GUIDE TO PORT ENTRY

NATIONS A – K

Produced by
Colin L. Pielow

SHIPPING GUIDES LTD.

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1977-78

VOLUME 1

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COLIN L. PIELOW

M.R.I.N., A.M.N.I.,
A.I.C.S.

SHIPPING GUIDES LTD
NAUTICAL ADVISERS AND PUBLISHERS

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WARNING

Every effort has been made to ensure that the information contained in this *Guide* is correct. However, it will be clearly understood that this book is intended as a guide only, that the information cannot be *Guaranteed* correct and that final responsibility must (as always) rest with the Shipmaster.

At certain ports, items of navigational routeings and aids have been included as a means of general guidance only. Shipmasters should have in mind that full and due reference MUST ALWAYS be made to corrected charts of the area, to the appropriate Notices to Mariners, and all or any other navigational notices, warnings or amendments issued by proper Authorities and/or navigational aid services.

The sketch maps are included for general interest and must not be used for navigational purposes.

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FOREWORD

Shipmasters, Shipowners or Managers, Port Authorities, Administrators and Agents, are earnestly requested to assist our work in up-dating the Guide *by providing written comment, information, amendments or corrections, plus additional details of any ports or terminals, to the following address:*

SHIPPING GUIDES (SERVICES) LIMITED,
17 HIGH STREET,
REIGATE,
SURREY,
ENGLAND

All communications will be acknowledged and will be most useful, since it is only by this means that the *Guide* will remain of great value to the user and will be up to date and thoroughly professional in content.

For assistance and guidance in the submission of information, a reprint of the items presently covered by the *Guide* is placed here under. Additional items will also be most welcome.

N.B. PLANS, DIAGRAMS, DRAWINGS AND SKETCHES: As you will note, this 1977/78 edition of "Guide to Port Entry" contains over one thousand port plans and diagrams that have been reproduced from plans and drawings very kindly sent to us by numerous Port Authorities, Agents and shipboard personnel. We hope that the special plan sections in these volumes will prove interesting and useful.

Presently however, the special plan sections are to an extent incomplete, since there are many ports and mooring facilities for which we have not yet received the necessary plans for reproduction purposes. We are anxious to secure plans, diagrams, drawings or sketches of ports and facilities not presently shown in our special plan sections, and therefore request that Port Authorities and/or Agents at the places concerned be kind enough to pass us this data together with the necessary permission for reproduction. We would also be very grateful if ship's officers calling at ports not already covered in our special plan sections, could find it possible to provide us with diagrams or sketches of the facilities which would be suitable for reproduction in our later editions and/or which might be re-drawn as required by our own art department prior to reproduction.

PORT INFORMATION KINDLY REQUESTED

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" and (subject to Charter-Party Terms) laytime will commence.

DOCUMENTS: The matter of documentation is one of the most important items to be included in the *Guide*, and we would like to be sure that ALL requirements are included in order that Masters will be in a position to prepare all necessary documentation before arrival and thus ensure speedy clearance. (E.g. Number of Crew Lists, Passenger Lists, Customs, Documents, Health Documents, Manifests, Bills of Lading, Ship's Papers, Ship's Certificates, etc., etc.)

PILOTAGE: Manner in which vessel approaching the port applies for a Pilot. That is, telegraphic address of Pilot Station, amount of advance notice of ETA required, and VHF channel or frequency to be used when contacting Pilot Boat or Pilot Station. If possible, a description of Pilot Boat; particular light or sound signals to be made by vessels requiring a Pilot; the *exact* area where the Pilot Boat is located or where the Pilot has to be taken on board and also any alternative area in the event of bad weather and Pilot Boat not in usual station; details of any specific requirements on the part of Pilots with respect to boarding and safety measures; location of anchorage for vessel awaiting a Pilot.

ANCHORAGES: Boundaries, areas and depths of safe anchorages.

RESTRICTIONS: Details of any restrictions imposed upon entry, for example at night time, or in accordance with state of tide and draft restriction.

MAX. SIZE: Maximum permissible length, breadth, and draft for any vessel entering the port or for oil-carriers proceeding to installations outside the main port area, also state of tide governing these dimensions.

HEALTH: Pratique procedure and action necessary to obtain pratique. Also action necessary in the event of any suspected disease or fever on board. Also when pratique is automatic, for example vessels entering after calling at another port in the same country.

RADIO: Name and call sign of radio station through which it is best for a vessel to route ETA cables to Agent, Receivers, etc.

VHF: Fullest possible data concerning VHF Radio communication facilities in operation at the port including advices required from vessels approaching the port, arriving at the port, when manoeuvring within the port area, and when sailing. Details of standard communication procedures and numbers of Channels used in calling, further communication and safety, as may be applicable with respect to Pilotage, Tugs, Port Authority, Quarantine or other craft or shore-stations.

RADAR: Details of existing Port Radar Service, also if the Master may contact the Radar Service by means of ship's radio or by VHF, and the Channel number or frequency to be used.

TUGS: Position where tugs normally join the vessel. Also whether usual for ship's lines or tug's lines to be used, and if optional, the usual charge for use of tug's lines.

BERTHING: Details of available berths, including length of quay, maximum permissible ship-draft at Low Water (indicating whether Salt or Fresh Water), whether load/discharge is by shore equipment or by ship's own gear, and other relevant data, together with advice of cargoes handled at respective berths.

CRANES: Fullest possible information concerning type, working loads and numbers of shore-cranes available at respective berths for cargo handling. Details of heavy-lift cranes ashore or afloat, with lifting capacities. It is also helpful to know at which ports, or berths within a port, that cranes are *not* available and a vessel is required to use her own gear.

BULK CARGO FACILITIES: Details of berths and cargoes handled, length of quay, maximum permissible draft (indicating Salt or Fresh) at Low Water, berth equipment, maximum height of discharging-gear above High Water Level, and maximum Loading/Discharge rates. Cargoes intended to be covered by this heading are, Grain, Ores, Coal, Fertilisers, Sulphurs, Copra, etc.

SPECIALISED CARGO-HANDLING FACILITIES: Details of berths, specially equipped for handling containers, or roll-on/roll-off traffic; berths handling liquid chemicals or LPG carriers. Please note that it is also useful to know if the port does *not* have any of these facilities.

BRIDGES: Details of any particular arrival times required in order to pass through particular bridges, and maximum clearances, that is height of bridge to waterline.

STEVEDORES: Any particular ETA advices required in order to arrange gangs. Details of main commodities and average load or discharge rates.

MEDICAL: Whether necessary for Agents to receive advance notice of required medical attention and the amount of notice required; also if hospital facilities available; also any other relevant medical information such as particular inoculations required, vaccination/fever certificates, etc.

TANKERS: Diameter of load/discharge lines in order that Masters may know whether or not it is necessary to fit reducing pieces before arrival; slop (residue) discharge facilities, and S.G. and A.P.I. of local types of oil (loading ports only). Number of tanker berths and maximum permitted drafts at these berths. Average load/discharge rates.

DENSITY: (SALINITY): Average salinity of water in the port.

FRESH WATER: Availability, method of delivery, rate of delivery and approximate cost per ton.

FUEL: Grades (viscosities) available, amount of advance notice required, and method of delivery.

FIRE PRECAUTIONS: Any specific precautions particularly respecting tankers (that is, other than usual non-smoking precautions, etc.).

CONSULS: Names of countries having Consuls at the port.

REPAIRS: Whether all types of deck and engine repairs are possible, and if not then what types of repairs are able to be carried out.

DRY DOCKS: Dimensions of largest dry dock and also the number of smaller docks.

SURVEYORS: Advice of which Classification Societies are represented at the port, or at nearby ports, e.g. Lloyds, A.B.S., N.V., etc.

GANGWAY/DECK WATCHMEN: Whether service of watchmen necessary or to be recommended and if so, the cost of watchmen.

HATCHES: Whether opening/closing is normally carried out by crew or stevedores.

CUSTOMS ALLOWANCES: (Tobacco/Wine, Spirits). Quantity permitted for each crew member to be held out of Bond.

CARGO GEAR: Whether load/discharge effected by shore gear or by ship's gear, and details of any special cargo equipment, e.g. heavy lift cranes, etc.

REPATRIATION: If facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORT: Distance from airport and whether airport is served by regular airlines; otherwise number of flights per day or week.

TIME: Local time in relation to GMT and dates/details of any alterations made to clocks during the year.

HOLIDAYS: Dates and details of official holidays and advice whether or not cargo work can be arranged on those days.

POLICE/AMBULANCE/FIRE: Telephone numbers of these three services, that is, the nearest departments.

TELEPHONES: Whether arrangements exist for placing telephones on board and if so the approximate cost for this connection.

SERVICES: Details of any special services available, e.g. tank-cleaning equipment, facilities for discharge of tank-washings, compass adjusting, etc., etc.

SHORE LEAVE: Whether crew members are allowed ashore or not.

IDENTIFICATION CARDS: Whether shore passes issued or whether seaman's book is sufficient.

REGULATIONS: Any particular or unusual regulations for the port.

DELAYS: What delays in berthing, load or discharge or bunkering can normally be expected.

DEVELOPMENTS: Details of expected draft increases, new installations, berths, etc., expected in the foreseeable future together with expected dates of completion.

SHIP'S OFFICERS REPORTS: Information is earnestly sought from Ship Masters and other serving officers giving corrections, amendments and additions to existing information, together with their professional advices or comment upon recommended or required procedures for entering or sailing port, including advice of their experience of the port either generally or specifically. Useful items of experience and suggestions of other Ship Masters are of great value, and will be printed under a special heading.

GENERAL: Any other information that you feel may be of value to the Ship Master that is not already covered by the previous questions.

AUTHORITY: Name, address, and other details of local Port Authority.

AGENT: At the foot of many of the ports in this *Guide* we have an additional heading entitled "Agent". The purpose of including this item has been to provide Shipowners, Managers, and Operators with prompt access to the name, address, telephone, telex numbers, and cable addresses, etc., of an experienced Agent at the port concerned.

Of course, it will be understood that the Agents named in the *Guide* are not necessarily the only Agent at that port; however, demands on available space preclude the inclusion of other reputable Agency companies and we trust that other such companies will understand and appreciate the position. We have been obliged therefore to include details of one Agency company only, but by doing so we hope to have provided a further service to the user of the *Guide*.

ROBERT W. PEDLOW, *Editor*,
Shipping Guides Ltd.

PUBLISHER'S NOTE

Our thanks are due to the very many Port Authorities, Agents, Shipmasters and others engaged in the shipping industry, for their very kind assistance and support in the production of this 1977/78 edition of "Guide to Port Entry". Our day-to-day work brings us into contact with such persons from all the maritime nations, and it is a very real pleasure for us to be so engaged.

For our part, we have always made and will continue to make every possible effort to ensure that the results of our work are worthy of the guidance and assistance shown to us, and we do hope that this new edition will provide some indication of our considerable respect for all those persons, organisations and companies who have made it possible.

The theme of our work has been that of continuous improvement from one edition of "Guide to Port Entry", to the next, and this includes not only the processes of detailed accuracy and enlargement of the range of shipping matters contained in these volumes, but also improving upon our own methods of print and production. To this end, and following considerable evaluation of the interesting problems concerned with production of printed data, we have taken quite a large step forward by computerising the print process.

Subscribers to earlier editions of the "Guide to Port Entry" will immediately note that we have changed the binding style from the previous hard-covers, to the new soft-covers. This change may have resulted in some loss of appearance, but we hope this will be adequately compensated by a degree of easier handling when turning to the appropriate page required in the text. Overall weight, particularly now that we have extended the range of data to the point of producing the work in two volumes, is also thereby reduced.

With a view to meeting the requirements of Shipmasters, Owners and Operators, it is important that we keep abreast of port developments, and changes in the patterns of cargo carriage. In this respect, we would continue to welcome professional opinion as to suggested improvements in the subject matter of these volumes. In addition, advice of amendments to the existing information, and additional information, with particular respect to developing patterns e.g. Container carriage and ports, Ro/Ro, Feeder-ships, L.P.G./L.N.G., etc., would be most appreciated.

Once again, we wish to express our sincere thanks to all those who have enabled us to produce these two volumes, and to all seafarers and others who may utilise these books we send our best wishes together with the hope that the "Guide to Port Entry" will prove to be of real assistance.

Reigate 1977.

COLIN PIELOW

Albania

DURRES: 41.19 N. 19.28 E.

DOCUMENTS: Completed on arrival.
RESTRICTIONS: Vessels arriving from ports in Yugoslavia, Italy and Greece must give notice of arrival 48 hours in advance. Vessels arriving from ports in other countries must give notice of arrival 5 days in advance. Notice of arrival is sent by radio to Adetare Durres with following information: Vessel's name and flag; name of last port; draft on arrival; cargo description and distribution; particulars of vessel's tonnage and length.
PILOTAGE: Compulsory. Arriving vessels should anchor and await pilot in position 41° 15′ 08″ N. 19° 26′ E. Pilot available in daylight hours only. Entrance is through buoyed channel, depth 33 ft.
MAX. SIZE: Controlled by berth depth. Maximum draft 28 ft. 6 in.
HEALTH: Free pratique given when Pilot boards provided vessel's health declaration is satisfactory.
RADIO: Vessels should maintain regular contact with Durres Radio up until time of entry into Albanian territorial waters, which extend 10 miles off shore.
TUGS: Port Authority supplies tugs for mooring and unmooring on Pilot's recommendations.
BERTHING: General cargo wharf No. 5 permitted draft 28 ft. 6 in. All other berths, permitted draft 21 ft. 6 in.
MEDICAL: Doctor and hospital facilities available.
TANKERS: One oil berth, at the East Mole, depth 23 ft. Tank cleaning facilities available.
FRESH WATER: Available ex wharf at all berths.
FUEL: Limited quantity available for emergency only.
OPENING/CLOSING HATCHES: Carried out by stevedores.
IDENTIFICATION CARDS: Shore passes issued by local police.
REPAIRS: State shipyard can effect limited hull and engine repairs.
AIRPORT: Rinas airport, distance 35 km.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year (January 1st and 2nd); Proclamation of the Republic (January 11th); Labour Day (May 1st); October Revolution (November 7th); Independence Day (November 28th); Liberation Day (November 29th). No work performed on Sundays and holidays.
SHORE LEAVE: Crew may use seamen's club in port area.
AUTHORITY: Drejtorija e Portit Durres.
AGENT: Agensija Detare Durres, Cables "Adetare Durres," Tel. 233.

SARANDE: 39.52 N. 20.02 E.

DOCUMENTS-RESTRICTIONS: Refer to "Durres."
PILOTAGE: Compulsory. On arrival vessels should anchor and wait for Pilot in position 39° 51′ 50″ N, and 20° 10′ 10″ E. Pilot available only during daylight hours.
BERTHING: Larger vessels work cargo at anchor only. Ship's gear used.
HEALTH: Free pratique given when Pilot boards provided vessel's health declaration is satisfactory.
RADIO: Durres Radio.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: See "Durres" for General Information.
AUTHORITY, AGENT: See "Durres".

SHENGJIN: 41.49 N. 19.35 E.

DOCUMENTS, RESTRICTIONS: Refer to "Durres".
PILOTAGE: Compulsory. On arrival vessels should anchor and await Pilot in position 41° 48′ N, 19° 35′ E. Pilot available only during daylight hours.
MAX. SIZE: Draft 18 ft.
HEALTH: Free pratique given when Pilot boards provided vessel's health declaration is satisfactory.
RADIO: Durres Radio.
TUGS: One small tug available.
BERTHING: Two piers in harbour, one of which is used for larger vessels.
FRESH WATER: Limited supply by barge.
FUEL: Not available.
GENERAL: See "Durres" for general information.
AUTHORITY, AGENT: See "Durres".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Algeria

ALGIERS: 36.50 N. 03.00 E. (See Plan)

DOCUMENTS:
1 Cargo Manifest required for all cargo including that in transit for non-Algerian ports.
8 Crew Lists.
2 Crew and Passenger Personal Effects Lists.
2 Stores Lists, including Bonded Stores.
1 Currency Manifest.
2 Lists of arms, ammunitions or Military Stores (or "Nil" Declaration).
1 Private Bond and Beer List.
1 Declaration of Health.
1 Vaccination List.

Immigration officials may require to inspect all discharge books or passports. Customs regulations are strictly interpreted. Care should be taken to ensure that all ships' papers are perfectly in order. Vessels arriving with incomplete or inaccurate documentation have been subjected to severe delays and penalties.
PILOTAGE: Compulsory. Available day or night. Pilot boards vessel about 0.5 mile from end of Wattier jetty. Pilot boat is black with insignia of 2 white anchors.
ANCHORAGE: Algiers Bay is crescent-shaped with Cape Caxine on the West and Cape Matifon on the East. Depth 25-30 m. Bottom is good holding ground, and vessels are sheltered from West and Northwest.
RESTRICTIONS: None if Port Authority is advised by Radio Algiers or by Agent.
MAX. SIZE: Vessels of 25,000 tons proceed normally. Length not restricted; maximum draft 38 ft.
HEALTH: Health Officer boards vessel on arrival.
RADIO: Algiers Radio, operates continuously.
TUGS: Three available of 600 to 800 h.p. and also one of 1,000 h.p. for towing in harbour; two larger available for open sea, 1,500-1,300 h.p.
BERTHING: 54 berths available, total distance of 9,519 m. plus 2 berths of 250 m. each for tankers. All general cargo berths have cranes with lift of 3-6 tons.
STEVEDORES: Available.
MEDICAL: All assistance available.
TANKERS: Quay de Lorient: 2 berths, with depth alongside 11.50 m. Deballasting facilities available.
DENSITY: Salt water.
FRESH WATER: Delivered by pipe-line to quay, or by water barges.
FUEL: Deliveries by pipe-line on most quays or by barge. Big ships are supplied by barge in the roads.
FIRE PRECAUTIONS: A special notice with instructions is delivered to tankers. Fire station established within port area.
GANGWAY/DECK WATCHMEN: Service by three experienced companies arranged by Agent.
OPENING/CLOSING HATCHES: Normally opened by crew, or by port workers.
IDENTIFICATION CARDS: Not required.
CONSULS: All principal countries are represented in Algeria.
REPAIRS: All repairs available. Two floating cranes, 1×120 tons, 1×50 tons.
DRY DOCKS: Two: one of 136 m. long, 18.50 m. width, and 8 m. deep. The second of 74.30 m. long, 15.50 m. width and 5 m. deep.
REPATRIATION: Frequent departures for Europe by boat or plane.
AIRPORT: Maison-Blanche at a distance of 20 km. from Algiers; several flights daily.
TIME: GMT.
HOLIDAYS: 1st January; 5th July; 1st November; plus religious holidays – Aid Seghir; Aid Kebir; New Year's Day (Egira); Achoura, and Mouloud. Friday is now considered as the weekly rest day in Algeria.
POLICE/AMBULANCE/FIRE: Police 63.01.61; Fire Brigade Service 63.71.22.
SHORE LEAVE: Allowed.
AUTHORITY: Capitainerie du Port.

ANNABA: 36.58 N. 07.47 E.

DOCUMENTS: Refer to Algiers.
PILOTAGE: Compulsory when entering, leaving or shifting in harbour, vessels arriving during night and wishing to enter the basin must anchor at 2 nautical miles to East of Southern Lighthouse at main entrance (red occulting light) on steady sand bottom of 65 to 100 ft. depth.
ANCHORAGE: Quite good anchorage well protected against West or North winds at about 3 nautical miles to North of harbour with depths of 40 to 60 ft. on rocky and sandy steady bottom.
MAX. SIZE: Length 656 ft. draft 33 ft., breadth no restriction.
RADIO: Cable Agents giving ETA or to Harbour Master by cable or radio telephone via Annaba Radio Station which is permanently watching on 2182 k/cs.
VHF: Harbour Master's Office can be contacted on Channels 16 and 14.
TUGS: Two tugs available each of 700 h.p. both fitted with radio telephone and two fire appliances.
BRIDGES: No bridges or power cables crossing port area.
BERTHING: Harbour is open to merchant navigation every day from 0500 to 2200. In case of necessity vessel will be handled at any time.
STEVEDORES: Available. Working hours (whole days), normal hours: 0700/1020–1400/1720. Shifts: 0630/1230-1300/1900-2000/0200. Working night and holidays, overtime 50%.
TANKERS: Two tanker berths in outer port, entrance 43 ft. The first is at Lyon's Jetty consists of two dolphins 180 ft. apart. Second at South Jetty consists of two dolphins 180 ft. apart. 8 in. and 10 in. pipe-lines supply the oil installation.
FRESH WATER: Plentiful supply of water alongside wharves at a rate of 8 to 14 t.p.h.
FUEL: Bunkering available. No coal.
GANGWAY/DECK WATCHMEN: Performed by ship's crew.
OPENING/CLOSING HATCHES: Performed by stevedores.
CARGO GEAR: Cranes: 18 electric or diesel shore cranes with lifting capacities from 3 to 6 tons; 1 electric shore sheers of 110 tons and 1 diesel-electric sheers hulk of 80 tons.
IDENTIFICATION CARDS: Required.
SHORE LEAVE: Allowed.
REPAIRS: One graving dock fitted with two rolling cradles on slipways, lifting capacity 100 and 200 tons. Divers and frogmen available.
GENERAL: Prevailing winds generally of N.W. and West. Storms from these directions are blocked by mountains which lie behind harbour. Harbour is only exposed to storms from East and N.E. which are very rare. There is practically no swell or surf into harbour. Tidal variation about 1 ft. and water level ranges about 31 in. dependent on season. Low waters from February to June and high waters from June to February.
AUTHORITY: Directeur du Port.

ARZEW: 35.50 N. 00.16 W.

DOCUMENTS: Refer to Algiers.
APPROACHES: There are numerous good navigational aids visible from seawards to vessels approaching Arzew Bay. The oil storage tanks are visible for a considerable distance seawards, and the methane gas flare in the Southwest corner of the bay is clearly visible at night. In addition to Isle de Arzew lighthouse, the mooring buoys are fitted with red winker lights, visible one mile, but too much reliance must not be placed on these last lights. The pillar buoys on the berths are fitted with blue winker lights. All these buoys form a good radar target and are clearly visible over 5 miles on the radar screen.
PILOTAGE: Pilotage is compulsory. A Pilot from the pilotage station of Oran/Arzew will board vessels and assist Master to berth.

Communications from tankers will be via the international radio station at St. Lys, which is in telex communication with the Arzew terminal. Contact with the Arzew terminal can be made on VHF Channel 16. Vessel will then be informed by the control room of the frequency to use, either Channel 12 or 14 for mooring purposes.

Masters are advised to provide for safe access of port personnel an accommodation ladder rigged to end 10 ft. above the water, and a pilot ladder alongside to provide access to the accommodation ladder.
ANCHORAGE: Vessels requiring to anchor on arrival normally use services of the Pilot. Anchorage fees are charged whether the Pilot is used or not. Sea bottom of rocks, sand and mud.
RESTRICTIONS: Vessels may enter or sail by day or night. Tankers berthing on the sea line berths may be restricted by bad weather, heavy wind or swell.
TUGS: Four tugs available, from 900 h.p. to 1,600 h.p. Two tugs normally required for berthing and unberthing. The tow line should be supplied by the vessel. Tugs join inward bound vessels at about 1.5 miles from harbour entrance.
MAX. SIZE: *Inside Harbour.* Dry cargo berth for vessels up to 7.50 m. draft. LPG and refined crude berth for vessels up to 8.0 m. draft. Methane Terminal, two berths for vessels up to 10 m. draft.

Sea Line Tanker Berth. For tankers up to 150,000 tons.
HEALTH: Free pratique is not granted by radio. For tankers berthing on the sea line, pratique may be granted by a visiting sanitary officer or by the Pilot when he boards, providing the health declaration is satisfactory. For vessels berthing inside the harbour, the Health Officer will board on arrival.

Vessels calling at Arzew must give their ETA 48 and 24 hours prior arrival, naming the ports called within the last 10 days.

Crew must be vaccinated against cholera and smallpox. Vaccination books must be valid and a check is made before free pratique is granted.
RADIO: Oran Radio and Algiers Radio both listen on international frequencies. Tankers normally use St. Lys Radio.
BERTHS: *(Inside Harbour)*: Berths No. 1 and 2 used for loading fertilisers, suitable for vessels up to 225 m. length with maximum draft 6.50 m. Berth No. 3 for discharging of general cargo, vessels up to 100 m. length, 7.50 m. draft. Berth Nos. 4 and 5 for loading salt in bulk and discharging general cargo, for vessels up to 220 m. length, 6 to 7 m. draft. Berth No. 7 used for unloading LPG and refined crude, for vessels up to 100 m. length, 8 m. draft.

Methane Terminal. Two loading berths for liquid methane, each 400 m. long for vessels up to 10 m. draft.

Sonatrach Terminal. Three sea line berths are located about one mile from Arzew Harbour breakwater, in approximate position 35° 50′ North, 00° 16′ West.

At sea line berths Nos. 1 and 2, minimum 23,000 d.w.t., maximum 85,000 d.w.t.; minimum length 540 ft.; loading rate 3,000 t.p.h. Depths up to 92 ft.

At sea line berth No. 3, maximum 150,000 d.w.t., minimum length 640 ft.; maximum length 948 ft.; draft up to 68 ft.; loading rate up to 5,500 t.p.h. Depth in the berth up to 92 ft. Tankers over 80,000 d.w.t. must be capable of loading and deballasting at the same time. Minimum depth of water in the berthing area is 73 ft.

BERTHING: Use of ship's anchors will not be permitted when manoeuvring into berth. Two tugs are available to assist in berthing. On arrival vessels should have ready eight mooring lines, four forward and four aft and a tow rope at each end as it will be necessary to position the vessel with her own gear before securing to the heavy wires. Good rope messengers should be ready at each end of the vessel to pick up these wires.

There are three mooring buoys at the bow and three at the stern. All buoys are fitted with 5 in. wire ropes. Ships of moderate tonnage may be moored using two bow buoys and two quarter buoys only. Hoses will be lifted from both sides of the vessel using ship's gear and crew.

The port and starboard derricks must be ready for use before berthing. The safe working-load must be at least 5 tons. The Loading Master can refuse to berth a tanker whose lifting tackle is not correctly rigged or in good working condition.

Three 12 in. hoses are connected for loading, 2 on one side and one on the other. Loading rates up to 5,500 t.p.h.

BALLAST: Pilots are empowered to refuse to berth a vessel if in their opinion the vessel has insufficient ballast, or her trim is such that it would prevent safe loading.

The Arzew deballasting plant is presently not available for discharging dirty ballast ashore.

Vessels required to arrive with clean ballast only, which may be discharged to sea, subject to Master's sole responsibility for oil pollution risks.

STEVEDORES: Vessels must cable their ETA at least 24 hours before arrival and confirm before 1700 hrs. on day prior to arrival or before 1000 hrs. if vessel will arrive in the afternoon of the same day. Gangs are ordered before 0700 hrs. for mornings and at 1030 hrs. for afternoons. Shifts are from 0730–1050 hrs. and 1530 to 1650 hrs. Extra shifts from 0730–1330 hrs. and from 1330 to 1930 hrs.

DENSITY: 1030.

MEDICAL: All treatment of ship's crew is arranged by private doctors through ship's Agent. No hospital facilities at Arzew. Seriously injured crew are taken to Oran, 45 kms. away, for hospitalisation. Vessels arriving with sick crew on board should notify Agents well in advance to make arrangements for hospitalisation on arrival. No patient is to be disembarked without notification to the Health Officer for his agreement.

FRESH WATER: Not available.

FUEL: Not available at Sonatrach Terminal. May be arranged for vessels inside harbour, subject to advance notice.

WATCHMEN: Shore watchmen are compulsory for vessels loading fertiliser or discharging LPG or refined crude in the harbour area. For tankers loading at the sea line berth, watchmen are at Master's discretion.

CUSTOMS ALLOWANCES: 200 cigarettes and an opened bottle of spirits per man.

IDENTITY CARDS: On arrival, the immigration control all passports or seamen's books. Shore passes are given at the harbour gate in exchange for passports, seaman's book, or in the case of French seamen, their identity cards.

AIRPORT: Nearest at Oran (Es Senia).

CONSULS: Nearest at Oran.

TIME: GMT is used all year round.

TELEPHONES: Available only at methane berths. At the sea line berths tankers may communicate using VHF Channel 16 to Arzew Terminal.

AUTHORITY: Capitainerie du Port.

BEJAIA (BOUGIE) 36.45 N. 05.05 E. (See Plan)

DOCUMENTS: Refer to Algiers.

PILOTAGE: Compulsory within pilotage zone between Cap Carbon to the West and Ras Attia to the East. Contact pilot station by VHF Channel 16 or Telex 93087. Tel. 92.05.02, or 92.05.03, and 92.03.39 at night. International code signals used to call Pilot who boards at the limit of pilotage zone. Pilot ladder should always be placed on port side.

ANCHORAGE: Suitable anchorage in all weathers will be indicated by the Pilot.

RESTRICTIONS: No night movements for tankers with LPG or refined petrol cargoes.

MAX. SIZE: Tankers: Length 260 m. Draft up to 13 m. Waiting zone for vessels in ballast; depth 10 m.

Commercial Port: Draft between 7 m. to 9 m.

HEALTH: Free pratique given by Brigade Maritime on arrival, unless suspected disease on board when Port Doctor will visit the ship. Pratique is automatic after calling at another Algerian Port.

RADIO: Alger Radio.

TUGS: Available under direction of Pilot by VHF contact. Ship's lines always used. 2 tugs required for berthing and unberthing.

Sonatrach Oil Terminal: 3 loading piers for crude oil.

Pier No. 1 for vessels up to 11.50 m. draft. Four 10 in. hoses.
Pier No. 2 for vessels up to 12.50 m. draft. Four 12 in. hoses.
Pier No. 3 for vessels up to 13.00 m. draft. Four 12 in. hoses.
Maximum pressure allowed 3 kgs.
Loading rates up to 4,000 t.ph.

BALLAST: All dirty ballast to be discharged ashore; 2 hoses available at each berth, can receive ballast up to 2,000 t.p.h.

Vessels berthed at Piers No. 2 and 3 cannot discharge ballast simultaneously.

Clean ballast may be discharged to sea, only if vessel is in gas-free condition.

Thick slop residues may only be accepted subject to terminal operator's approval, but only in quantities of less than 100 tons.

FRESH WATER: Available at berths No. 2 and 3 only, subject to 24 hours' notice. Loading rate about 15 t.p.h.

FUEL: Available at all Sonatrach berths, subject prior arrangements. No barges.

REPAIRS: Very limited facilities. No dry docks. No possibility for radio/radar repairs.

No repairs may be carried out on board a tanker without first obtaining the Harbour Master's permission.

FIRE PRECAUTIONS: Anchors must be hove-up while vessel is moored in berth. A fire wire must be provided fore and aft for tug's use if necessary.

Tanker's fire-fighting equipment must be ready for use on fore and main deck.

3 tugs are equipped with fire-fighting apparatus.

DENSITY: 1025.

WATCHMEN: Not compulsory but recommended. The Port Commandant may impose a guard on vessels carrying certain cargoes.

CUSTOMS ALLOWANCES: 3 packets cigarettes and 1 bottle of wine or alcohol per man per day.

CONSULS: France: tel. 92.12.13. Others at Algiers.

REPATRIATIONS: Can be arranged via Algiers.

AIRPORT: Dar-el-Beida International Airport at Algiers, 240 km. from Bejaia.

TIME: GMT all year round.

POLICE/FIRE/AMBULANCE: Police, tel. 92.04.22. Ambulance/Fire, tel. 92.00.02.

TELEPHONES: None on board, but telephone exists at each tanker berth.

SHORE LEAVE: Allowed, provided seamen carry identity cards or shore passes.

AUTHORITY: Capitainerie du Port de Bejaia.

MOSTAGANEM: 35.56 N. 00.04 E.

(SHIPMASTER'S REPORT)

DOCUMENTS:

7 Crew Lists.
1 Passenger List.
1 Helath Declaration.
1 Vaccination List.
2 Store Lists, including Bonded Stores.
2 Crew Personal Effects Lists.
2 Lists of Arms and Ammunitions.
1 List of Currencies.

If the vessel is coming from another Algerian port, clearance will also be required.

Certificates: Not requested.

Customs: Very strict customs at this port. Routine search will be made. Penalties extremely high if something not manifested is found.

PILOTAGE: Compulsory. There are two Pilots; 24 hour service. Pilot boat is black with a white stripe. Vessels arriving after sunset, if no cargo work at night, will be kept in the roads until 0600 hrs. next morning. Vessels sail at any time during the night.

ANCHORAGE: Recommended anchorage is having the light of the Jette du Large and the Light of the Mole Sud Ouest in line, and 0.5 miles off the first light.

MAX. SIZE: Not more than 200 m. length. Max. draft 25 to 27 ft., depending on the berth.

HEALTH: Free pratique is granted easily upon berthing and producing Health Declaration and Vaccination List. If any vaccinations certificates have expired, free pratique will be granted and health Authorities will arrange, on request, the vaccinations.

RADIO: Alger Radio, receiving on 2182 kc/s. and working on 1792 kc/s., on 24 hours basis. Also Oran Radio, listening on 2182 kc/s., and working on 1735 kc/s., on 24 hours service. Advisable to use the latter.

VHF: At the harbour Master's Office, working on Channel 16, officially 24 hour service, only French spoken. Also Oran Radio can be reached easily by VHF Channel 16, from Mostaganem, English spoken.

TUGS: Available at Arzew. Therefore too expensive to be used.

BERTHING: Eight berths available.

CRANES: Five cranes, (6–15 tons).

STEVEDORES: Arranged by the Agent. They belong to a National Stevedoring Company, who supplies them.

MEDICAL: All facilities available.

DENSITY: 1025.

FRESH WATER: Available, but not advisable to use as drinking water.

FUEL: No facilities. Vessels must proceed to Oran for bunkering.

GANGWAY/DECK WATCHMEN: Not compulsory, but strongly recommended by Port Authorities and Agent.

OPENING/CLOSING HATCHES: Can be performed by ship's crew or by stevedores.

CUSTOMS ALLOWANCES: 1 bottle of spirits and 1 carton of cigarettes are allowed for every Crew member. Anything in excess of this amount will be sealed.

IDENTIFICATION CARDS: On leaving the vessel, Crew members to carry their passports, which will be kept at the harbour gate, whilst ashore.

CONSULS: None.

REPATRIATION: It is possible and easily arranged by Agent.
REPAIRS: Only minor repairs can be carried out by workshop.
AIRPORT: At Oran, La Seine Airport, 80 km. distance, with 3 daily domestic flights to Algiers.
TIME: GMT all year round.
HOLIDAYS: See "Algiers".
SHORE LEAVE: No restrictions, except for some nationals.
AUTHORITY: Capitanerie du Port de Mostaganem.

ORAN: 35.43 N. 00.39 W.

DOCUMENTS: Refer to Algiers.
PILOTAGE! Compulsory. Arranged by Agents' basis vessels ETA. International Code signals used. Pilot boards at port entrance.
ANCHORAGE: In depths over 40 ft. available in the roads.
HEALTH: Free pratique given by Brigade Maritime on arrival, unless suspected disease on board when port doctor will visit the ship. Pratique is automatic after calling at another Algerian Port.
RADIO: Alger Radio.
MAX. SIZE: Length 800 ft. Draft 38 ft.
TUGS: Available to assist berthing and unberthing.
BERTHING: Mole 1: tankers, depth alongside 39 ft. Mole 2: tankers, depth alongside 33 ft. Cargo vessels: about twenty berths at quays with depths from 20 to 33 ft. alongside.
MEDICAL: Doctors and hospital facilities available.
FRESH WATER: Available by barge.
FUEL: All grades available by pipe-line at the oil berths.
REPAIRS: Only minor repairs can be effected.
WATCHMEN: Not compulsory but recommended. The Port Commandant may impose a guard on vessels carrying certain cargoes.
CUSTOMS ALLOWANCES: Three packets cigarettes and one bottle of wine or alcohol per man per day.
TIME: GMT all year round.
AIRPORT: La Senia, 7 km. away. Daily flights to Algiers for international connections.
AUTHORITY: Port Autonome d'Oran.

SKIKDA: 36.53 N. 6.54 E.

DOCUMENTS: Refer to Algiers.
PILOTAGE: Compulsory.
RESTRICTIONS: Mooring and unmooring permitted at night.
If vessel required to swing inside harbour, turning basin is 350 m. diameter provided draft not more than 11 m.
MAX. SIZE: Tankers up to 50,000 d.w.t. acceptable at No. 3 berth.
TUGS: Tug assistance available for berthing and unberthing.
TANKERS: Three berths,
No. 1 – for vessels up to 225 m. length, 11 m. draft.
No. 2 – for vessels up to 250 m. length, 12.50 m. draft.
No. 3 – for vessels up to 275 m. length, 27.5 m. draft.
Three shore lines, each with capacity of 500 cu.m. per hour. Three slop tanks available each with capacity of 500 cu.m. Dirty ballast discharge rate restricted to 2,000 cu.m. an hour.
FRESH WATER: Available by pipe-line at the berths.
FUEL: Not available.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Angola

CABINDA: 05.22 S. 12.11 E.

DOCUMENTS:

10 Manifests for each port where cargo loaded for Cabinda, plus 1 copy of each Bill of Lading.
8 Lists of Passengers disembarking or in transit, even if nil.
8 Crew Lists.
8 Lists giving previous Ports of Call.
2 Lists of Crew Vaccinations.
3 Stores Lists.
3 Personal Effects Lists.

Other forms applicable to customs, health, etc., can be completed on arrival.

PILOTAGE: Services of a Government Pilot are compulsory. Radio ETA to Agents via Luanda Radio (or by cable from previous port) and anchor on arrival as near Cabinda as draft permits. Vessel is visited by port authorities and, if necessary, will be shifted, with Pilot, to alternative anchorage. If cargo for account of Cabinda Gulf Oil, vessel will almost certainly be moved nearer Malongo, where oil companies have special jetty for discharge of their dry cargo ex-lighters.

Tankers: The Pilot Boarding Area for Cabinda is one mile Southwestward of Well 84-8 (located 5° 26′ 06.7″ S. 12° 03′ 13.4″ E.) where a Cabinda Gulf Mooring Master will board the vessel. On establishing contact by R/T or VHF, the Mooring Master will advise the vessel of a safe approach; briefly, this will be for the vessel to approach from Westerly direction and to keep West of all obstructions, e.g. drilling rigs, platforms, etc.

As offshore drilling and surveying operations are being effected on a continuous basis. Masters are warned to approach the port with great caution. Cabinda Gulf Oil Terminal (call sign "Malongo Terminal") will pass on to vessels upon arrival the latest information regarding oil-drilling rigs, platforms, etc., once contact by VHF has been established.

Special attention is called to the well platforms:

No. 84–1: Located 5° 25′ 19.9″ S. 12° 03′ 59.5″ E.
No. 84–12: Located 5° 29′ 10.2″ S. 12° 03′ 52.1″ E.
No. 84–8: Located 5° 26′ 06.7″ S. 12° 03′ 13.4″ E.
No. 95–3: Located 5° 33′ 45.4″ S. 11° 59′ 05.9″ E.

These platforms are equipped with both light and horn. The lights flash Morse Code "U" as follows:

Light: Group flash (3) 15 seconds.
Light: 0.4 seconds; Eclipse: 0.5 seconds.
Light: 0.4 seconds; Eclipse: 0.5 seconds.
Light: 1.2 seconds; Eclipse: 12.0 seconds.

ANCHORAGE: For vessels moving to Malongo, anchorage is restricted where Cabinda Gulf Oil are operating, roughly between 5° 15′ S. and 5° 30′ S. extending out to 12° 00′ E.

Tankers: Vessels required to anchor upon arrival (e.g. if the SPM Buoy is occupied) should anchor in the Pilot Boarding Area, at a distance of not less than 3.5 miles Westward of the SPM Buoy.

MAX. SIZE: Cargo vessels at anchorage for safe working off Cabinda 32 ft. draft. Vessels with deeper drafts can be accommodated further out but is always risk of swell hampering operations. For tankers Cabinda Gulf have buoyed terminal for tankers maximum 100,000 tons, max. draft 50 ft.

PRATIQUE: Upon arrival, the appropriate Government Officials will board the vessel for prompt clearance so the preparation can begin for mooring.

In the event of arrival during night, clearance will not be effected until 0800 hrs.; however, a Custom Police Agent will be stationed aboard the vessel, which will allow preparation for daylight mooring to proceed.

RADIO: Luanda Radio. HF Radio telephone system is installed at Malongo Terminal and uses the call "MALONGO". 24 hour watch is maintained on the international frequency of 2182 kHz.

For short range communications of approximately 50 miles, a VHF system is also installed in Malongo, which uses the same radio call ("MALONGO") and is also monitored 24 hours a day. Initial contact on this system should be made on 156.8 Mc/s. (Channel 16) then, by mutual agreement, the traffic should be passed on any of the following frequencies: 156.6 Mc/s. (Channel 12); 165.45 Mc/s. (Channel 9); 156.7 Mc/s. (Channel 14).

Masters are requested to advise CABGOC-CABINDA 72 and 24 hours in advance of estimated arrival time, giving vessel's name, date and expected hour of arrival, Master's name and any special requirements.

TUGS: None normally required. Cabinda Gulf have chartered a small tug to assist tankers berthing, if necessary.

STEVEDORES: 48 hours advance notice, giving hatch distribution and nature of cargo, is recommended.

MEDICAL: Arrangements can be made for doctor to visit vessel on arrival. Hospital facilities available. Serious cases are taken to Luanda. Crew must be in possession of valid Smallpox and Yellow Fever Certificates.

SINGLE BUOY MOORING: A single point buoy mooring is located 8.7 miles West-Southwest of the Cabinda Gulf Oil Company Terminal at Malongo. The position of the buoy mooring is approx. 5° 26′ S., and 12° 05′ E. The buoy is marked by a 5-mile white light flashing for 2 seconds and eclipsed for 18 seconds. Depth of water in the berth is 75 ft.

Mooring: Mooring and unmooring operations will be undertaken by day and night under normal weather conditions.

Notice of Readiness will be accepted by the Mooring Master on arrival providing that the ship is in all respects ready to load.

Before arrival at the Pilot Boarding Area it will be necessary to ensure that the following moorings are ready for use on arrival at the berth:

Minimum requirements on forecastle head: 4 mooring ropes; 1 heavy messenger (5 in.); 1 pick-up wire (0.75 in. diameter) with shackle on the eye.

When the vessel is within reasonable distance of the buoy, two ship's lines will be carried by the mooring launch to the buoy. These will be used to heave the vessel into position when she can pick up the two plaited buoy ropes. Once the buoy ropes are secured, the ship's own lines will be slacked down until such time as all the weight is taken by the buoy ropes; the ship's lines can then be left slacked right down but attached to the buoy ropes in case of emergency.

Power must be available at all times on all deck winches and windlass while the vessel is at the berth.

There are no special arrangements for unmooring, which can be undertaken by day or night.

Hose Handling: Two 12 in. hoses are connected to ship's manifold on the port side. Hose handling is to be effected by ship's crew under the direction of a ship's officer as instructed by the Mooring Master. The port boom should be rigged in readiness with a runner of minimum of 0.75 in. diameter. Approx. weight of one hose is 3 tons.

Ballast: No facilities for reception of dirty ballast. Vessels must arrive with clean ballast sufficient for safe manoeuvring. Deballasting operations will be constantly policed by representatives of CABGOC, and any evidence of pollution will be cause for refusal to permit continuing deballasting.

Cargo: "Cabinda Crude Oil" will have varying gravities ranging from 26.3 API to 34.6 API.

Some of this oil contains appreciable amounts of hydrogen sulphide, which can cause a toxic atmosphere during loading.

Loading: Cargo loading is by gravity, possibly assisted by booster pump, at a rate of approximately 30,000 Bbls. per hour.

About 30 minutes before the cargo is completed, the CABGOC Representative should be advised in order to co-ordinate the shutdown between the vessel and the terminal.

When the vessel has completed the cargo, loading line valves ashore and on the buoy will be closed; only then may the vessel's manifold valves be closed. (In an emergency, however, vessel may shutdown against loading.)

After completion of loading operations, the vessel will be ullaged and a comparison of ship-shore figures made. The ullages will be transmitted to the terminal by radio, and the report prepared and distributed.

The cargo papers will be delivered to the Master by the CABGOC Representative as promptly as possible.

Tankers may have to be "short despatched" to avoid delays on sailing.

There is no provision for off-take from ship. It is imperative that Ship's Master declare the tonnage he requires prior to loading. Accurate meters ashore will ensure requested tonnage.

DENSITY: 1025. Influence of Congo River current variable depending on season.

FRESH WATER: One lighter available for carrying about 40 tons water but no guarantee can be given. Cost of water is expensive.

FUEL: None available.

WATCHMEN: Not necessary. Harbour Police placed aboard by Authorities.

OPENING/CLOSING HATCHES: By crew or stevedores.

CERTIFICATES: Ship's Register, valid Deratisation Certificate and Safety Equipment Certificate.

CUSTOMS ALLOWANCES: Customs do not normally seal bond and *reasonable* amount tobacco may be taken ashore for crew members *own* consumption. No liquor restrictions on board but not allowed ashore under any circumstances.

IDENTITY CARDS: Supplied by Agent and stamped by Immigration Police before any person allowed ashore.

CONSULS: None.

REPAIRS: Facilities very limited.

REPATRIATION: Available if absolutely necessary but can only be arranged via Luanda.

AIRPORT: Small airport about 4 miles from city served by internal airline only. One flight from and to Luanda per day.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; 28th May; 10th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December. Work not possible 1st January and 25th December, but possible other dates subject to approval Port Authority.

EMERGENCY TELEPHONES: Police 22456; Ambulance 22405; Fire, telephone Port Captain 22160/22159.

SERVICES: None available.

SHORE LEAVE: Travel from Cabinda District to Angola proper is both limited and strictly controlled and, therefore, visits ashore of vessel's personnel should be minimised.

Crew members left behind when the vessel leaves will be held in custody and deported at the vessel's expense. The vessel may also be subjected to a fine.

WEATHER: Wind and swell are mostly from S.W. direction with usually a heavy swell from March through to September. Heavy rains may be expected from December through to April. The prevailing currents set N.W. and at times exceed 3 knots. In view of these conditions, vessels are advised that under no circumstances are engine repairs or immobilisation of the main engines permitted within port limits.

DELAYS: For tankers usually no delay, but for cargo vessels may be

delays if two or more arrive simultaneously, which will result in lighter shortages. Is also probability of swell hampering discharge/loading.
AUTHORITY: Inspeccao da Exploracao dos Portos do Norte.

LOBITO: 12.20 S. 13.34 E.

DOCUMENTS: Required on arrival:
Health Certificate.
2 Vaccination Certificates (smallpox, cholera and yellow fever).
8 Crew Lists.
11 Passenger Lists (each for Landing and Transit).
4 Lists showing Ports of Call.
2 Lists of Articles held by Crew: cameras, binoculars, radio, spirits, cigarettes, etc.
3 Ship's Stores Lists.
6 Dangerous Cargo Lists.
8 Unfreighted Cargo Manifests.
1 Freighted Manifest.
3 Non-negotiable copies Bills of Lading.
3 Cargo Plans (preferably before ship's arrival).
Other necessary official forms prepared by Agent.
PILOTAGE: When Pilot required outside Harbour Entrance, vessel must request via Agent at least 12 hours before arrival. Otherwise Pilot boards inside Lobito Bay before vessel berths. Pilot boat: grey hull, white housing. Max. speed entering Bay – 8 knots.
ANCHORAGE: Lobito Bay excellent holding ground, depths over 33 ft. and easily accessible day and night the year round.
ENTRY RESTRICTIONS: No restrictions, vessels may enter harbour day and night. Vessels not normally visited by Port Authorities between approximately 1900 hrs. to 0700 hrs.
MAX. SIZE: Length 900 ft., draft 34 ft., max. depth 35–37 ft. (normal tidal range: 3 ft. 3 in., maximum: 6 ft.).
WEATHER: March/May rain season. Heavy wind and rain can effect cargo work.
HEALTH: Pratique never given by radio, but granted after Port Authorities (including Doctor) board vessel between 0700–1900 hrs. Pratique granted if no contagious illnesses aboard, otherwise quarantine restrictions imposed. Ships calling from other Angolan Ports – except coasters – subject same procedure.
RADIO: Because Lobito Radio (call sign CQZ) operating MW range 200/400 miles only, all ETA messages, etc., must be routed via Luanda Radio (call sign CQW). Agent uses same routeing.
TUGS: Tug (usually one only) joins vessel whilst berthing and sailing. Ships' lines used.
BERTHING: Unless Masters indicate preference, Port decides which side alongside. No vessels usually allowed berth after sunset. Sailing after dark allowed at Port Authorities' discretion, up to 2400 hrs. No vessel permitted berth without Pilot. Before berthing, vessel must effectively cover water outlets, prepare accommodation ladder and have anchors "at the ready". (Authority fine any vessel ejecting water or waste on to Quays.) Ships carrying explosives not permitted berth before Port Captain inspects cargo.
Passenger and Fruit vessels are given priority regarding berthing.
STEVEDORES: Important vessel gives accurate ETA at least 24 hours in advance to enable Agent order necessary gangs. (Gangs ordered 0700 and 1500 hrs.) No work usually allowed Sundays.
MEDICAL: Radio before arrival if medical assistance necessary on entry. Good hospital facilities available, but specialised treatment and surgery is not. Yellow Fever, Cholera and Smallpox Vaccinations Certificates inspected on arrival.
TANKERS: No oil to be pumped overboard into Territorial waters. Heavy fines imposed for oil pollution, however slight. Three 8 in. diameter pipe-lines discharging into local storage tanks. No slop tanks available. Two Tanker Berths, Nos. 5 and 8, maximum drafts 30 ft. and 35 ft. respectively.
DENSITY: 1024.
FRESH WATER: Normal requirements readily available and delivered by 3 in hose. Loading rate very slow as pressure usually low. Costs: First 50 cu.m., Esc. 20.00, then gradual reduction to Esc. 7.50 for 1,500 cu.m.
FUEL: Fuel Oil (Ordinary) available, viscosity up to 1500 sec. Redwood. 24 hours' notice bunker requirements essential. Gas oil available. No Diesel.
GANGWAY/DECK WATCHMEN: Compulsory, both day and night.
OPENING/CLOSING HATCHES: When closed or opened by Stevedores, cost per time, Esc. 100.00 per hatch. (Crew allowed to carry out this operation.)
SHIPS' CERTIFICATES: Registered Tonnage Certificate, Deratisation Certificate to be shown. (Vessels of Communist countries advised to carry all relevant Certificates for vessels' tonnages, measurements, gear and crew.)
CUSTOMS ALLOWANCES: No restrictions. Custom's Guard supervises opening and resealing of bond.
CARGO GEAR: Normal routine gear: wire and rope slings, nets, chain-slings, baskets, grabs, and shore-cranes (capacity 3–10 tons) available. Heavy lifts of over 10 tons must be discharged using ship's derricks. Two cranes 10 tons available, but not always accessible. 100 ton floating crane sometimes available.
CREW IDENTIFICATION CARDS: On arrival, all crews' and passengers' passports must be handed Immigration Police, who retain these and issue shore-passes. Passes must be carried at all times when on shore. If lost, a fine of Esc. 1150.00 per Pass is imposed.
CONSULS: At Lobito, Norwegian and Belgian Consulates and French Consular Agency. At Benguela – 30 km. from Lobito – Italian Vice-Consulate.
REPAIRS: Small, slipway accommodating vessels up to 800 tons available. Limited engine and hull repairs: electric, oxy-acetylene welding, riveting, cleaning, repairs to auxiliary diesel and electric equipment and boilers. Floating dock for vessels up to 2,000 tons displacement.
REPATRIATION: Air communication via Luanda.
AIRPORT: About 4 kilometres from Port. Airstrip unable take heavy aircraft.
TIME: GMT plus one hour.
HOLIDAYS: 1st January; March/April Easter; 10th June (National); May/June (Corpus Christi); 15th August (Ascension Day); 2nd September (City Day); 5th October; 1st November (All Saints Day); 1st December (Independence Day); 8th December; 24th December; 25th December.
GENERAL: Ships should not: Dispose any wastes into harbour or on to quays. Change mooring lines or lower lifeboats or immobilise main engine or use ship's sirens or radio station without prior permission from Authorities. Vessels must: use watchmen 24 hours per day on adequately illuminated gangway. Also hoist Portuguese Flag from 8 a.m. to sunset.
SHORE-LEAVE: Nationals from countries having friendly diplomatic relations with Portugal usually granted shore-leave, See "I.D. Cards".
DELAYS: Congestion not unusual and berthing delays may vary from one to three days. Ships calling for bunkers have no priority but are sometimes berthed at sunset and fuel during night-shift. Discharging of bulk cargoes can be effected by shortage of suitable wagons.
AUTHORITY: Port Manager, Port of Lobito.

LUANDA: 08.48 S. 13.14 E.

PORT LIMITS: A vessel to be considered an "arrived ship" should be anchored in the bay past a line drawn between the Ilha Light and across the bay to Fort S. Pedro.
DOCUMENTS:
6 Luanda Cargo Manifests (1 freighted).
3 Luanda Bills of Lading.
8 Transit Cargo Manifests.
5 Transit Bills of Lading.
6 Crew Lists.
1 Crew List with full Christian names, giving dates of smallpox and yellow fever inoculations,
7 Ports of Call List.
7 Passenger Lists, including landing and intransit passengers, or "No passengers" declaration.
2 Provisions and Stores Lists.
1 Crew Personal Effects Manifest.
1 Health Declaration.
All ship's certificates to be sighted by Authorities.
PILOTAGE: 72 hours notice of arrival, addressed Agents via Luanda Radio, plus message of arrival at least 6 hours prior arrival received during working hours (0700–1700 hrs.). No VHF available. Pilot launch comes out from port. Anchorage for Pilot in Luanda Bay. No draft restriction at anchorage. Pilot not required for anchoring in bay. For berthing, no pilotage available between midnight–0700 hrs. Pilotage compulsory. No special berthing Pilot. Pilot launch white – flying Pilot Flag (H).
ANCHORAGES: Luanda Bay offers safe, sheltered anchorage at all times of the year. Good holding ground – sand/mud. No draft restrictions.
MAX. SIZE: Length, 1,000 ft. (alongside); breadth, no restriction; draft, 34 ft. (alongside). Tankers, up to 55 ft. draft at the refinery buoys.
WEATHER: March/May rain season. Heavy wind and rain can affect cargo work.
HEALTH: Pratique may be granted by radio through Radio Luanda, addressed Port Health or via Agents. Accommodation ladder must be rigged for doctor on arrival. Pratique must be granted at each Angolan port. Pratique is *not* automatic. If infectious disease on board inform Port Health/Agents by cable.
RADIO: Addressed "Luandaradio" for ETA, draft and requirements. Call sign CQW on 500 kc/s, listening on "odd" hours only throughout 24 hours. Listening between 0600–1800 hrs. Call sign CQW3 on 13.023 kc/s on "even" hours only. Listening between 1800–0600 hrs. Call sign CQW on 8.565 kc/s on "even" hours only.
TUGS: Two available and compulsory for berthing and unberthing. Tugs join vessel off berths. Ship lines used (if tug lines requested – extra charges).
BERTHING: Ships taken in strict rotation of arrival for berthing, except that passenger vessels have priority. There are 7 berths for import and export cargoes, all berths are available for oil bunkering.
The quays are divided into 5 zones with depths alongside of 32 ft. maximum.

Zone I.	1,380 ft. of which 900 ft. of quay length suitable for ocean going vessels.
Zone II.	480 ft. quay length.
Zone III.	900 ft. quay length.
Zone IV.	540 ft. quay length.
Zone V.	574 ft. quay length.

Shoreside cranes of 3 tons and 5 tons, furthermore 2 cranes of 10 tons lifting capacity and also 1 mobile crane of 20 ton capacity for lifting heavy pieces only.
A self-propelled floating crane, capable of lifting 100 tons, was recently commissioned – maximum and minimum reach of 46 ft. 6 in. and 9 ft. respectively, lifting to about 78 ft. approximately.
BULK HANDLING: Ores in bulk are usually loaded at Zone III; no mechanical loading installation.

The ore is shovelled from railway trucks into buckets; daily loading average 4,000 tons per 24 hrs.

Grain vessels will also be moored at Zone III alongside the grain shed. Discharging by means of tubes which are lowered into the holds and suck the grain out by an electrically propelled spiral fitted in the tube.

The rate of discharging is about 100 t.p.h. and the grain is loaded into railway waggons, each of 30 ton capacity, via the adjacent warehouse.

STEVEDORES: Gangs arranged by Agent/Shipmaster. Normal port working hours 0700–1200 hrs., 1400–1730 hrs. (overtime 1730–2330 hrs.), Saturday 0700–1230 hrs. Sunday/holidays – no work.

MEDICAL: For serious cases, as much advanced notice as possible should be given with all details available. Minor cases can be treated on arrival within half an hour without previous notice. Apart from Government Hospital, there are a number of private nursing homes with good facilities. Smallpox inoculations are essential. Yellow Fever inoculations recommended.

TANKERS: Two tanker terminals No. 2 Quay and off-shore terminal. Lines No. 2 Quay 10 in. diameter, available for loading/discharging fuel oils, gas oil, gasoline and aviation spirit, but *not* crude oil. Off-shore terminal utilised principally for loading fuel oil and gas oil, as well as loading or discharging crude oil. Three lines, viz. 12 and 18 in. – fuel oil and crude oil, 8 in. for gas oil. No slop discharge facilities. Drafts – No. 2 Quay 34 ft. Off-shore terminal two sets mooring buoys, one for tankers with max. length 230 m. and max. draft 55 ft. and the other for tankers not exceeding 100 m. with draft 40 ft.

DENSITY: About 1024.

FRESH WATER: Fresh water available through quay pipe-lines, each hose delivering about 30 t.p.h. First 50 tons Escudos 20 per ton, next 200 tons Escudos 17.50 per ton, next 250 tons Escudos 15 per ton.

FUEL: Limited number of grades can be obtained subject to nomination well in advance. No barges available.

FIRE PRECAUTIONS: For tankers loading/discharging alongside No. 2 Quay – no vehicles allowed within vicinity and other vessels cannot berth within 40 m. of tanker's stern or bow.

DEVELOPMENTS: Plans for reclamation and new berths round to the Forte da S. Pedro da Barra.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Can be carried out by crew or stevedores at vessel's option.

SHIP CERTIFICATES: Tonnage and Deratisation Certificates.

CUSTOMS ALLOWANCE: No restrictions, but sales ashore a serious offence.

CARGO GEAR: No additional requirements provided valid test certificates aboard.

CREW IDENTIFICATION CARDS: Provided by Agents for crew proceeding ashore.

CONSULS:

Belgium	Denmark	U.S.A.
France	West Germany	Austria
Great Britain	Netherlands	Brazil
Italy	Norway	Switzerland
South Africa	Sweden	Spain

REPAIRS: Minor repairs and hull repairs above the water-line can be carried out.

DRY DOCKS: None.

REPATRIATION: Repatriation will not present any difficulties.

AIRPORT: Distance from port 4.5 miles. 21 flights weekly to/from Lisbon by Transportes Aereos Portugueses (TAP), also 5 flights weekly to/from Salisbury and Johannesburg in association with South African Airways (SAA).

TIME: GMT plus 1 hour all year.

HOLIDAYS: Saints Day (1st January), Portugal Day (10th June), Saints Day (15th August), Republic Day (5th Ocober), Saints Day (1st November), Independence Day (1st December), Saints Day (8th December), Christmas Day (25th December). No cargo work on these holidays.

POLICE/AMBULANCE/FIRE: Police 7408; Ambulance 25275; Fire 22222.

TELEPHONES: Can be placed on board.

GENERAL: Ample water in bay for anchoring, and most vessels enter port without Pilot. Pilotage is compulsory for berthing/unberthing on quays, this service being available from 0700 hrs. to midnight. If Master elects to wait for Pilot outside port and another vessel proceeds direct to anchorage, the latter will be first on turn for berth.

SERVICES: Tank cleaning possible but advance notice required. Radio, radar repairs possible by military personnel, but spares rarely available.

SHORE LEAVE: Crew members allowed shore leave subject Immigration approval provided inoculation certificates are valid.

REGULATIONS: Portuguese mailboats have berthing priority over all other vessels, foreign *passenger* vessels next in precedence.

DELAYS: Congestion rarely exceeds 36 hours.

AUTHORITY: Servicos de Portos, Caminhos de Ferro, e Transportes.

MOCAMEDES (incl. Porto Saco): 15.11 S. 12.07 E. **(See Plan)**

DOCUMENTS:

Health Certificate.
2 Vaccination Lists (smallpox and yellow fever).
8 Crew L sts.
11 Passenger Lists (for each landing and transit).
4 Lists showing ports of call.
2 Lists of Articles held by crew/passengers, i.e. cameras, binoculars, radios, tobacco, etc.
3 Ships' Stores Lists.
6 Dangerous Cargo Lists, i.e. all types of explosives.
All foregoing to be signed by Master. Other essential official forms prepared by Agent.

PILOTAGE: Pilot boards in Bay – safe, natural bay with no reefs and easily accessible both day and night. Vessel *must* wait for Pilot and instructions before berthing.

ANCHORAGE: No currents in harbour area, but slight prevailing winds constant. Good holding ground with depths over 34 ft. Approaches up to 45 ft. depth. Tidal range about 5 ft.

RESRICTIONS: No restrictions; vessels may enter harbour day and night. Authorities visit between 0700 and 1900 hrs. (approx.) only. Vessels may sail at any time.

MAX. SIZE: *Mocamedes* – Governed by berth depth 33 ft. alongside.
Porto Saco – Vessels up to 14 m. draft. Largest bulk carriers handled.

HEALTH: Pratique granted on arrival after "Health Guard" visit: boarding 0700-1900 hrs. Normal quarantine restrictions imposed if contagious diseases aboard. Ships calling from other Angolan ports (except coasters) are subject same procedure.

RADIO: Messages *must* be routed via Luanda Radio (call sign CQW). No ship/shore radio link.

TUGS: Two available of 2,200 h.p., fitted with VHF. Join vessel for berthing. Ship's lines used. Vessel under 5,000 tons use one tug only.

CARGO FACILITIES: *Mocamedes* – The accommodation consists of one concrete quay, length 1,350 ft. providing 3 berths. For the handling of general cargo, there are 4 cranes of 5 tons and two cranes of 3 tons, modern cargo handling devices. Also lightening possible. One 10-ton floating crane available, subject ample notice from Lobito. Dangerous cargo is discharged alongside or into lighters, at the Port Captain's discretion.

Porto Saco (Saco Bay) – Ore is loaded at the pier in Porto Saco; length is 1,066 ft., width 59 ft. Depth alongside 54 ft. 6 in. at low tide, normal sea water, clear height from water level at ISHW up to unloader 73 ft. 10 in. One mechanical loader of conveyor belt type; capacity often exceeds 3,500 metric t.p.h. Reach 65 ft. 6 in. approx. from fenders. Connections for supply of bunkers and water.

BERTHING: Unless Masters indicate preference, port decides berthing-side. No vessels berthed after sunset (except passenger ships), but sailing during nightshift permitted so long as prior warning given before 1700 hrs. No vessel allowed berth without Pilot. Before berthing, important that vessel covers all water outlets, prepares accommodation ladder and has forward anchors ready. Ships carrying explosives not permitted berth before Port Captain surveys cargo.

STEVEDORES: Radio accurate ETA 24 hours in advance to enable Agent order required gangs. (Gangs ordered 0700 and 1500 hrs.) No Sunday work permitted for cargo vessels.

MEDICAL: If medical assistance required on arrival radio to Agent. Adequate hospital facilities available, but no specialised treatment or surgery. Yellow fever/smallpox certificates inspected on arrival.

TANKERS: No oil or waste products to be pumped overboard. Heavy fines imposed for breach of this regulation. Tankers discharge at Porto Saco – about 10 kilometres north of general cargo berths, situated northern end of Mocamedes Bay. Maximum draft 54 ft., length of quay 1,066 ft. No dirty ballast facilities.

DENSITY: 1024.

FUEL: Available from dockside pipe-line. At Porto Saco, rate 200 t.p.h. Bunkers may be taken during loading operations without delay.

FRESH WATER: Available ex-wharf, rate 15 t.p.h.

FIRE PRECAUTIONS: No special precautions except ships carrying explosives. Fire Brigade standby charge.

DEVELOPMENTS: Porto Saco (Iron-ore/Tankerberth) anticipated augment present ore-loading equipment to enable load ore-carriers up to 10,000 t.p.h. Dredging to projected depth of 65 ft.

GANGWAY/DECK WATCHMEN: Compulsory, day and night.

OPENING/CLOSING HATCHES: When performed by stevedores, costs per hatch per time Esc. 100.00, but crew allowed perform this task.

SHIPS' CERTIFICATES: Registered Tonnage Certificate, Derat. Certificate, examined by authorities on arrival.

CUSTOMS ALLOWANCE: No restrictions. Customs' guard supervises opening and resealing of ships' bonded lockers.

CREW IDENTIFICATION CARDS: All crew/passenger passports handed Immigration Police who issue shore passes. Passes must be carried when on shore.

CONSULS: None.

REPAIRS: Only very minor voyage repairs.

DRY DOCKS: None.

REPATRIATION: Air communication via Lobito and Luanda.

AIRPORT: Small airstrip unable to take heavy aircraft.

TIME: GMT plus one hour.

HOLIDAYS: See "Lobito".

GENERAL: Ships must not dispose of wastes into harbour or on to quays, change mooring lines, lower lifeboats, immobilise main engine, use ship's siren, or ship's radio station without prior permission from authorities. Vessels must use watchmen for 24 hours per day on well-illuminated gangways and hoist Angola flag from 0800 to sunset.

SERVICES: None available.

SHORE-LEAVE: All nationalities from countries having friendly diplomatic relations with permitted shore leave. See "I.D. Cards".

DELAYS: Berthing delays are unusual.

Argentina

Information for ports of Argentina, including drawings of port areas as reproduced in our special map section, has been compiled not only with the assistance of Port Authorities but also with the very kind co-operation of Centro de Navegacion Transatlantica of Buenos Aires to whom we are very much indebted.

Shipowners and Masters wishing to be in possession of more detailed information concerning River Plate ports, Argentina South Atlantic ports and the Strait of Magellan, are advised to obtain a copy of the "C.N.T. Year Book" which is published by Centro de Navegacion Transatlantica, 25 de Mayo 489, Buenos Aires.

N.B. For practical purposes, we have sub-divided information for Argentina into three sections as follows:

I. *GENERAL.*
II. *RIVER PLATE PORTS*
III. *SOUTH ATLANTIC PORTS*

I *GENERAL*

DOCUMENTS:

(a) According to Migrations Resolution No. 9153 of 13.7.72, effective 1.11.72, issued to comply with Latin American Free Trade Zone agreements tending to uniformity of shipping documents through Latin America, a new form has been introduced, and others modified.

Distribution of forms is now as follows:

	Sanitary Officials	*Customs*	*Immigration*	*Port Police (Prefecture)*	*Total*
Sailing permit from last port				1	1
Health Declaration	1				1
General Declaration†			1†		1
Negative cargo list (if no cargo for the port) alternatively Ballast certificate, alternatively cargo manifest for the port.		1			1
Manifest of cargo for transshipment		1			1
Store List					
Deck, Engineering & Refrigerating		2			2
Cabin Stores		2			2
Crew Personal Effects		2			2
Passenger List†	1	2	1	3/5	7‡
Passenger Baggage summary (manifest)		2			2
Crew List†	1		2	3/4	6§
Crew Identity cards†			1 each		various
Passenger E/D cards†			1 each		various

†required on both entering and sailing.
‡ 9 for passenger ship.
§ 7 for passenger ship.

(b) Masters should also have at hand for inspection as required all the various certificates such as Certificate of Registry, Postal packet permit, if pertinent, Freeboard, Measurement, Safety Equipment, Radio Installation, Bulk Cargo, shifting board installations or equivalent, and Deratisation Certificate, or exemption.

None of these documents requires an Argentine Consular visa.

(c) Port Agents should also receive copies for their use and to facilitate any further contacts with the authorities in case of need. In particular they require a large number of copies of Manifest, and from this they will prepare Spanish manifest, which must be presented to Customs within 48 hours of vessel's entry. A number of extra copies of crew list are also needed, and one extra store list.

(d) Every person figuring on the crew list of a vessel entering an Argentine port must possess documents proving his identity, such as a discharge book, passport or other documents in use in the country of origin, authorised by the competent Authorities.

(e) Vaccination Certificate. Members of crew must be provided with an international vaccination certificate, not more than 3 years old, which should be presented on arrival, together with the individual Identity Card. Failing this, the crew will be vaccinated by the boarding doctors.

(f) Identity Cards. On arrival at an Argentine port, Masters of foreign vessels must deliver Identity Cards complete with photographs and finger-prints of each member of the crew, together with two copies of Crew List. One set is retained by the Migrations Department, and the other document remains in possession of the individual so that once identified, the crew member may return to the country without the necessity of obtaining new documents. The Captain is handed in exchange one copy of the Crew List, sealed and signed by the Immigration Officer to enable him to prove at other Argentine ports of call, that he has complied with the corresponding Regulation.

No member of the crew, except the Captain, is allowed to land until the Immigration Authorities have checked the crew with the Identity Cards.

Captains may if necessary have the Identity Cards completed with photographs in the Argentine at the first port of arrival. In such cases it is advisable that Agents are advised in advance so that preparations may be made against vessel's arrival. The Authorities will not allow any members of the crew to be disembarked until they have presented their Identity Cards or have had their photographs taken. Agents must present these Identity Cards to the authorities for stamping within 48 hours of arrival of the vessel. Immigration control is made at whatever hour the vessel arrives, forming part of the normal reception procedure.

(g) The stores lists should be completed with great care as a specially trained searchers' brigade has been visiting most ships as soon as free pratique is granted.

Particular care must be taken to declare all sizes and measures in the metric system. A plea of a regrettable mistake is not accepted and fines, if legally applicable, can be severe.

FREE PRATIQUE: Vessels take pratique in port, and may enter and berth if they fulfil the following conditions:

(a) Clean port of sailing and ports of call.

(b) No persons with infectious or contagious diseases or with fever on board.

(c) No cases during the voyage of disease of international concern, or of infectious diseases of an epidemic nature.

To be able to obtain this privilege of taking pratique in port, it is essential that Captains of all vessels arriving from abroad wireless their Agents, not more than twelve hours before arrival, that vessels under their command are in the sanitary conditions as required by Art. 45 of the regulations to enter port and go alongside.

On receipt of this message, Agents will present to the Health Authorities the request for a berth, accompanied by the telegram sent by the Captain, not less than six hours (nor more than twelve) in advance, detailing sailing port and ports of call, and indicating the approximate hour of arrival. If the wireless message is in code, Agents will give the necessary translation, and be held responsible for any error in such translated version.

The message may be sent either in English or Spanish, and we give specimen texts in both languages, which should be closely followed:

"Addressed to Agency in Buenos Aires (or other port)
solicitamos pedir libre platica telegrafica buque . . . (1), procedente de . . . (2), con escalas en . . . (3), con . . . (4) . . . tripulantes, (5) . . . pasajeros Buenos Aires . . . (6), pasajeros transito punto. declaro no tener abordo persones afectadas por ninguna enfermedad pestilencial punto estado sanatario bueno
"captain . . .(7)."

or in English:

"please request free pratique ms (or ss) . . . (1), proceeding from . . . (2), with calls at . . . (3), with . . . (4) . . . crews, (5) . . . passengers for Buenos Aires . . . (6). passengers in transit stop hereby declare that nobody on board affected by any pestilential disease stop sanitary condition good.
"master . . . (7)."

In each case the gaps must be filled in as follows:

1. Port of vessel and flag.
2. Port of commencement of voyage.
3. Full details of all ports of call.
4. Number of crew.
5. Number of passengers for Buenos Aires (or whatever port first entered).
6. Number of passengers in transit.
7. Full name of Master, and also of doctor if there is one on board.

As there have been cases of insufficient information being received from vessels, and "added in" by Agents in the translation, the authorities have established this standard form which Masters must follow in their messages, and which will accompany the request to the Health Authorities.

This facility now refers to all Argentine ports, the message requesting Free Pratique to be sent to the vessel's Agent at first port of call, after which Free Pratique is automatic in all subsequent Argentine ports. If, however, a non Argentine port is called at en route, Free Pratique must again be requested at what will then become the "first Argentine port".

Agents will confirm to the vessel, by radio, the date and hour of granting of free pratique, and with this information in hand, vessel can enter port and go alongside. The Port Authorities will board as soon as the gangway is placed for their routine inspection, and until they have boarded, no one else should be allowed on board.

Vessels which do not meet the sanitary requirements, or come from unclean ports, must fly the yellow flag on entering for the necessary inspection alongside.

River Ports, Vessels proceeding to river ports get pratique at destination.

Vessels lightening. Tankers and other ships lightening in River Plate waters, provided they comply with Art. 45, may later continue their voyage and go straight into berth at port of destination to take free pratique there.

Sick crew members. If there is a sick person aboard, the international sign "W" must be flown on entering, and for Free Pratique, the customary yellow flag.

Captains must report to the boarding sanitary authorities those members of the crew having venereal complaints.

Asian and African Ports. In accordance with WHO requests, all vessels proceeding from these ports will be subject to an inspection of all galleys and store rooms.

Infected ports. Apart from the smallpox vaccination certificate, which is obligatory in all cases, the recent Cholera epidemics have caused the Health Authorities to tighten control. All persons on board vessels coming from ports in the countries named below must be in possession of the Anti-Cholera inoculation certificate, and from other zones as indicated as International Yellow Fever vaccination certificate.

Cholera. The international certificate is valid from the sixth day of inoculation, and for six months. The countries at present under control are:

Africa. Algiers, Alto Volta, Cameroon, Chad, Dahomey, Ghana, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Togo.

Asia. Burma, India, Indonesia, Malaysia (West), Muscat, Nepal, Pakistan, Philippines, Vietnam (South).

Epidemics are not officially admitted in the United Arab Republic

and Sudan, but the certificate is advisable as a precautionary measure.

Other zones may be affected at short notice.

Yellow Fever. The vaccination certificate is valid for ten years, as from the tenth day of inoculation. It is required for all persons coming from:

Africa. Angola, Ghana, Kinshasa, Nigeria, Sierra Leone, Sudan.

South America. Brazil (territories of Roraima and Boa Vista), Colombia (Bolivar, Simiti, Boyaco and Paz de Ariporo).

Inflammables. It should be borne in mind that vessels carrying over 25 tons and under 100 tons of inflammables, explosives, etc., must be inspected in the roads before entering whether they have asked for Free Pratique by radio or not, although this is still advisable as the one inspection is independent from the other.

CLASSIFICATION OF ARGENTINE PORTS: In accordance with Article 31 of the Pan American Sanitary Code, the National Health Department has classified the Argentine ports as follows:

Clean Ports Class A—Buenos Aires, Rosario, Santa Fe, La Plata and Bahia Blanca.

Clean Ports Class B—San Nicolas, San Lorenzo, San Martin, Villa Constitucion and Concepcion del Uruguay.

Clean ports under the vigilance of the Health Department—Mar del Plata, Necochea and Diamante.

A clean port, in general, requires the absence of non-imported cases of cholera, yellow fever, pest, exanthematic typhus or any other contagious disease o a serious epidemic nature, that may be carried through international trade. The clean ports of Class A have competent staff and suitable sanitary equipment, also bacteriological laboratories, registers of disease and deaths, lazarettos, etc.

The clean ports of Class B are those that have not got all the equipment required for Class A.

FLAG: The flag of the Republic is three horizontal and equal bands of which the centre one is white, and the upper and lower, sky blue.

The official colours, flown by Naval vessels and all official entities are distinguished by a rising golden sun in the centre of the white.

All foreign merchant vessels must fly the Argentine flag from the highest mast while in territorial waters and ports, and fly their own national colours from the ensign staff.

PILOTAGE: A. *Ordering:* For Recalada Station, minimum 48 hours in advance, for all other services Agents of the vessels to be piloted must apply, in writing, to the Pilotage section of the Prefectura at their domicile before 1700 hrs. on the day before the service is to be effected, or on Sundays/holidays, before 1100 hrs. Pilots are obliged to render service in strict turn, in accordance with the register in the zone.

Applications for Pilots presented outside the hours established will be accepted but they will be classed under the headings of "Extraordinary" or "Urgent" applications. Pilots should always be ordered by the Agency; only in exceptional cases may a Pilot be requested direct by a Master, when by reasons of force majeure, or change of destination arrival is unforeseen. Vessels which are unaware of their Agents name may also request a Pilot direct. In such cases the request should be made direct, by radio, to the Prefectura with full explanations of the circumstances.

B. *River Plate Zone:* There are three Pilot stations in this Zone, namely; Port of Buenos Aires, Intersection and Recalada Pontoons.

(i) Inwards from sea. Inward vessels for up river ports Buenos Aires or La Plata have to take a Pilot at Recalada, and must give 48 hours advance notice of arrival, both to Agents in Buenos Aires and direct to Recalada, call sign LOJ 500 kc/s. (600 m.) Type A1, A2.

The operator is on duty from 8 to 10, 12 to 14, 16 to 18 and 20 to 2200 hrs. Communications can also be made on 462 kc/s. (649 m.).

The second Pilot station is at Intersection Pontoon km 37 measured out of Buenos Aires.

The Recalada Pilot takes all vessels to Intersection only, where another Pilot comes aboard, as follows:

if bound for Buenos Aires, a port Pilot.

if bound for La Plata, a river Pilot to La Plata Roads where a La Plata Port Pilot takes over.

if bound for upriver, a river Pilot.

(ii) Outwards to Montevideo. Vessels sailing from Argentine Plate ports to Montevideo must take an Argentine Pilot up to Montevideo Roads, not drop him at Recalada.

(iii) Inwards from Montevideo. Vessels arriving from Montevideo come in charge of a Uruguayan Pilot to Intersection, where the second Pilot takes over as above: Uruguayan Pilots, when in Argentine waters are subject to all Argentine laws and regulations.

(iv) Outwards to sea. Outward bound vessels (except for Montevideo) are obliged to disembark their Pilots at Recalada, except when prevented by weather, in which case the Pilot must land at first available port and his travelling expenses back to Buenos Aires are for vessel's account.

C. *River Parana Zone:* Comprises the River Parana from the port of Parana (km. 600 from Buenos Aires) down to its mouth, and that part of the River Plate limited to the East by its left bank to Punta Negra (Uruguay), thence to Intersection Pontoon, to the South by the North bank of the access channel to Buenos Aires Port, to the West the right bank of the River Plate from the entrance to Buenos Aires port to kilometre 0 of the River Uruguay.

On the River Parana, on distances exceeding 200 km. two special Pilots must be ordered, and therefore there will be four Pilots on board (two special and the two on turn), and the vessel has to pay for each of them, i.e. four times the tariff.

For distances of less than 200 km., the same ruling applies when continuous navigation is requested, which necessitates the employment of two Pilots on turn. However, when only one Pilot is asked for, only one special Pilot is nominated, if specially asked for, and consequently the tariff is double.

(i) Northbound. Pilots for navigation through this zone go on board, north-bound, at Intersection Pontoon, whatever the destination. If for Uruguayan ports in the River Uruguay, the Uruguayan port Pilot comes on board off Parana Bravo.

(ii) From river Uruguay. Vessels from River Uruguayan Ports, either Argentine or Uruguayan, change their River Uruguay Pilot for River Parana Pilot at the mouth of the Parana Bravo. However, if proceeding from a Uruguayan port, it is preferable to send the Parana Pilot to the Uruguayan port, and drop the Uruguayan Pilot off Nueva Palmyra. In certain cases the Argentine Parana Pilot can also come aboard at Nueva Palmyra.

(iii) Inside Parana River. There are two stations for despatching Pilots in the River Parana Zone; one at Buenos Aires and the other at Rosario. From the port of Buenos Aires Pilots will be cleared to take vessels to the Northern limits of the Zone, as also for vessels anchored at ports or places South of San Pedro, for any destination.

From the Rosario station, Pilots will be despatched to vessels anchored within the port of San Pedro, and all places to the North of the port, whatever their destination.

At some of the smaller ports in this zone the Prefecture will, to avoid delay to the vessel, authorise the River Pilot to berth the vessel. This request must be made when ordering the Pilot, but Agents at the river port must also apply for a Pilot, and see that he is employed if available.

Draft is ruled by the depth of water at Martin Garcia Bar, which is at present 24 ft. 6 in. at zero. This varies, and from time to time the Prefecture has authorized clearance of vessels up to 27 ft. Occasionally it happens, in spring, that there is less water in the river above Martin Garcia, but the Weekly Bulletin issued by the authorities covers this and all determining depths on the river routes.

(iv) To Montevideo. Vessels proceeding down river to Montevideo, take a Pilot at Intersection to Montevideo Roads, where a port Pilot boards.

(v) To La Plata. Vessels from up river ports for La Plata drop their river Pilot at Intersection, take another river Pilot to La Plata Roads (optional) and then a port Pilot there.

D. *River Uruguay Zone:* Comprises the River Uruguay from Concepcion de Uruguay, km. 188 to its mouth, and that part of the River Plate mentioned under the Parana River Zone. All Pilots for this Zone will be despatched through the Buenos Aires station.

E. *Bahia Blanca Zone:* Comprises the Bay from a line joining the buoys at Punta Tejada and Punta Lobos, up to the ports. There is no pilot vessel on station. The ordering of Pilots for the Bahia Blanca Zone is effected by the Overseas and Coasting office at that port. As the official tug for taking sea Pilots to meet incoming vessels is sometimes out of commission, Masters are requested to advise their Agents of the ETA 48 hours in advance. The cost of a special tug is heavy, and on occasions a saving can be made sharing expenses if the tug can take out Pilots for other incoming vessels, and also embark those from vessels outward bound from Bahia Blanca.

F. *Southern Ports:* South of Bahia Blanca and as far as Rio Grande pilotage is not obligatory in port, but when a vessel requires a Pilot application should be made to the Pilots' Office of the Naval Prefecture through vessel's Agents in Buenos Aires with at least five days advance notice. They go on board either at Buenos Aires, off Mar del Plata, or at other ports as required, and are authorized to operate in all of the Southern ports: San Antonio del Oeste, Madryn, Commodoro Rivadavia and the adjacent oil berths, Deseado, San Julian, Santa Cruz, Rio Gallegos, San Sebastian, Rio Grande and Ushuaia.

Their duties are to act as Port Pilots for entering, mooring, unmooring and leaving any of these ports.

Vessels from South Atlantic Argentine ports, for Montevideo should pick up an Argentine Pilot from Recalada to Montevideo Roads, but if such vessels pass further than five miles away from Recalada Lightship and pass direct to Montevideo Roads, there is no such obligation.

G. *Embarking/Disembarking:* Accommodation ladder. The gangway should be lowered to about 3 m. above the surface of the water, and adjusted in such a way that the Pilot only needs to climb the rope for this distance, in order to step on to the gangway. This rope ladder must have all the steps resting firmly against the side of the ship, in accordance with the requirements of the Safety of Life at Sea Convention. Similarly, the gangway must rest against or be secured to the side of the vessel, and Pilots may refuse to board if these conditions are not complied with.

RADIO: All times are given in GMT unless otherwise specified.

Storm Warning, Met. situation, Weather forecasts and Notices to Mariners. Are transmitted in clear (A1) in Spanish and then English, daily, from the following stations:

General Pacheco Buenos Aires	LSV	3220.5 kc/s.	0.5 kW	01.30	Storm warning Met. resume
	LSV 2	5907.5	0.5 kW		Forecast
	LSV 4	12100	1 kW		
	LSV 5	17520	1 kW		

and again at 1600

while LPD 5 transmits the same information on 512 kc/s. (5 kW) at 0148 and 1630 hrs.

The weather forecast covers the zone from Rio de Janeiro to Drake Strait and is valid until 1200 of the next day. The word "nil" is used if there is no information to report, as for example in storm warnings.

Vessels at sea can request a forecast and state of the weather at any time from Meteoro Baires, through Pacheco—LPD on 4177,

4187, 8354, 8374, 11531, 12561, 16708, 16748, 22220 and 22270 kc/s.

Radio Trelew	LPZ	20	527 kc/s.	3 kW at 1730
Radio Comodoro Rivadavia	LPX	2	474 kc/s.	at 0400 and 1800 as above.

Vessels at sea in this area can request a forecast from Meteoro Comodoro Rivadavia through LPX 2.

Notices to Mariners and Urgent River Notices. Are transmitted in Spanish and repeated in English by Radio Pacheco and Radio Comodoro Rivadavia.

Radio Pacheco	LPD 5	512 kc/s.	5 kW	A2 at 00.30 Plate Area
	LPD 6	4268 kc/s.	0.25 kW	A1 at 12.30
Comodoro Rivadavia	LPX 2	474 kc/s.	3 kW	A2 at 13.30 20.00
	LPX 27	4428.6 kc/s.	0.5 kW	A3 at 04.00 08.00 12.00 21.00

This station only reports on Lat. 42° S. to 52° S.

In both cases messages are repeated twice at intervals of one minute at the times indicated. Notices are repeated daily during six days from publication, preceded by the signal TTT, followed by the number of the notice, the letter R and then the text in this sequence:

Zone, sea, river, province, locality, etc.
Lat. and Long. if necessary.
News in question.
Sign off with SHN to indicate the authority (Servicio Hidrografia Naval).

If there is no notice to transmit, the stations will transmit "no hay avisos para navegantes", "no notices for mariners".

Notices to Mariners, and other items, in Spanish only—Notices to Mariners and other special information are given in Spanish only as follows:

Rosario—LSQ 38, 477 kc/s., A1, at 13.05:
Depth of water in the Parana River from Los Pajaros to Los Ratones and also the minimum depth between Santa Fe and Rosario.

Concepcion del Uruguay—LSQ 57, 477 kc/s., A1, 0.5 kW at 13.00:
Information on the Uruguay River from San Javier to Gualeguaychu.

Buenos Aires South Dock (Darsena Sur)—LSQ 9, 477 kc/s. A1, 1.5 kW at 0400, 0500, 0600, 0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, and 1545 hrs. except on Sundays and holidays.
Depth of water on the gauge at Riachuelo.

Buenos Aires Central de Comunicaciones (Prefectura Naval Argentina) —LSQ 4, 524 kc/s., A2, from 05 to 10 minutes each hour:
Depth of water indicated by the semaphores at Puerto La Plata and Riachuelo, and of the El Codillo zone of the Punta Indio Channel referred to zero on the Oyarbide tide gauge which is between pairs of buoys 24 and 25 in the Main Channel, and the new tide gauges referred to under "Buenos Aires", Tidal Signals.

Buenos Aires, Meteo (All A1)—LSV 3220.4; LSV 2, LSV 6, 5907.5; LSV 4, 12100; LSV 5, 17520 kc/s. at 1705 hrs.
Depth on the River Plate, River Parana, River Paraguay and River Uruguay zones. Buenos Aires, Radio Nacional LRA 870 kc/s. A3, at 0100, 1100, 1500, 1800 and 2100 hrs.
Depths of water and met. forecast for River Plate zone, this station also transmits tidal forecasts at 0100, 1000, 1315, 1600, 1900 and 2200 hrs.

Intersection Pontoon River Plate—LOI, 524 kc/s., A2:
Continuous information on local depths of water, on request.

Recalada Pontoon—LOJ, 524 kc/s., A1:
Same as Intersection.

Buenos Aires, Central de Comunicaciones (Navy—LOL 457.2, 2162.5, 4856, 8030, 13101, 17180, 22840 kc/s., A1, at 0230, 0300, 1300, 1330, 1930 and 2030 hrs.
Urgent Notices to Mariners, and Notices to Mariners covering the Argentine Coast and river systems.

Santiago River (La Plata)—LOM, 524 kc/s., A2,
from 05 to 10 minutes each hour:
Depth of water on the semaphore at La Plata.
From 10 to 15 minutes each hour:
State of tides in El Codillo zone of Punta Indio Channel, referred to zero on the Oyarbide tidal gauge (between pairs of buoys 24 and 25).

All Atlantic ports also transmit local notices to Mariners and weather forecasts in Spanish, the call signs and frequencies are indicated under each individual port, but between the powerful stations at Pacheco (Buenos Aires) and Comodoro Rivadavia, the whole coast is covered by the regular information given in both Spanish and English.

Facsimile Reports. Buenos Aires also transmits facsimile reports, of which the following correspond to surface forecasts, valid for 24 hours, and weather on Mercator projection.

		0800/0815 and 2000/2015 hrs.
From station	LRO 69	5185 kc/s.
and	LRB	10720 kc/s.

both of F4, white and black with a variation in frequency of plus 400 minus 400–5 kW and referred to observations made eight hours earlier.

From the Antarctic, the Argentine Met. station at the South Orkney Islands transmits an analysis of the Atlantic area at 0300 and 1700 hrs. from LOK on 4250 kc/s. and 13051.5 kc/s.

Traffic Control and Safety at Sea. The Prefectura Naval Argentina, in charge of shipping activities including safety at sea, maintains a control centre at Buenos Aires, and another at Mar del Plata (where several hundred fishing vessels operate).

Objectives are to prevent collisions at sea or groundings and to keep a safe, expedite and orderly flow of traffic, as well as to alert safety and salvage systems when vessels need assistance.

A. – The Controlled area, from Buenos Aires, covers from parallel 57° W passing through pair of buoys No. 21 in the main entrance Channel to a line from San Isidro (Buenos Aires) to the mouth of the Parana Guazu river.

The Centre is on permanent duty in the following VHF-FM channels

16	frequency 156.8	mHz for calls, assistance, urgency and safety.
12	156.6	notices to mariners.
14	156.7	annex to Channel 12.
6 and 8	156.3/4	bridge to bridge use.

Information All vessels in the area, both foreign and national, must inform the Centre of the following:

1. On entering the systems.
2. On leaving the systems.
3. On crossing km 57 in the main channel.
4. On arriving at Intersection Pontoon.
5. On crossing km 11 of the access channel to/or from Buenos Aires.
6. When anchoring, mooring or unmooring.

In each case, except 2 and 6, they will give the estimated hour of arrival at the next point en route.

Vessels will also report, on Channel 16, the following:

(a) Accident or fire on board.
(b) Sighting another vessel in apparent difficulties.
(c) Sighting any dangerous obstacle to navigation.
(d) Any serious reduction in visibility.

They will also advise, on Channel 12, as soon as possible, if any mark, light or navigational aid is damaged, missing, functioning badly or evidently out of position. Vessels must keep constant watch on Channel 16 from entering the zone to leaving it, and immediately after using any of the other channels will continue to listen on Channel 16. If, for any reason, this is not possible, they will report this to Control office by Channel 12.

The Centre transmits as routine information urgent Notices to Mariners, ruling weather conditions every four hours from 0000 and depth of water at El Codillo, La Plata port, Riachuela and Martin Garcia Bar five minutes after every hour.

Also tide and met. forecasts at 0900 and 1500. Storm warnings, visibility reports and obstructions in channels will be transmitted immediately on being reported, and then included in the next routine transmission.

Information can be requested from the Centre at any time.

The Administration procedure is that figuring in the International Union of Telecommunications and/or the Manual for the Use of Mobile services.

Time used in this service is local Argentine time, i.e. GMT less 3 hours.

Language: Personnel on duty in the Control centre will use only Spanish.

If necessary recourse can be had to the Code groups in the International Signal Code in use, and the spelling and lettering tables therein, or to Code Q.

B. – Mar del Plata Centre controls the area from 35° 30′ to 41° S. In this zone the system is voluntary for foreign flag vessels. The Centre operates on the folowing frequencies:

	Coastal Frequency					*Ship frequency*		
One:	Type	A3	H	2182 kHz	LSO	20	2182	a
				2100	LSO	69	2100	d
				4409.4	LSO	70	4410.8	f
				8754.4	LSO	71	8220.4	g
				13189.5	LSO	n2	12410.5	i
	A1	A2		500	LSO	20	500	
	A1			437	LSO	20	437	
				4325	LSO	21	4325	
				12728	LSO	57	12728	

Two: The Mar del Plata Centre maintains a continuous listening watch on:

A1	A2	500 kHz	LSO	20	
A1		4325	LSO	21	
A3	H	2182	LSO	20	
		4110.8	LSO	70	
		8220.4	LSO	71	

and also listens from 00 to 05 minutes each hour on A1 12728 kHz and from 45 to 50 minutes every hour on A3 H on 2100 and 12410.5 kHz.

Vessels can use any of the frequencies listed under "one" after calling any of the frequencies in "two". In radiotelephony, except for frequencies 2100 kHz and 2182 kHz traffic will be routed in semi-duplex as per frequency pairs as indicated in "one" f. g and i.

In this are Notices to Mariners and Safety information will be transmitted as follows:

A3	H 2100	8754.4	0005 and 0505	Argentine time (GMT −3)
	4409.4	7854.4	0805	Argentine time (GMT −3)
	4409.4	13189.5	1205 and 1605	Argentine time
A1	437	4325	0100 and 0600	Argentine time
	4325	12728	1300 and 1900	Argentine time

Storm warnings or other urgent information will be transmitted in A3H and A1 on 500 kHz and 2182 kHz.

Information: Vessels on entering or leaving the zone will indicate:

1. Position, course, speed, whence proceeding, whither bound.
2. Sailing from or entering ports in the area.
3. Report geographical position every twelve hours counted from time of first advice, giving course and speed.
4. Any change in course or speed which alters the normal route and time at which it occurred.

5. Anchoring in or leaving the area.

Happenings: All vessels will immediately advise the centre of:

(a) Accident or damage to own or another vessel.

(b) Sighting any object dangerous to navigation.

(c) Any serious reduction in visibility, or unfavourable meteorological conditions.

(d) Having observed if any lighthouse, beacon, buoy, etc., is not working properly or is out of its correct position.

Language and Time: As in River Plate centre.

Time Signals. Time signals are transmitted from LOL Buenos Aires as follows: frequency 475.5, 2162.5, 4856, 8030, 13101, 17180, 22840 kc/s., A1. at 0100, 1300 and 2100 GMT, using the modified modern American system, with dots every second from 54.30 to 54.50, a dash of eight seconds ending with four half-second dashes, every minute to the hour, ending with a dash.

LOL also transmits on 5, 10 and 15 Mc/s. simultaneously in A1, A2, A3. Carrier waves are modulated in 1000 and 440 c/s. alternately.

Signal consist of dots every second, omitting the 59th second, and with one second interval before the next period commences. Transmissions is from 0800 to 0900, 1100 to 1200, 1400 to 1500, 1700 to 1800, 2000 to 2100, and 2300 to 2400 hrs. Argentine time (GMT less 3 hours daily), except Sundays and national holidays.

At the end of each period of transmission the call sign is given in morse, and before each period the words Observatorio Naval Argentino are followed by the hour and minute corresponding to the commencement of the next signal.

Modulation on 440 c/s. corresponds to the note LA of the fifth octave in the musical scale.

D/F BEACONS: A number of radio beacons specially for shipping have been installed down the coast, in addition to the airbeacons which can also be used, though with less accuracy.

There are eight beacons, and 18 aerial beacons in use as follows:

Practicos Recalada – 35° 10′ 06″ S. 56° 15′ 00″ W. range 150 miles (on the lightship) frequency 320 kc/s., A2.

Signal PR once 9.7 seconds, followed by silence 2.3 seconds, a long dash 17 seconds, silence one second, dash 17 seconds., silence one sec. PR repeat the cycle, PR again and final silence 14.3 seconds, making a period of 120 seconds (two minutes).

In good weather there are two transmissions every two minutes, from 02 to 08 and 32 to 38 minutes each hour.

In fog, one two-minute transmission every four minutes from 02 minutes.

Punta Mogotes – 38° 05′ 32″ S. 57° 32′ 28″ W. range 120 miles. (On the lighthouse) frequency 295 kc/s., A2.

Signal PM once 9.8 secs., followed by silence 2.2 sec., dash 17 secs., silence one second, dash 17 secs., silence one second PM and repeat cycle. PM again, final silence 14.2 seconds, total period two minutes of the hour.

In good weather two transmissions as from 06 and 36 minutes of the hour.

In fog, continuous commencing on the hour.

Bahia Blanca – (On the Recalda Lighthouse) 38° 59′ 33″ S. 61° 15′ 38″ W. range 350 miles frequency 310 kc/s., A2, 0.2 kW.

Signal BB 9.8 seconds, silence 2.2 secs., dash 17 seconds, silence one second, dash 17 seconds, silence one sec. BB and repeat cycle, then BB and final silence 14.2 seconds, total period two minutes.

In good weather two transmissions four minutes apart from 04 and 34 minutes after the hour.

In fog, one transmission every four minutes from 04 each hour.

Bahia Blanca – (On the Light buoy El Rincon) 39° 23′ 12″ S. and 62° 00′ 48″ W. range 200 miles, frequency 310 kc/s., A1 and A2, 0.15 kW.

Signal RN once, seven seconds, silence two seconds, two long dashes 41 seconds, silence two seconds RN repeat cycle, but one second first silence after signal then as before repeat RN and final silence 250 seconds, total 6 minutes.

In good weather, two transmissions from 02 and another two from 32 minutes of each hour.

In fog continuously from 02 each hour.

Bahia Blanca – (On the Segunda Barranca lighthouse) 40° 47′ S. 62° 16′ W. approx. range 200 miles, 310 kc/s., A2.

Signal SB 9.8 seconds, silence 2.3 secs.,dash 17 seconds, silence one second, dash 17 seconds, silence one second SB and repeat cycle, repeat SB final silence 14.8 seconds, total period 2 minutes. In good weather, two transmissions every half hour, at 00/02 06/08 30/32 and 36/38 minutes on the hour, in fog, every four minutes 00/02, 06/08, etc.

Punta Delgada–Los – 42° 46′ 00″ S. 63° 38′ 00″ W. range 200 miles, frequency 315 kc/s., modulation 1000 c/s. modulated A2 signal PD 9.7 seconds, silence 2.3 seconds, long dash 00 seconds, silence one second, long dash 17 seconds, silence one second PD repeat cycle, PD final silence 14.3 seconds total period 2 minutes, good weather four transmissions every hour at 04, 10, 34 and 40 minutes after the hour. In fog, two minutes transmission and four minutes silence from 04 of the hour.

San Gregorio – 45° 01′ 30″ S. 65° 37′ 51″ W. range 200 miles, frequency 295 kc/s., A2, 2kW.

Signal IL 9 seconds, silence 3 seconds, long dash 17 seconds, silence one second, long dash 17 seconds, silence one second, IL repeat cycle. IL final silence 15 seconds, two minutes period in good weather four times every hour, two minutes each from 00, 06, 30 and 36 after the hour.

In fog, one two-minute transmission and four silence, from 00 in the hour, but fog transmission temporarily suspended.

Cabo Blanco–Loa – 47° 12′ 12″ S. 65° 44′ 33″ W. range 200 miles (on the lighthouse) frequency 295 kc/s., A1, A2, 0.15 kW signal CB 12 seconds, two long dashes 37 seconds, CB repeat cycle CB final silence 250 seconds, total period six minutes. Good weather, twice from 08 and twice from 38 minutes after the hour; fog, continuously from 02.

Temporarily out of service.

Medical Advice. Medical consultations can be made, without charge, from vessels at sea with urgent illness or accidents on board. Messages should be brief, but clear and concise, describing the symptoms of the illness with all possible details, including age and sex of patient and informing what first aid equipment is available on board.

For priority, messages should be preceded by the urgent signal XXX and be signed by the Master of the vessel.

The Medical section of the International Signals Code, 1931 volume 2, can be used, as also clear language if it is necessary to amplify the message.

Messages should be radioed to "Consulta Radiomedica" followed by the name of the coastal station used.

All consultations are gratuitous, they must be composed in Spanish, and indicate in this order:

Sex; Age; clinical antecedents; symptoms leading to the consultation; probable cause of the illness or conditions in which accident occurred; any other data which could assist diagnosis and facilitate treatment, such as pulse rate, temperature (in Centigrade) character and appearance of the wound, etc., and informing what first-aid equipment is on board.

The following stations at Buenos Aires give continuous service for this purpose:

LPD	4	44.5	kc/s.	A1	A2
LPD	68	4268	kc/s.	A1	
LPD	86	8646	kc/s.	A1	
LPD	32	13002	kc/s.	A1	
LPD	46	17045.6	kc/s.	A1	
LPD	91	22419	kc/s.	A1	
LPD	44	4434.5	kc/s.	A3	
LPD	8	8811.5	kc/s.	A3	
LPD	9	13180	kc/s.	A3	

LOAD LINE: Vessels are permitted to load to their Summer marks all year round at all River Plate Ports as well as Atlantic ports as far South as Cape Tres Puntas; inclusive (47° 06′ S. 65° 05′ W.) and provided they are Northbound or Eastbound. All ports in the River Parana, River Uruguay and the River Plate proper are fresh water.

With regard to Loaded Draft, the mean draft and not the maximum must be taken into account, and this should not exceed the Load Line marks.

On the mean draft an allowance will be made equal to the weight of the fuel vessel will consume until it reaches the Sea from up-river ports. No allowance is given to vessels leaving Buenos Aires or La Plata.

LIGHTENING ANCHORAGE: Vessels wishing to lighten cargo and

The Following Beacons, all on A2, may be of assistance

				Freq.	*Time*
Bs. Aires, Aeroparque	OP	34° 31′ 18″ S.	58° 29′ 00″ W.	260	kc/s. continuous
Bs. Aires, el Palomar	PAL	34° 37′	58° 36′	400	from sunset, on req.
Bs. Aires, Moron	MOR	34° 40′	58° 38′	355	continuous
Bs. Aires, Ezeiza	EZA	34° 49′	58° 32′	365	continuous
La Plata	PTA	34° 53′	57° 56′	250 or 275	continuous
Punta Indio	PDI	35° 18′	57° 16′	325	09/2300
Dolores	DOL	36° 20′	57° 42′	235	on request, range 120 miles
Bahia Blanca	BCA	38° 43′	62° 12′	330	daylight only, not Sundays/holidays, range 250 miles
Comandante Espora	EPO	38° 45′	62° 10′	370	daylight
San Antonio Oeste	SAO	40° 44′	64° 58′	220	daylight
Trelew	TRE	43° 14′	65° 19′	205	daylight, range 300 m.
Comodoro Rivadavia	CVR	45° 47′	67° 30′	230	daylight, range 230 m.
Puerto Deseado	ADO	47° 44′	65° 55′	210	continuous
San Julian	SJU	49° 18′ 30″	67° 46′ 30″	375	occasional, range 150 miles
Santa Cruz	SCZ	50° 01′	68° 34′	245	occasional, range 250 miles
Rio Gallegos	GAL	51° 37′	69° 17′	330	09/2300 350 miles
Rio Grande	RGN	53° 47′	57° 40′	365	on request
Ushuaia	USU	54° 49′	68° 19′	235	on request 200 miles

perform topping-off operations may do so in the following positions:

Position	No. 1	34° 42.0′ S. 57° 57.2′ W.
	No. 2	34° 44.1′ S. 56° 48.0′ W.
	No. 3	34° 46.0′ S. 56° 48.0′ W.
	No. 4	34° 43.9′ S. 57° 57.2′ W.

For ships performing such operations in the River Parana, after passing Martin Garcia, the respective zone is between km. 172 and km. 173 in the River Parana Guazu, outside the channel. It is forbidden for ships not lightening or topping off to anchor at these points.

SPEED: *Maximum speed in Ports, Channel and rivers* – Vessels operating in the proximity of an open port, close to quays or loading places where other vessels or barges are operating, will reduce speed to a maximum six knots.

In particular this refers to

Rosario	between Saladillo and Punta Barrancos (La Florida)
San Nicolas	between km. 347 and 351
Ramallo	between km. 322 and 326
Zarate	between km. 104 and 111
Campana	between km. 96 and 98

FUMIGATION: *(a) Exemption.* Vessels of foreign registry will be fumigated when proof is not shewn that fumigation has been effected by competent authority, and in a port duly authorized by the International Office of Public Hygiene, or that they have been exempted from such operation by the Health Ministry at authorized ports, within the last 6 months. Vessels arriving with an expired Fumigation or Exemption Certificate, will be fumigated except where a request of one month's grace is made to allow vessel to return to home Country or a request is made for an inspection. Should the vessel be in either case in a sanitary condition and have *no trace of rats*, an Exemption Certificate will be granted.

(b) Certificates are of no value if vessel is not in good sanitary condition. The Authorities will not recognize the validity of any Certificate or issue any Exemption Certificate to those vessels which in the opinion of the National Health Ministry, after inspecting the vessel, are not in a good sanitary condition. Both cyanide and sulphur (Clayton process) Fumigation Certificates are accepted by the Health Ministry.

(c) Permit to commence loading of vessels ordered to fumigate. No vessels which have had an annotation on their Free Pratique Certificate to the effect that they must be fumigated or inspected, are permitted to commence loading before these requisites are complied with. To this effect the necessary advice will be passed by the Customs or Port Authorities to the Health Ministry for intervention.

(d) Ports where vessels can fumigate. The sulphur fumigation is exclusively effected by the Health Ministry at the ports of Buenos Aires, La Plata and Rosario. The cyanide process is effected by private companies at practically every port of the Republic, provided sufficient notice is given, as at some ports it is necessary to bring the equipment from other ports.

Captains are recommended to ensure that their vessels are in good sanitary condition and free from traces of rats on arrival. Even although vessels may be given a Free Pratique Certificate, this does not always free vessel from fumigation if on arrival at port of loading, the Authorities discover traces of rats on board. The granting of Free Pratique has, in fact, no relationship to the granting of fumigation exemption, and permission to load.

(e) Weevil. The National Grain Board is very strict on inspecting for weevil on board vessels destined to load grain.

TIDES: Following data indicates the tidal range at Spring and Neaps in feet and tenths of a foot indicating the Argentine chart number on which the respective datum is given, and the height to be added to or deducted from that datum at the various ports, which are given in North/South rotation.

	Springs	*Neaps*	*Chart number*
Martin Garcia	2	0.4	70
Buenos Aires	3.2	0.8	176
Mar del Plata	3.8	1.2	18
Quequen/Necochea	5.2	2	18
Puerto Belgrano (Bahia Blanca)	12.6	6.4	74
S. Antonio Oeste	30.4	11.8	6
Puerto Madryn	18.8	6	92
Comodoro Rivadavia	19.6	7.4	30 (plus 0.6 feet)
Puerto Deseado	17.2	6.2	21
San Julian	28	9.2	H 350
Santa Cruz	39.8	9.4	2
Rio Gallegos	39.4	9.6	H 451/2
Cabo Virgenes	37.8	7.4	203 (minus 2.5)
San Sebastian	33.8	9.4	84 (minus 0.7)
Rio Grande	22.6	7.6	67 (minus 2.1)
Ushuaia	5.2	2.2	45
and for comparative purposes.			
Montevideo	0.8	0.4	242 (plus 0.8)
Punta Arenas	5.6	1	English chart 545

DRY DOCKS AND FLOATING DOCKS: There are two dry docks at Buenos Aires and two at Bahia Blanca, and six floating docks at Buenos Aires, with smaller ones available at Rosario and Corrientes.

The four dry docks are under the control of the Ministry of Marine as are some of the floating docks, but all are available for merchant vessels, and private repair companies are permitted to carry out work in these Government docks.

(a) Applications for entering either Dry or Floating Docks are the same:

Name and class of vessel; flag, characteristics; NRT as per Register; nature of repairs; estimated stay in dock, date when ready to enter dock; vessels' Register number and plans of the hull for docking.

Tank vessels must also supply a "Gas Free" certificate.

(b) Buenos Aires.—The two dry docks are at right angles in the North Basin, on the Northeast side and have the following dimensions:

No. 1 493 ft. (150 m.), breadth at top of entrance 66 ft. (19.75 m.) gradient 1: 300.

No. 2 590 ft. (180 m.), breadth at top of entrance 92 ft. (22.10 m.).

Vessels with large beam can only enter if their draft does not exceed 20 ft.

(c) Bahia Blanca.—The two dry docks are in the Naval Dockyard base.

No. 1 is 705 ft. (215 m.) in length, width on sill 72 ft. 6 in. (22.12 m.).

No. 2 is 672 ft. 6 in. in length (closed) (205 m.).

(d) Floating Docks.—There are seven in Buenos Aires, as follows:

	Lifting Capacity		*Length*	*Internal Breadth*	
No. 1	3,500 tons	413′	126.10 m.	56.0′	17.10 m.
No. 2	1,500 tons	300′	91.50 m.	41.0′	12.50 m.
No. 3	750 tons	216′	65.79 m.	44.0′	13.32 m.
No. 4	750 tons	216′	65.79 m.	44.0′	13.32 m.
No. A	12,000 tons	565′	172.50 m.	86.0′	26.20 m.
No. B	2,800 tons	397′	110.00 m.	60.7′	18.05 m.
No. C	1,000 tons	246′	75.00 m.	51.4′	15.68 m.

All supply cranes, fire fighting equipment, compressed air, water pumps, electric supply – 380 V. and 110 V. AC or 220 V. DC. Telephone, sanitary discharge for ship's bilges and sanitary services on the dock.

FUEL: Bunker stocks of diesel oil are available in bond at Buenos Aires, Bahia Blanca and Montevideo, thus these ports are the most convenient for taking Diesel bunkers. It is available at other ports, but has to be transported by lorry from Buenos Aires. Lorries are unable to go alongside at some of the elevator berths, and there are no oil barges at Rosario, San Nicolas, or Necochea.

At Buenos Aires there are barges of 150 to 550 tons with tanks to carry all classes of oil. If smaller quantities are required transportation can be effected by lorries from the tanks, the cost being cheaper than barging.

Oil can be transported by lorry to any berth in the port of Buenos Aires.

STEVEDORES: Working hours are officially 0700/1300; 1300/1900; 1900/0100 and 0100/0700. From 1900/0100 and 0100/0700 there is a 100% surcharge on Mondays to Fridays, or 200% on Saturdays, Sundays or holidays. On Saturdays the second shift (1300/1900) and on Sundays/holidays the two day shifts (0700/1300 and 1300/1900) are paid with 100% surcharge.

In Parana River ports, shifts start and finish one hour earlier, except at Santa Fe.

It is forbidden for a man to work more than one shift daily, unless no other labour is available at the halls, and the Port Captain agrees.

Use of mechanical appliances is encouraged, and when the Port has not sufficient available, the Stevedoring companies hire this to the vessel to speed up operations.

Stevedoring damage: It is essential that Master and/or Agent leaves on immediate record any damage done to vessel or cargo by the stevedores, in order to assist in recovering the cost of repairs.

Holidays and Non-Working days: National Holidays: January 1st (New Year's Day), Good Friday, May 1st (National Workers' Day), May 25th (National Independence Day), June 20th (Argentine Flag Day), July 9th (Independence Day), August 17th (Death of Gral. San Martin), December 25th (Christmas Day).

Non-Working Days: Maundy Thursday, December 8th (Catholic Holiday).

Drinking Water. A good supply of drinking water should be available on board, and in hot weather this must be iced.

GRAIN LOADING: On a North/South basis. See table

WATCHMAN: The use of watchmen is obligatory in all ports, and they are the auxiliary delegates of the Maritime Authority. One man per gangway must be placed. Masters may also place a crew member on watch, but in ports where there is an official service the official watchmen must be used. His duties are to control access to the vessel, control the shipment or discharge of prohibited articles, to revise all packages brought on board or landed, see that the moorings are in order, that the gangway is duly illuminated and that rat guards are in place.

WHARF CLEANING: It is the Master's duty to see that the Wharf is properly cleaned up before his vessel vacates a wharf. Port authorities can do this, and charge the Agents of the vessel last berthed with the cost.

HATCHES: Opening and closing normally carried out by the stevedores in each port. All hatches must be kept closed when vessels are not operating, and when leaving port, must be well battened down and covered with two tarpaulins.

RAT GUARDS: All moorings must be provided with regulation pattern rat guards, 80 cm. diameter.

As part of the rat control gangways must be painted white and fully illuminated at night. Fines are imposed for non-compliance.

FENDERS: At all ports, vessel must be boomed off the quay at least one m. fifty cm. Any type of fender meeting this requirement will do, but at San Nicolas, special fenders are supplied.

NIGHT LIGHTS: All vessels when made fast must illuminate that side towards the water with at least one screened light. When vessels are double berthed, the one lying second off must comply

TABLE A

		Berths	Spouts	Workable simultaneously	Rate per hour each	Total
Santa Fe						
72,500 tons	Unit 1	2	8	3	300/400	1200
	unit 2 N.W.	1	6	2	200	400
	unit 2 S.W.	1	2	2	200	400
Diamante						
20,000 tons		1	4	2	500	1000
San Lorenzo/San Martin						
320,000 tons	unit 8	1	2	1	150/180	150
	unit 10	1	3	1	150/180	150
Rosario						
326,100 tons	unit 1	1		2	170	340
(80,000 in const.)	unit 2	1		2	200	400
	unit 3 × 4	1		2	250	500
	unit 4 × 8	1		2	under repair	
	unit 5 × 10	2		2	200	400
	unit 6 × 13	2		6	200	1200
Villa Constitucion		2		1 each	300	600
225,500 tons		2		1 each	300	600
San Nicolas						
53,000 tons		1	5	2	500	1000
(16,000 in construction 1973)						
Ramallo						
12,080 tons		1		2	250	500
San Pedro						
7,560 tons		1	7	1	400	400
Concepcion del Uruguay						
3,200 tons		1		1	not ready	
(20,000 in construction)						
Buenos Aires						
219,400 tons	Basin D	5	29	5	500	2500
(20,000 in construction)	Dock 3	1	6	1	500	500
	South Dock	1	4	1	400	400
	South Dock	1	3	1	400	400
Mar del Plata						
25,000 tons		2	5	2	400	800
Quequen						
404,500 tons	unit 1 3/4	1	4	2	450	900
	5/6	1	4	2	450	900
	unit 2	1		1	400	400
	extension berth	1		1	230	230
Bahia Blanca						
617,480 tons						
	old elevator ext. 1/2	2	12	2/4	250	500
	3/4	2	8	2/4	400	800
	central elevat. 5/6	2	10	2/4	480	960
	7/8	2	10	2/4	480	960
	new elevator 9	1	12	2	1000	2000

with this rule. Similarly, vessels moored with either stern or bows to shore must show a light over the anchor chain to seaward. Vessels laid up or being dismantled are exempt from this, but owners are responsible for any resulting damages.

DESTINATION CHANGE: When at sea if there is any change in destination, within the Argentine, Masters must report this by radio to the Marine Prefecture, indicating the reasons for such change.

DESPATCHES: Once despatch is granted, this is valid for twelve hours only, after which period new despatches must be requested, and reasons given for not sailing. In ports where local conditions impose a longer limit, the maximum allowable is thirty hours.

SEAMEN'S INSTITUTES, HOME AND CHURCHES: There is one hostel for seamen, and five institutes operating in Buenos Aires and one in Rosario, as follows:

Stella Maris (Apostleship of the Sea)
Independencia 20 (corner Ing. Huergo). Telephone: 33–0832
Chaplain – Father Alex Dalpaiz CS. Open every day. Vessels visited daily. Hotel – Rooms, Meals, Bar. Information – Port Office, Books, Money Exchange, Souvenirs. Amusements – Dancing, table tennis, billiards, television, excursions. Salon Dance – Wednesdays, Saturdays and Sundays.

Religion – Mass every Sunday at 1930 hrs., and in the morning on board ship by request. Confession at all times. Night prayer for all seamen.

Football games arranged. Books freely exchanged.

The Missions to Seamen
Cochabamba 223. Telephone 33–0326
Chaplain – The Rev. E. W. Casson. Open daily from 1900 hrs., with dances on Tuesdays, Thursdays and Saturdays from 2100 hrs. Shop, post office, billiards (three tables), snooker, table tennis, television, bar (beer, no spirits), etc.

There is a service of Holy Communion at 1900 hrs. every Sunday. Football games and excursions arranged. Vessels are visited.

Sjomandskirke
Ing. Huergo 1263. Telephone: 33–3861
Open daily from 0800 hrs. Library, billiards, table tennis, sightseeing visits arranged, as also football matches. Vessels visited every day.

Church services every first Sunday at 1030 hrs.

Axel Johnson Minne till Svenska Sjoman
Juan de Garay 80. Telephone: 33–7304
Open daily from 1800 hrs. Library, sightseeing arranged.

Details of religious services on board of Swedish Church in Azopardo 1428 (round the corner from the Johnson Foundation).

Dansky Kirke
Carlos Calvo 257. Telephone: 33–9154
Danish seamen are welcome at the Norwegian Centre, while at the Church the office is open every Tuesday from 2000 hrs. to 2200 hrs. for assistance, and the Young People meet on Tuesdays and Fridays from 2000 hrs. to 2200 hrs., all being welcome.

Church services are at 1000 hrs. every Sunday, and on third Sunday in every month at 1600 hrs.

Finnska Sjomens-Kyrken. Suommerimien Kirkko
San Juan 234. Telephone: 33–6797. Open daily 1800 hrs. to 2200 hrs.

Rosario: The Missions to Seamen at Sarmiento 209.

II *RIVER PLATE PORTS*

Acevedo	Diamante	San Lorenzo
Acindar	Ibicuy	San Martin
Atucha	Ing. Rocca	San Nicolas
Borghi	La Plata	San Pedro
Buenos Aires	Ramallo	Santa Fe
Buitrago	Rocca	Villa Constitucion
Campana	Rosario	Zarate
Concepcion del Uruguay		

THE RIVER PLATE

The River Plate, or Rio de la Plata, is formed by the rivers Parana and Uruguay, and is one of the greatest river systems in the world, the Basin covering nearly four million square kms. It is some 150 miles long, and the mud and sand in the waters give a thick brownish colour. Tides are small, but the water level is subject to frequent and sudden fluctuations on account of the weather.

Distance Table

Montevideo and Buenos Aires to Parana and intermediate ports

Nautical miles

	Montevideo	Recalada Practicos	La Plata	Practicos Interseccion	Buenos Aires	Martin Garcia	Ibicuy	Campana	Zarate	San Pedro	Obligado	Ramallo	San Nicolas	Villa Constitucion	Rosario	San Lorenzo	Grondona	Gaboto	Diamante	Alvear	Santa Fe	Bajada Grande	Parana
Montevideo	—	16	118	108	128	145	205	243	238	239	249	261	276	285	310	326	343	348	374	385	400	406	410
Recalada Practicos	16	—	102	92	112	129	189	227	222	223	223	245	260	269	294	310	327	332	358	369	384	390	394
La Plata	118	102	—	10	30	47	107	145	140	141	151	163	178	187	212	228	245	250	276	287	302	308	312
Interseccion Practicos	108	92	10	—	20	37	97	135	130	131	141	153	168	177	202	218	235	240	266	277	292	298	302
Buenos Aires	128	112	30	20	—	57	117	155	150	151	161	173	188	197	222	238	255	260	286	297	312	318	322
Martin Garcia	145	129	47	37	57	—	60	98	93	94	104	116	131	140	165	181	198	203	229	240	255	261	265
Ibicuy	205	189	107	97	117	60	—	41	36	37	47	59	74	83	108	124	141	146	172	183	198	204	208
Campana	243	227	145	135	155	98	41	—	5	72	82	94	109	118	143	159	176	181	207	218	233	239	243
Zarate	238	222	140	130	150	93	36	5	—	67	77	89	104	113	138	154	171	176	202	213	228	234	238
San Pedro	239	223	141	131	151	94	37	72	67	—	10	22	37	46	71	87	104	109	135	146	161	167	171
Obligado	249	233	151	141	161	104	47	82	77	10	—	12	27	36	61	77	94	99	125	136	151	157	161
Ramallo	261	245	163	153	173	116	59	94	89	22	12	—	15	24	49	65	82	87	113	124	139	145	149
San Nicolas	276	260	178	168	188	131	74	109	104	37	27	15	—	9	34	50	67	72	98	109	124	130	134
Villa Constitucion	285	269	187	177	197	140	83	118	113	46	36	24	9	—	25	41	58	63	89	100	115	121	125
Rosario	310	294	212	202	222	165	108	143	138	71	61	49	34	25	—	16	33	38	64	75	90	96	100
San Lorenzo	326	310	228	218	238	181	124	159	154	87	77	65	50	41	16	—	17	22	48	59	74	80	84
Grondona	343	327	245	235	255	198	141	176	171	104	94	82	67	58	33	17	—	5	33	44	59	65	69
Gaboto	348	332	250	240	260	203	146	181	176	109	99	87	72	63	38	22	5	—	37	48	63	69	73
Diamante	374	358	276	266	286	229	172	207	202	135	125	113	98	89	64	48	33	37	—	11	26	39	36
Alvear	385	369	287	277	297	240	183	218	213	146	136	124	109	100	75	59	44	48	11	—	15	21	25
Santa Fe	400	384	302	292	312	255	198	233	228	161	151	139	124	115	90	74	59	63	26	15	—	6	10
Bajada Grande	406	390	308	298	318	261	204	239	234	167	157	145	130	121	96	80	65	69	32	21	6	—	4
Parana	410	394	312	302	322	265	208	243	238	171	161	149	134	125	100	84	69	73	36	25	10	4	—

The official depth at zero of the long entrance channel from Recalada to the Port of Buenos Aires is presently (this varies slightly from time to time):

	Width of channel m.	*Depth* ft. in.	*Alternative width* m.	*Depth* ft. in.
Punta Indio and of the access channel from the Roads (km. 37 to km. 9.8)	110	29	200	26 6
North Channel (km. 9.8 to Anteport)	55	30	80	29
South Channel (km. 8.2 to Boca)	60	27	80	24
	30	24 6	50	19

From Recalada Lightship West the Bay is all fresh water.

Vessels drawing 31 ft. or even 32 ft. (fresh water marks) frequently navigate safely. The tidal rise and fall is from three to five feet, but the state of the river is influenced to a far greater extent by the force and direction of the wind. There is no guarantee that a vessel drawing 31 ft. may not be caught by low water caused by a North wind, which carries the water seawards. Just as a North wind will reduce the depth of water, so a Southerly or Southeasterly wind raises it considerably, often several feet.

Winds from S.W. to E.N.E. through N. make the level drop, North being the strongest in this sense.

E.N.E. to S.S.W. winds make the water rise, S.S.E. having the greatest influence.

Between S.W. and S.S.W. or N.E. and E.N.E. the influence of the winds is much less.

Vessels often touch bottom, or even bump slightly, but as the bed of the river is soft mud and silt, one never learns of these ships reporting damage. The Plate Pilots, of course, warn Masters of this not infrequent occurrence. The docks and basins in the port also have soft mud bottoms, except for the entrance between North Basin and Dock 4, and it is quite customary to see vessels lying safely aground when loading or discharging.

RECALADA LIGHTSHIP: Vessels enter the Plate system passing the Recalada Lightship, 16.8 miles South of Montevideo at 35° 10′ 06″ S. and 56° 19′ 06″ W. At this point it is obligatory to take an Estuary Pilot, if proceeding West, and a minimum 48 hours notice must be given both to Agents in Buenos Aires and to Recalada Lightship.

The Recalada Lightship and Pilot station is a small vessel, whose hull is painted in vertical black and white stripes, two m. wide, and with an orange/red housing.

Apart from the usual pilot lights (white above red) there is a lantern on the foremast, with a white flash every eight seconds (one second light, seven seconds eclipse) placed at 19 m. above river level, range twelve miles.

The lightship also has a fog signal, period thirty seconds sounding for three seconds and silent for 27.

Radio call sign is LOJ on 500 kc/s. type A1, A2, transmitting in clear every hour from 05 to 08 and 35 to 38 minutes. Operator on watch 08/10, 12/14, 16/18 and 20/22, also listens on 462 kc/s.

Punta Indio Channel and Privileged Zone

The term "Adjacent Zone" comprises the zones of the main channel of the River Plate which extends 500 m. to either side of the buoy at km. 57 and Buoys No. 30 at Punta Indio Channel, likewise 300 m. on each side, outwards, of the pairs of buoys marking the Punta Indio Channel between Buoys No. 30 and 1.

Vessels navigating in these zones have equal privileges to those navigating the Punta Indio Channel, which comprises the zone of the general channel of the River Plate between Buoy No. 30 and the Recalada Lightship following the route buoyed for ocean going vessels by the Ministry of Public Works.

Vessels drawing over 24 ft. entering or leaving the River Plate are obliged to traverse the Punta Indio Channel from Buoys 1 to 30, and the Adjacent Zones existing between Buoys 30 and km. 57.

Vessels drawing 21 ft. and up to 24 ft. inclusive must follow the route of the general channel and the corresponding Adjacent Zones and may make use of the Punta Indio Channel or not, depending on the depths of the river.

Vessels drawing 19 ft. but under 21 ft. must use the general channel of the River Plate and the corresponding Adjacent Zones, but can only use the Punta Indio Channel between Buoys 19 and 23 when depth of the river makes this advisable.

Vessels drawing less than 19 ft., wishing to follow the route of the main Channel, may do so through the corresponding Adjacent Zones but are forbidden to navigate along the Punta Indio Channel.

INTERSECTION LIGHTSHIP: This Pilot station, near km. 33.5 and 169 km. West from Recalada is on the North side of the principal channel, at 34° 39′ 30″ S. and 58° 00′ 04″ W.

Hull, mast and superstructure are painted sky blue and the inscription on the hull is "Practicos Interseccion" in black letters. At night, two lights are shown on the fore-mast, one white about 11 m. from the deck, and below this a red light at about 7 m.

Radio call sign LOI, on 500 kc/s. wavelength 600 m. Operator on duty from 8 to 10, 12 to 14, 16 to 18 and 20 to 2200 hours.

At this point the estuary Pilot concludes his stint, inwards, or takes over outwards, and port Pilots for Buenos Aires take over or finish. Similarly up river Pilots for vessels bound for Uruguay or Parana rivers take over or deliver vessels here.

If, owing to the bad weather or force majeure, the pontoon's launch cannot trans-ship Pilots, by day the blue flag with the letter "P" normally flown at the fore will be struck, or by night the red and white Pilot lights will be extinguished, and a red light exhibited at the stern.

At Intersection vessels anchor while waiting for draft to proceed to the Parana or Uruguay rivers, as well as those awaiting berth in Buenos Aires. Such vessels should keep well clear of the Pontoon to leave ample room for those taking or disembarking Pilots.

The holding ground here is not good, being soft mud. All ships drawing more than 15 ft. must, before leaving Martin Garcia or Interseccion outward bound, ascertain the state of the channel from LOI (Radio Interseccion) who will give the departure time, draft, and speed of vessels navigating in the channel. Only after receiving this dual information can Masters and Pilots decide to proceed, and then must communicate time, draft and speed to Radio Interseccion. Vessels drawing less than 15 ft. can navigate freely between Martin Garcia and Interseccion, but must give way to vessels of deeper draft.

INTERSECTION TO MARTIN GARCIA: From Intersection (km. 38) to Martin Garcia (km. 106) vessels will anchor near km. 37 until there is sufficient water, with 1 ft. under the keel and a rising tide or river. If it is calculated that the vessel will have 1 ft. clear through the whole passage, she may leave, but on a falling or stationary

river, she must adjust speed to avoid the difficulties between km. 37 and km. 79.

From Martin Garcia to Intersection, vessels drawing 22 ft. 6 in. or more will leave when conditions assure 1 ft. 6 in. of water under the keel. It is essential to radio LOI as above to check on tides, etc. Such vessels coming down river must also communicate to LOI the passing of km. 101 and 38, while those going up river must communicate passing km. 38, 72 and 101.

Maximum draft permitted between km. 39 (Intersection) and km. 93 (Canal Nuevo) is 26 ft. and a speed of 10 knots or over, or with 8 to 10 knots, maximum 24 ft.

In the sector Intersection/Martin Garcia vessels will anchor in any suitable place until depth of water permits them to go upstream on a rising river.

Vessels drawing 22 ft. or more are recommended to cross only between km. 72/74, 80/82 and 96/96. Those drawing less than 22 ft. and with at least 3 ft. under their keel can also cross between km. 52/56 and 98/100.

MARTIN GARCIA BAR: The Flats (rock outcrops) in the estuary from Martin Garcia Island down to Farallon have remained practically unchanged for fifty years. The Island itself, in Lat. 23° 11′ S. and Long. 58° 17′ W. is an almost circular mass of granite, about 27 m. high and some three miles in circumference. Shores are muddy but also rocky.

It commands the entrance to the Rivers Parana and Uruguay, and all vessels using these rivers must pass within half a mile of the shore on the South side, or within less than a mile by the Northern Channel. There is an Argentine Naval detachment there.

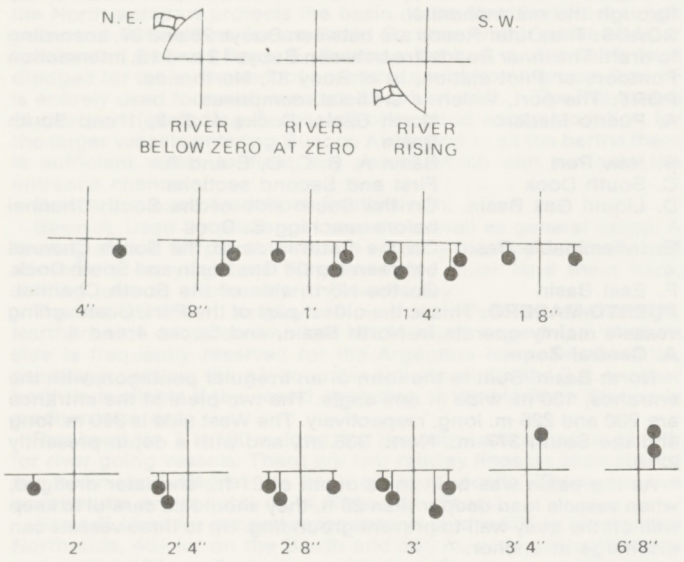
Important: It is always said that Martin Garcia Bar rules the rivers; this is not strictly correct as, usually in the second half of the year, there may be less water in the stretches above Rosario, and at times even below San Nicolas to San Pedro, where new shallows keep forming which have constantly to be watched. Caution should be used, therefore, from July to January in this connection.

Light House. At an elevation of 38 m. a light is shown from a circular stone tower standing 13 m. high in the centre of the island.

Radio communication. The lighthouse is provided with a wireless station (call letters LOH) which transmits the depth of water on the semaphore at the following hours: 2, 5, 8, 11, 14, 17, 20, and 2300 hours.

Tidal Signals. These are made from a signal mast placed alongside the lighthouse.

Day Signals



The figures given below the corresponding signals indicate the level of the river in feet and inches either above or below zero mark.

To obtain the effective depth in Martin Garcia Channels, 26 cm. (10 in.) should be deducted from the draft of water indicated on the semaphore

Night Signals

(White flash)	Cycle: 30 seconds
(Red flash)	Long flash: 2.5 sec. each.
(Green flash)	Short flash: 6/10 sec. each.
White flashes	Rising tide: One long.
	Falling tide: Two short.
Red flashes	Above zero:
	For each m.: One long.
	For each 10 cm.: One short.
Green flashes	Below zero:
	For each m.: One long.
	For each 10 cm.: One short.
Green and red flashes	Zero:
	One green and one red, both short.

Depth of water here varies from hour to hour, with no pattern, and is not dependant on the depth of water in the Parana. The only relation between the River Parana and Martin Garcia and San Pedro Bars, seems to be that with a full and strong river, the water which is blown into the Plate Estuary by Southerly winds against the strong head of the river, makes deeper water than a similar Southerly wind opposed to a smaller stream from the river. Likewise, the water blown out to sea by Northerly winds causes lower depths when the river is running strongly than when it is low. The effect is almost that of a new or full moon on the lunar tides.

It must always be remembered, therefore, that the dominant factors from Martin Garcia seawards are the direction and force of the wind. A Southerly wind will bank up the water, while a Northerly wind will blow it out. There may be, say, 30 ft. in the Parana, with a strong North wind, and less than 20 ft. on Martin Garcia. With the wind in the Southeast, the depth at Martin Garcia can rise in a few hours up to 30 ft.

A prudent course is never to attempt to cross Martin Garcia drawing more than 25 ft. even with the river at its highest.

Martin Garcia lies at km. 99.4 from Buenos Aires, via Intersection, i.e. at km. 62.4 from Intersection.

Vessels continue North to km. 140, at which point the Uruguay and Parana Rivers meet to form the River Plate. This is opposite Nueva Palmira in Uruguay, and at this point the River Uruguay buoy numbers start from km. 0, while the Parana numbering continues from 140 on through the Parana Bravo, which is the Northerly arm of the extensive Parana Delta.

WEATHER: *The yearly average direction of winds* of Force 7 or more, as observed at Recalada Lightship shows:

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
0.8	1.3	2.7	3.4	5.2	3.7	1.9	1.3

expressed in per cent of winds observed, the least frequent being the North. Division is relatively even over the year, with perhaps August showing a higher incidence of storms.

The average velocity of winds from the various directions, over the year, is 6.8 knots on the coast or 12.5 knots at Recalada Lightship, the highest figures being from S.E., S. and S.W. at 8.3, 9.3 and 9.2 knots respectively.

Percentagewise the direction of the winds through the year is remarkably even:

N.	N.E.	E.	S.E	S.	S.W.	W.	N.W.	calm
12.7	15.8	14.4	14.2	11.3	9.7	6.8	9.2	5.8

Visibility in the Plate area is normally good; rain storms may temporarily affect it, but these are usually of short duration. Fog (visibility less than 1,000 m.) or mist (visibility 1/2,000 m.) occurs from April to October, with June showing the highest percentage of fogs (13%). North winds seem to favour the forming of fog, as these figures show.

Calm	%fog	11	SE	12
N		24	S	6
NE		17	SW	0
E		5	W	3
			NW	13

Fog on the river forms by a cooling from below of warm air which drifts from E. or N.E., and is formed only when the temperature of the air is greater than that of the water. If the current augments its velocity, the fog lifts and visibility improves at sea level. Shore fogs usually affect only the coast and are of short duration.

Rain falls, on average, 92 days a year, with a total of 1,089 mm. yearly in Buenos Aires, spread evenly through the year with a high in January of 113 mm.

Humidity is high, on average 77% with 82% Winter, and 71% Summer months.

Electric storms are not frequent, and usually limited in extent.

Average yearly temperature is 16.6° C, in Summer 22.2°, Autumn 17.2°, Winter 11.2° and Spring 16°. Extremes correspond to January 43.3° (all-time high) and minus 5.6° in July.

ACTION OF THE WIND ON TIDES: In this large body of enclosed and shallow water winds up and down its axis raise or lower the water level very appreciably.

Cross winds in general have much less effect, and the inner and centre sections of the Plate show greater variations than the outer part. We show below a table as estimated by the Hydrographic Office, based on many years observations showing the variations, in cm., due to speed and direction of the winds. The values quoted must be applied to the astronomic tidal figures to arrive at a net level over datum.

Four new tide-gauges have been installed – two in Punta Indio Canal, at km. 99 and km. 180, and two up-river. Eventually four more will operate at Palermo, Banco Ortiz, Martin Garcia and Atalaya. Connected to the Hydrographic Office, the date will be incorporated into the regular tidal bulletins.

Table showing variations in river level according to force and direction of wind in the River Plate

expressed in centimetres.

	Kilometres/hour								
	10	20	30	40	50	60	70	80	sign
N.	18	30	39	48	60	72	84	96	minus
N.N.E.	9	21	30	36	45	57	69	81	minus
N.E.	3	6	9	24	39	57	69	81	minus
E.N.E.	3	6	9	12	18	33	42	51	plus
E.	6	12	24	36	48	60	72	84	plus
E.S.E.	9	24	39	57	69	81	93	105	plus
S.E.	21	39	57	72	87	102	114	126	plus
S.S.E.	30	45	66	81	96	114	132	150	plus
S.	18	36	57	66	78	99	108	120	plus
S.S.W.	12	24	39	48	57	69	78	87	plus
S.W.	9	12	18	24	33	52	51	60	minus
W.S.W.	6	12	18	30	39	51	60	69	minus
W.	9	15	27	36	45	54	63	72	minus
W.N.W.	12	21	30	36	45	54	66	78	minus
N.W.	12	21	33	39	48	60	69	78	minus
N.N.W.	15	24	36	45	54	63	75	87	minus

(source: Naval Hydrographic Service)

The tidal forecasts transmitted regularly over LRA (870 kc/s.), in telephony, in Spanish are, therefore, a combination of astronomical tide figures and meteorological influences on this basis.

Wind direction also affects the hours of the tide. In general, time of high water is not affected, but low water can be delayed or advanced by the wind force.

MITRE CANAL: The Canal runs some five miles offshore, starting from km. 12 in the access channel, and means a saving of some 30 miles for vessels going up river (or much more to the oil port of Campana), as well as the saving of time loss incurred in waiting for water depth to the Martin Garcia Bar.

Opposite San Fernando the canal enters the Parana de las Palmas branch of the Parana, through the "Las Viboras" Channel. From here on this arm of the river is deep enough to need nothing beyond the straightening of two or three sharp curves, to accommodate long vessels.

Logically, this does not guarantee 30 ft. draft up river at all times, the normal rise and fall of the river controls this, but during most of the year 30 ft. is obtainable to Rosario and San Lorenzo. In actual fact, the Parana River is tidal up to Rosario, and tides are felt all year round to Villa Constitucion, and in low water seasons, to Rosario itself. Passes between San Nicolas and Rosario also require constant attention, being at present only 22 ft.

Until the several sharp bends above Campana have been straightened length will be restricted to 200 m. o.a.l., by day only, with night navigation solely for vessels of 100 m. o.a.l. or less.

PARANA RIVER: Maximum drafts permitted up to km. 585 (Santa Fe) are governed by the Martin Garcia Bar, and must also, logically, take into account river conditions.

The River Parana rises in Brazil, and is formed by a junction of a number of rivers, the principal tributary being the Paraguay River.

It is a great river at all times, conveying an immense volume of water to the Atlantic. The Northern bank is comparatively high and rocky, the Southern bank low.

The stretch above Rosario is entirely riverlike in behaviour with an annual flood, rising and falling yearly. From Rosario to Martin Garcia Bar, where the river joins the Uruguay River to form the River Plate, there is also an annual flood, but this part is also influenced by the Plate tides. This section can be divided into two, from San Pedro to Villa Constitucion where the tidal fluctuations are always felt, and from Villa Constitucion to Rosario where the tide makes its influence felt only in periods of low water in the river.

Maximum depth in the river is normally reached in March and the low in September, but it is irregular in behaviour. There is a possibility that the series of dams being built in Brazil for hydroelectric purposes may eventually regularize the river by permitting some control over the seasonal increases.

When the river commences to fall, care must be taken in calculating loaded draft a few days ahead, as the official figures may be reduced one or more feet without warning.

HIGH AND LOW WATER: Maximum and minimum figures registered between Rosario and San Pedro in the last ten years.

		Jan.	*Feb.*	*Mch.*	*Apr.*	*May*	*Jun.*
High	Max.	32′	32′ 8″	33′ 7″	36′ 3″	37′ 9″	30′ 5″
	Min.	27′ 2″	29′ 2″	29′ 2″	28′ 7″	29′ 5″	25′ 3″
		Jul.	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*
High.	Max.	32′ 7″	28′ 2″	29′ 9″	31′ 5″	30′ 7″	31′ 4″
	Min.	25′ 5″	23′ 6″	22′ 8″	25′ 8″	26′ 6″	26′ 3″
		Jan.	*Feb.*	*Mch.*	*Apr.*	*May*	*Jun.*
Low	Max.	31′ 3″	31′ 4″	31′ 7″	33′ 7″	36′ 6″	29′ 9″
	Min.	24′ 2″	25′	27′ 2″	27′ 6″	26′ 3″	24′ 9″
		Jul.	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*
Low	Max.	29′ 9″	27′ 2″	25′ 6″	25′ 8″	30′	29′ 6″
	Min.	23′ 9″	21′ 8″	21′ 7″	23′ 3″	24′ 3″	24′ 3″

MAXIMUM DRAFT UP RIVER: When vessels by reason of their loaded draft have to complete loading at Buenos Aires or La Plata, they should never load deeper than two ft. less than the offical draft on the River Parana.

In the sector San Lorenzo/River Plate, when the height of the river is 4 ft. or more, one ft. must be calculated below keel depth; when the river is under 4 ft., two ft. clearance must be calculated.

In the sector Parana (Santa Fe)/San Lorenzo, when the height of the river on the hydrometer at Santa Fe is 5 ft 7 in. or more over zero, 2 ft. must be calculated under the keel with vessels of under 50 fiscal units, or 2 ft. 6 in. over that size. When the depth on the hydrometer is less than 5 ft. 7 in. (1.70 m.) then 2 ft. 6 in. and 3 ft. 6 in. respectively must be allowed.

These safety margins for the Parana/San Lorenzo/Santa Fe zone refer to river navigation; in access channels and ports a margin of one ft. is sufficient.

The references to river height refer respectively to Rosario and Santa Fe.

A falling or rising river will also be taken into account.

BRIDGES: A road and rail bridge is being built from Zarate (km. 107 on Parana de las Palmas) across the various islands and arms of the Parana to Brazo Largo (km. 180 on the Parana Bravo). The span on this arm of the river will be over 200 m. and clearance at high water 45 m. Until the bridge is officially opened, night-time navigation under it is prohibited.

A bridge from Resistencia (Capital of the Chaco Province) connects with Corrientes (Capital of Corrientes Province). This does not affect ocean shipping, beyond that going to Asuncion, and the clearance of the main span is 40 m. above high river level.

Two bridges are also under construction over the River Uruguay, one at Paysandu, which will not affect ocean shipping, and another at Puerto Unzue to Fray Bentos, in Uruguay. This latter will have a 220 m. span with 36 m. clearance above river level.

ATUCHA:

Situated on the left bank of the Parana de Las Palmas at km. 132, fifteen miles upstream from Zarate, and 135 miles by river from Buenos Aires.

BERTH: A small berth 33 m. long with two dolphins in 40 ft. built especially for the discharge of heavy material for the new Atomic Energy Plant. There is a 300 ton heavy lift crane on the concrete platform. The plant is now in full operation.

PORT AUTHORITIES: There are no port authorities here, and the port comes under the jurisdiction of Zarate.

BUENOS AIRES: 34.36 S. 58.22 W. (See Plan)

"A" category port

Refer to beginning of Argentina and River Plate Ports.

APPROACHES: Access is by the "Punta Indio" channel which requires constant dredging and commences just West of the Recalada Lightship, which is situated 30 km. due South of Montevideo. The channel with 28 ft. 6 ins. on a width of 200 m. or 23 ft. over 200 m. winds up to the Outer Roads, which are some 37 km. from the Port. Direct entrance is by a channel, dredged to 29 ft 6 ins. with a 50 m. width, and 28ft. 6 ins. on an 80 m. width, to within 10 km., where the channel divides into North Channel, serving the New Port and Madero Port berths, and South Channel, for the rest of the port. North Channel at present has a depth of 28 ft. 6 ins. with a width of 50 m. or 22 ft. with 80 m. width. South Channel has 23 ft. 6ins. with a width of 35 m., or 21 ft. 6 ins. over 50 m. All depths given here and elsewhere refer to the zero of the Riachuelo tidal indicator and semaphore in Buenos Aires port, which practically corresponds to the level of the ordinary lowest water, and is marked 0.72 m. under the average medium level of tides. Tides average 3 ft., but the principal factor is that of wind, which can raise or lower the water by 5 ft. or more.

The Mitre Channel enters the access channel at Buoy 12, by the Inner Roads.

When large passenger liners or LASH vessels are entering or leaving, it is possible to have the access channel closed to all other traffic for a period of four hours on account of the narrowness of the dredged channel.

The fixed zero mark on the tidal indicator and semaphore is practically corresponding to the level of the ordinary lowest waters and is marked 0.72 m. under the average medium level of tides.

Vessels with draft of up to 32 ft. FW have proceeded safely through the main channel.

ROADS: The Outer Roads are between Buoys 25 and 37, according to draft. The Inner Roads are between Buoys 12 and 15. Intersection Pontoon, or Pilot station, is at Buoy 37, North side.

PORT: The port, which is artificial, comprises:

A. Puerto Madero	North Basin, Docks 4, 3, 2, 1 and South Basin.
B. New Port	Basin A, B, C, D, E and F.
C. South Dock	First and Second sections.
D. Liquid Gas Basin	On the South side of the South Channel before reaching S. Dock
E. Inflammable Basin	On the South side of the South Channel between Liquid Gas Basin and South Dock.
F. East Basin	On the North side of the South Channel.

PUERTO MADERO: This is the oldest part of the Port. Ocean going vessels mainly operate in North Basin, and Docks 4 and 3.

A. Central Zone

North Basin. Built in the form of an irregular pentagon, with the entrance, 100 m. wide in one angle. The two piers at the entrance are 200 and 225 m. long, respectively. The West side is 390 m. long and the South 377 m., North 335 m., and with a depth presently 22 ft.

As the basin was built for a depth of 21 ft., and later dredged, when vessels load deeper than 20 ft. they should be careful to keep well off the quay wall to prevent grounding. Up to three vessels can discharge at anchor.

There are two dry docks in the basin, and a repair shop.

Usually only one berth, section 6, is used for loading/discharging operations, and sections 1 and 2 are used by vessels repairing or laid up, while sections 3 and 5 are for Navy use. The warehouse of section 7 is used by the Custom House.

Dock 4. connected to North Basin by a lock 197 m. long, and 25 m. wide. The dock itself is 630 m. long and 160 m. wide, with 20 ft. water. This lock was originally fitted with lock gates, as was that from Dock 1 to South Basin, but these have not been used for many years. The bottom of the lock, between all the docks, is of concrete.

On the West side there are four warehouses, each 4 storeys high and twelve 3-ton cranes. Berths, or sections, numbered 1 to 4.

On the East side there are four two-storey warehouses and twenty-three 2.5-ton cranes. There are also several sheds behind and parallel with the warehouses which give on to the dock, sections numbered 5 to 8.

Between berths 6 and 7 on the East side there is a large open space where vessels or lighters can discharge direct to trucks or to railcars. Trucks may also go alongside at the other berths, at all of which there are railway lines, but space is limited.

The dock heads are used for discharging sand and gravel from barges.

Dock 3. South of Dock 4, connected by a cutting 70 m. long by 20 m. wide, with a swing-bridge. This dock is 690 m. long and 160 m. wide, depth also 20 ft.

On the West side, berths 1 to 5, there are four four-storey warehouses, and there are thirteen 3-ton cranes. There was a fifth warehouse at No. 3, burnt down and not rebuilt; this now forms part

of the open space for general discharge and storage of imperishables.

On the East side, which is fitted with six 3-ton cranes, there are two elevators for grain. Unit three, with capacity for 6,000 tons in bulk and 1,200 tons in bags, fitted with 3 tubes and 3 chutes, can load 500 tons an hour bulk, or 160 bagged, by one spout only at a time. It is used for the smaller vessels in the trade with Brazil only. The other elevator in this Dock, No. 5, is used for storage.

Between the elevators, on the East side, there are open spaces where vessels may berth and discharge lumber or drummed cargo, but this section is limited to medium and small vessels only.

Dock 2. This is connected with Dock 3 by a cutting 60 m. long, and 20 m. wide, with a swing-bridge. The Dock is 570 m. long by 160 m. wide and 20 ft. deep at zero.

On the West side there are four berths, each with a warehouse, Nos. 1 and 4 being three-storey, and 2 and 3-storeys storeys high. There are fifteen 3-ton cranes.

Section 1 is no longer used for the storage of dangerous or noxious cargoes, although Section 2 is in use for parcel storage.

The grain elevators on the East side of the dock are in a state of disuse. Their demolition is envisaged in order to provide an open storage area.

Dock 1. Connects with Dock 2 by a cutting 80 m. long, 20 m. wide, with 19 ft. This dock is chiefly used by Government-owned river craft. On the West side there are 5 warehouses, and 18 cranes. There are also ample open spaces. On the East side there is an elevator, capacity 27,000 tons in bulk, and three sheds between Docks 1 and 2, at about 300 m. from the quay.

At the southern end of this dock a hazardous and inflammable cargo store has been established, known as Shed 0 (zero).

South Basin. This basin is connected with Dock 1 by a lock 184 m. long by 20 m. wide, with a swing-bridge.

None of the lock gates in Docks 1 to 4 are used as water gates, water level is tidal, and the gates are simply means of communication. There are only gates proper into Dock 4 and Dock 1 from the North and South basins respectively. These have not been used for many years, although they were originally functional and formed one lock of all the docks.

The basin is 1,029 m. long and an average width of 110 m. It is used by river craft, cross river passenger ferry boats, coasters, etc. A new ferry boat terminal has been built here, on the land side of the basin, with waiting rooms, Customs section, etc.

B. New Port. The New Port, lies to the North of Puerto Madero, and entrance is via the Northern Channel. A breakwater extending from the North anteport protects the basin of the New Port from rough seas, and extends as far as Basin D, from which point another breakwater protects Basin E. Between the two, a channel is kept dredged for the movement of coasters to and from upriver. Basin F is entirely used for small coasters and river craft.' The five basins of this part (excluding F, coastal) offer good accommodation for the larger vessels entering Buenos Aires, and in all the berths there is sufficient water to float any vessel which can navigate the entrance channels.

Basins are numbered from South/North.

Basin A. Used by passenger vessels as well as general cargo. A landing station for passengers has recently been opened here and all vessels carrying over 50 passengers must land them here, shifting later to another berth if necessary.

The basin is 365 m. long by 140 m. wide, with 870 m. of wharfage. Northern side can accommodate two medium/large ships. Western side is frequently reserved for the Argentine Navy. On the S.W., passenger section, there is room for one vessel. On the S.E. another berth is available if the vessel operating at the Maritime Station is medium size only.

Pier head No. 1 is 100 m. long, but is mostly used as waiting berth for river going vessels. There are two railway lines on each side of the basin, and also at the back of the deposits. There are five warehouses and a total of 14 three-ton cranes.

Basin B. Used for general cargo vessels, and is 525 m. long on the North side, 464 m. on the South and 151 m. wide at the Western end, with 1,165 m. of wharfage with room for seven medium/large ships.

There are ten warehouses, and a total of 29 cranes, all three tons.

Pier head No. 2 is 202 m. long. There are three 3-ton cranes, and as a rule large passenger vessels occupy this berth after shifting from the passenger station.

Section 6 and 7 of this basin are reserved for the State Fleet vessels, or if used by others must be vacated if required by the national vessels.

Basin C. This is 495 m. long on the North, 585 m. on the South and 175 m. wide at its Western end, with 1,284 m. wharfage for seven medium/large vessels.

On the South side there are three warehouses, built 20 m. back from the quay to facilitate operations. There are thirteen 3-ton cranes.

On the North and West sides there are no sheds, and this is used for operating directly to or from trucks or rail cars.

There are seven 3-ton cranes on the North and three on the West side.

On Pier head No. 3 which is 236 m. long there are two 3-ton cranes and a 20-ton crane.

Railway tracks are fitted with a third rail for narrow gauge traffic.

The South side of this basin is reserved for ELMA (State Fleet) vessels.

Basin D: This is 495 m. long on the North, 585 m. on the South and 194 m. wide at its Western end, with 1,519 m. of wharfage.

Along the Southern side is the Grain Elevator, which occupies all the water front and extends also along Pier Head No. 4 — 295 m. Capacity is at present 150,000 tons, with another 20,000 being added. It can deliver 13,500 t.p.d. to a total of five vessels. On the North and Western sides, vessels may work to or from trucks for direct delivery cargo. There are nine 3 ton cranes on the North and three on the West, and also three cranes capacity 30 tons each.

On the North side a Container yard has been commenced, at present operating with 25,000 sq.m. of pavement and 1 shed, 100 m. long, 10 m. high and 30 m. wide. There are also two side loaders for 20/22 tons and one for 35 tons. Eventually the flooring will be extended to twice the area. 20 ft or 40 ft. Containers can be handled. The handling of Containers has become quicker.

A further warehouse will be completed at the end of 1976 for the storage of general cargo and containers.

For vessels with a reduced number of Containers, Basin E, North side, can also be employed, using the same concentration area at the so called Ericson yard.

Basin E: The basin is 495 m. long on the North side, 585 m. on the South and 194 m. at the West end, with a total length of 1,797 m. Coal is discharged on the North side and there is also a warehouse there for other cargoes, although basically this basin is used for coal.

On Pier Head No. 5, which is 523 m. long, the Power plant discharges its coal or oil. There is one oil intake and two travelling grabs, capacity 4 tons each, and also a 30 ton crane.

On the South side of this Basin vessels operate loading or unloading fruit and generals. On the N.W. Pier there is another generator plant of the Italo-Argentina de Electridad Co.

The South side of this dock is used by government vessels, but at its Eastern end, vessels may discharge liquid fuels. The Northern side has a store with 7,600 sq.m. of ground area. On the Western Head is a liquid product plant, (soda, tallow, vegetable oil etc.), although the berth is also used for general cargo.

Basin F: This faces North, and is used for river craft only, pusher barges and tugs, while on the land or West side there are discharging facilities for sand hoppers.

Pier Head No.6, between Basins E and F is 310 m. long, with room for one vessel only, and with two intakes for fuel oil and a 7.5 ton travelling grab for discharging Coal, capacity 150 t.p.h.

South Dock Zone.

This Dock is composed of two sections.

C. South Dock

First section. Has continuous quays on both sides, a width of 90 m. for most of its length, widening to a turning basin before reaching the connecting channel. The West quay is 911 m. long, and the East side is 1,109 m. long, both being used for general cargo and produce.

The refrigeration plants on the West side has now been demolished, and frozen meat is no longer shipped from this dock.

On the East side of the turning basin there is an elevator with capacity 6,500 tons, with four tubes and three chutes, and another storage shed capacity, 19,000 tons grain. Loading is only possible over one tube at a time rate 400 t.p.h. There are also tanks for edible oils here, pumping rate 150 t.p.h.

On the West side three 3-ton cranes and nine 1.5 ton cranes.

Second section. The connecting channel is 90 m. wide, with earth banks. Jetties for discharging petroleum are placed along the East side, while on the West there is a continuous quay 1,000 m. long, on which there are four 3-ton cranes and eight 1.5-ton cranes for discharging sand.

There are seven berths, five of which are for general use, one for the power plant for discharge of coal, with a 5-ton grab, which is now out of use, and one elevator berth, unit ten, capacity 23,500 tons. The loading bridge has five turrets, each with two tubes and one chute. Only one can load at a time, rate 400 t.p.h.

There are eight petroleum jetties on the East side for discharge of tankers and loading oil barges ex shore tanks. The jetties are marked A to H.

On reaching a draft of 23 ft. 6 in. vessels must shift to New Port.

D. Liquid Gas Basin. The Liquid Gas basin lies on the South side of the channel, immediately East from the Inflammables Basin, and consists of a central mooring platform 356 m. long, with four pairs of dolphins and two mooring blocks at each end, all joined by a foot gangway. The basin is protected from the S.E. by a breakwater 850 m. long, in the form of an inverted "L". The Gas lines are insulated to carry Liquid gas at minus 45°C.

Only two tankers are allowed to use the basin at a time.

As with the Inflammables Basin, all transit to land is by launch.

E. Inflammable Basin. This is situated outside the South Channel in front of km. 0.500 and about 300 m. distant from the axis of the Channel and at a right angle. The dimensions are as follows: length: 483 m. on the East side, 323 m. on the West side, 185 m. on the S.W. side and 72 m. on the South side. The dock walls at the entrance are 44 m. long on each side. The entrance is 50 m. wide. All the dock walls of this basin are of cement, as well as the intakes and landing dolphins. It has 6 intakes, 6 dolphins and 12 jetties for moorinrcessels. The present tank storage in South Dock lies to the S.E. of this basin at a distance of about 1,000 m. The land lying between the South Dock and the Inflammables Basin is used for erecting tanks.

Ocean going tankers discharge at the piers on the West side. There are no facilities for reaching the city by land and therefore all the transport of officials, crew, stores, etc., must be done by launch.

The oil for the Y.P.F. tanks on the East side of the Basin and the M.O.P workshops is sent from South Dock by piping under the South Channel.

F. East Basin. At the entrance to the South Anteport, a breakwater and two new basins have been constructed.

Basin No. 1 is used exclusively by the Port Works Department for

laying up and repairing dredgers and other maintenance craft. It also contains a dry dock and a shipyard. Depth of water is 24 ft. in the basin but only 16 ft. at the entrance.

Basin No. 2, in form an irregular quadrilateral, is separated from No. 1 by a mole, and is 146 m. wide at the entrance, 170 at the base and with walls 372 m. long to the S.E. and 294 m. long to the West, allowing a number of vessels to berth. Alongside this mole is the SEGBA Power Plant. Depth in the basin varies from 24 ft. to 14 ft. at the entrance.

From No. 2 there is a mole parallel to the South Access channel, 260 m. long, with a central salient 120 m. long, and two side salients 15 m. long each, and at 55 m. from the central mole. This is used by tankers discharging fuel for the Power Plant. There is one crane, 16 tons, and a narrow gauge railway line.

The breakwater has been built on the South side of the access channel as a protection for the basins, and commences 100 m. South of the light buoy on km. 1 of this canal.

South Anteport. The construction of the Inflammables Basin, and of the East Basins, before arriving at the entrance to South Dock, Riachuelo or South Basin has created an Anteport. The North part has a mole 384 m. long from East Basin No. 1 to South Basin. This is used by the Port Works Department for workshops, deposits and offices.

The Prefecture has an office here, on top of which is a mast two m. high, used as a signal station. A white-edged red flag by day or a flashing red light by night indicates that a vessel is entering by the Southern Channel from km. 8 to the Anteport. This signal will remain until the vessel reaches the Anteport, and signifies that the Channel is closed to all except tugs, sand hoppers and river passenger craft, provided draft does not exceed 14 in.

TUGS: From vessels drawing up to 22 ft., service is rendered by a bow tug from km. 5, and a stern tug from km. 1, or vice versa, and to or from kms. 8 and 4 respectively when draft exceeds 22 ft.

Stand-by time will be charged if a vessel is delayed in entering or leaving by bad weather, fog, low water, no berth, etc., plus usual Sunday/holiday surcharge.

Tug hours now coincide with ordinary port working hours and time is counted from the hour they leave their moorings and until they return.

When a vessel is leaving port, and tugs are ordered to accompany her beyond normal limits, an overcharge will be made on an hourly basis.

Once a vessel is moored, all further service in the same section will be charged by hour. If the vessel shifts section, this movement is charged plus the sections traversed.

A special compensation charge is made when tugs are ordered but not used.

For the services of tugs supplying electricity or steam, charges are made per day and per hour, varying with the size of the tug.

If vessels do not use their engines while under tow, a surcharge of 50% is made.

Tow ropes must be supplied by the vessel, but can also be hired. The towage company is not responsible for breakages, fouling of propeller, expenses of diver or any other consequence.

DENSITY: Fresh water.

FRESH WATER: There are hydrants at all berths, with very few exceptions, at which vessels can take water at a charge per cu.m.

There are no hydrants in the Inflammable Basin, and only at Berth No. 1 on either side of Basin E in the New Port.

Delivery rate varies from 5 to 10 tons per hour, depending on the number of vessels taking water, time of day, etc. An extra charge is made in overtime.

FUEL: Available, by barge.

CARGO: *Classification of import cargo.* Argentina being a tariff protected country, all cargo landed is subject to Customs control.

To facilitate control, there are Custom House Warehouses on the city side of the dock zone, on the quays, in the South Dock, and others away from the quays. The Dock Zone is enclosed.

The transport of all goods from vessels is currently effected by State owned vehicles. There are no longer any private wharehouses.

All fine cargo, cargo in cases, and most baled cargo must be discharged to Custom House Warehouses, direct from the ship, by means of dock cranes.

Other cargo in cases, barrels, etc., which might be damaged if stowed in the open air, also cargo which from its nature might damage other cargo stowed with it must go to the Custom House Warehouses away from the quays, and is conveyed there by port railway wagons that take the cargo from alongside the ship. This same class of cargo can also be sent to private fiscal warehouses and is similarly conveyed there from the ship's side by railway wagons.

Cargo that can be stowed in the open air without risk of damage, such as cases of glass, motor cars, sanitary ware, etc., is also conveyed from the ship's side by railway wagons to open spaces (plazoletas) within the dock zone, reserved for the stowage of such cargo.

Certain classes of cargo, such as bales of gunnies, jute, rice, agricultural implements, and all articles the nature of which can be seen at a glance, can be discharged direct to consignees' carts, motor lorries, etc., from the ship's tackle. Also certain classes of rough cargo, such as coal, lumber, iron, cement, etc., must be discharged direct in this way.

The Custom House, in order to expedite despatch, has enlarged the list of goods that can be discharged in this manner, and also authorises the carrying out of these operations outside ordinary working hours, which has hitherto been prohibited.

Storage of goods in Custom House Deposits is limited to six months, counting from the date of the vessel's entrance to port.

All classes of cargo can be discharged into lighters (by permit from the Custom House).

Discharge to lighters can take place in all sections of the port.

Use of special deposit called "Transit" for reception of general cargo.

In order to facilitate the discharge of vessels with general cargo for delivery to Fiscal Warehouse, the Custom House authorities have authorised the direct discharge from vessels to a special warehouse which receives all the cargo as it comes out of the hold, labour being supplied by Agents.

This facility is only available at certain sections of the port and whenever a vessel discharges at a berth where there is a "Transit" deposit, this must be used unless the vessel carried homogeneous cargo or of such a nature that it does not require the use of the "Transit" deposit.

The cargo discharged in these special warehouses must be delivered by the Agents at ship's expense, into the Customs warehouses.

Cargo in transit to or from Paraguay is now stored in sections of Warehouse No. 5 of Dock 4. The goods may remain in the warehouse, once onwards transportation has been arranged, for three days, where the ocean carrier is operating, or in a special shed in Section 1 of Dock 2, where the river vessels load for that country.

Cargo in transit for other countries can be deposited in any approved space. In all cases, special permit must be obtained in order not to lose the status of "transit cargo".

Time limit for the permanency of "In transit" cargo in lighters. Maximum time limit is set at ninety days, but it is possible to renew this, while on the expiry of such authorisation, the cargo must be discharged to fiscal warehouses, and be subject to all the rules and conditions governing this operation.

The Custom House is authorised to grant an extension of time when the interested party requests this before expiration date, and providing the causes are, in the opinion of the Custom House Authorities, justified.

Cargo in transit that is discharged by mistake to fiscal deposit, has to be removed from there within 48 hours; otherwise it must be added to the cargo manifest as a surplus discharge.

A tariff in the style of railway tariffs is in force with a variety of charges, all depending on the class and nature of the cargo that is being trans-shipped. Therefore, Shipowners, their Agents and Forwarding Agents should, in every case, communicate with their Agents in Buenos Aires to ascertain the exact cost of these charges. Subsequently to the new tariff being enforced, various increases were declared, so that the extra freight on cargo trans-shipped is now an important item to be considered when accepting through bookings.

Delivery of cargo. The receiver of the merchandise or holder of the Bill of Lading must deliver this document to the Custom House to clear the goods. The merchandise, whether for deposit of direct despatch is delivered to the Consignees without the intervention of the Master of the vessel or the Agents. The Bill of Lading remains with the Custom House, under whose control the cargo is delivered. The Custom House verifies the legitimacy of ownership, and whether all the import dues or services have been paid on the merchandise before leaving warehouse.

Collection of freights on imported goods. In the Argentine, the Custom House releases the cargo, and not the Agent, therefore the only means of ensuring collection of freight when payable at destination, is for the Agent to place a judicial embargo on the entire cargo. This action necessitates the Consignee first obtaining the Agent's conformity to the documents before the Custom House will accept them and deliver the goods.

Without an embargo the Agent, once he has presented the Cargo Manifest, cannot intervene between the Custom House and Consignee. Not even the retention by Shipper of all the signed original Bills of Lading is a safeguard, because the Custom House, which is only concerned with the delivery of the cargo to the lawful Owner and is in no way concerned with the freight payment, will deliver the cargo against production by consignee of a bank guarantee that the Bills of Lading will be forthcoming in due course.

From the foregoing it may be gathered that freight should always be prepaid when possible.

The Custom House usually does not release the cargo, if the Bills of Lading are claused "Payable at destination", until the importer produces an account for freight, duly receipted by the Agent, but this is not a sufficient cover, as the Customs are not under any legal obligation to effect this control, and therefore cannot be held responsible for the freight of goods delivered without it being paid.

Cargo discharged to or loaded from vehicles. The Custom House Administrator has authorised the access of vehicles of all classes to the quays of this port for the reception or delivery of cargo of any class, size or weight.

It is necessary for the importers, exporters or Custom House brokers to obtain a permit for this, and the applicant is held responsible for any damage to port installations caused by said vehicles. Sufficient space must be left between truck and sheds to allow passage of Port Authority vehicles and fire engines.

The authorities will not be responsible for any accidents to the vehicles, their crew or their cargo. The vehicles must be so handled as not to interfere with the railway traffic.

Discharge of Inflammables. This is now permitted in the Port of Buenos Aires under strict security control.

Discharge of Sulphur. It is compulsory to have a motor launch fire extinguisher alongside vessels during the discharge of sulphur. An

extra man is also required at each hold for carrying water to the stevedores.

Delivery of fresh fruit. The Custom House allows the consignees of fresh fruit to take away their cargo immediately on vessel's arrival, upon presentation of a special permit endorsed by a bank and Agents, and whereby the receivers guarantee presentation of the Bill of Lading in due course.

Placing of Lighters between Vessel and Wharf. When lighters are placed between the vessel and the wharf for the convenience of discharging a vessel's hold, full Port Service Dues are charged.

Lighters may be placed between the vessel and the wharf when the vessel's work to shore is not interfered with thereby. In such cases the vessel will continue to pay full dues. Lighters are, in fact, not considered as occupying any berth unless they are allotted a special berth by the Custom House to load or discharge. It is only when lighters are so commissioned by the Custom House, that a vessel going alongside these lighters would be charged in the category of a vessel lying second off.

Discharge of Heavy Lifts. There are three floating cranes, one for liftsofup to 60 tons, another of 100 tons and a new one of 250 tons. The first two may have lost part of their capacity. The 250-ton crane can navigate carrying its cargo, so making special movement of the vessel unnecessary, but the two smaller cranes must operate between ship and shore in swivelling movement.

There is also a floating crane capacity 30 tons belonging to the Navy, and two others, each 75 tons capacity, belonging to the State Fleet.

Hire counts from getting the crane alongside, and in condition to work, until work is completed, plus an extra hour to compensate crews from getting the crane back to its mooring place. Slings must be supplied by the lessee, and no responsibility is accepted for damage or breakage, the charge being on a tonnage/hour basis.

The 250-ton crane is not self propelled, and has a length of 45 m., 23 m. beam and a draft of 5 m., displacing 1,400 tons. If required it can be used in salvage operations, towage being for account of lessee.

Normally these cranes, except for the 250-ton crane, navigate under their own power, but the Craneman has the right to employ a tug or tugs for lessee's account when he considers it necessary and two tugs are also generally employed.

Wharf Cranes. The hire of shore cranes is charged by the Port Administration to the Agents of the vessel requesting their use. Special permission must be obtained for overtime work, and also to have shore cranes handle ship's machinery, ballast, or any other non-commercial commodity.

Movable Cranes. Charged per hour from arrival until work finishes. These are used for shifting cargo from one wagon to another, or for shifting cargo for convenience of consignees.

Advertisements. Advices of arrival of vessels with cargo, inspections of general cargo and notices of general average are published in the local press.

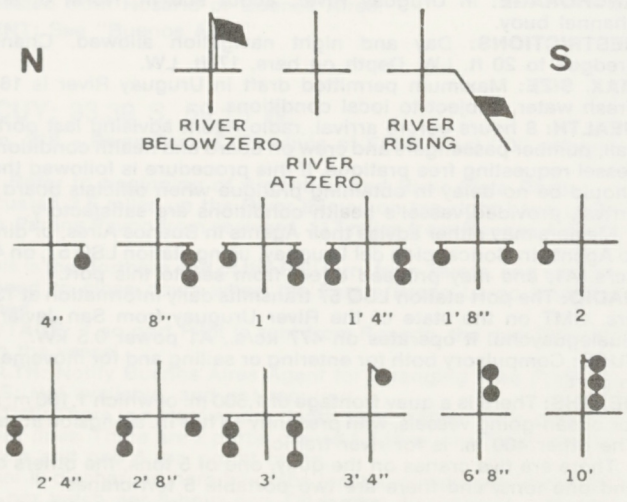
Notarial Protest and extensions. When vessels arrive with cargo it is customary to note protest before a Public Notary, for which there are fixed fees per page to be filled in, plus further fees should an extension be necessary later.

TIDAL SIGNALS: The following tidal signals, shown from a semaphore on the North side of the entrance to South Basin Lat. 34° 38′ S. Long. 58° 21′ W. (approx.), indicate the height of the water above or below zero.

The signals are made with balls and black flags by day and with flashes by night as shown in the diagram below, seen from the Anteport looking out towards the river.

To indicate that no signals are being made at the semaphore, a flag is hoisted to the masthead, and another at the yard-arm.

SIGNALS BY DAY



SIGNALS BY NIGHT

(White flash) Cycle: 30 seconds.
(Red flash) Long flash: 2.5 secs. each.
(Green flash) Short flash: 6/10 sec. each.

White flashes
Rising tide: One long.
Falling tide: Two short.

Red flashes
Above zero:
For each metre: One long.
for each 10 centimetres: One short.

Green flashes
Below zero:
For each metre: One long.
For each 10 centimetres: One short.

Green and red flashes
Zero:
One green and one red, both short.

A weekly bulletin is issued by the public works ministry and widely distributed among Pilots and Agents reports depths referred to the zero of the Riachuelo Indicator in channels, passages, basins and berths and it is possible to know the real depths at that moment in each part of the port area.

GENERAL: *Port Zone.* No one is permitted to enter the port zone on Sundays or holidays, or any working day after 1800 hrs., unless supplied with a pass. Visitors to ships must have cards issued by the Agents and approved by the authorities.

There are severai access gates open during day time, but after working hours and on Saturdays/Sundays and holidays only those at Cangallo Street (by Dock 4) and Maipu (New Port) are open on a 24-hour basis.

Allotment of Berths. Vessels to discharge are allotted berths by the Port Authorities in strict turn, as from arrival in the roads, and according to the nature of the cargo to discharge or load and its quantity. A certain time is granted for completing operations, though an extension can usually be obtained, the Port Authority reserving the right to order a vessel out if operations are not completed on time.

Berths are allotted in South Dock when the greater part of a vessel's cargo is for the factories in that zone.

Berths at the Elevators. These are allotted in accordance with the certificate given by the National Grain Board, and in strict order of arrival in the roads.

Time limit for occupying berths and commencing operations. Vessels which do not commence operations within four hours of the first ordinary period, are liable to have the berth given to others. Similarly those which suspend operations without due cause may lose the berth.

ELMA berths in New Port. Any vessels may solicit one of the reserved berths, if vacant, but must shift as soon as a State vessei requires the berth.

Discharge of Inflammables. Consignees must take delivery from alongside. Should Customs clearance for such cargo not be ready, it must be discharged into lighters and the authorities will indicate where it must be placed.

Entrance. Vessels can enter or leave at any time of day or night, with advance notice to the authorities.

Movements. Vessels are not allowed to shift if their draft is not at least ten inches less than the depth of water on the semaphore, with a rising river. Nc vessel can interrupt the operations of another to shift within the port, but if ready to sail, the other vessel must facilitate its departure whatever the hour may be.

All vessels moored alongside one another, at the quay, must reciprocally facilitate their operations, and open out when the vessel on the inside finishes her operations, and must leave or change berth. They must also make room for lighters with cargo for the vessel next to the quay, outside working hours.

When a vessel has to shift along the quay up to one ship's length to discharge or load from another hatch, neither towage nor pilotage is necessary when the shift is between the forward hatches, or the after hatches. Prior permission must be obtained.

Shifting from North to South or vice versa. There is no set rule, but usually vessels going from say, South Dock to New Port, will let tugs go and sail out to Intersection Roads to turn round and take up tugs again in the North Channel. It is also possible to have tugs follow out to km. 9, where the North and South Channels meet, turn there and come into the new berth with the same tugs, if length of vessel permits.

It is for the Master and Pilot to decide where the vessel will turn, depending on weather, draft, current, etc.

Opening of Dock bridges. The established time table, twice an hour is not observed, and Agents arrange for this when a vessel is ready to move through. Vessels should not attempt to pass the lock gates if clearance is less than ten cm. and the river is not rising. It must be remembered that the sole of the locks in each case is of concrete.

It is frequent in Madero docks to see vessels resting on the soft muddy bottom.

Prefecture Control. On both entering and leaving the Prefecture officers may control with the crew list that all members of the crew are on board, particularly on sailing.

Draft on sailing must be checked by the Pilot and Master, and duly recorded in the Pilot's book. Load lines are strictly checked; in case of hogging, drafts fore and aft are taken while in sagging marks will prevail.

Shiftings and manoeuvres in port are carried out under the responsibility of the Master, but Pilots are also responsible, at least to the Prefecture, since they are under direct authority and at the same time considered assessors to the Prefecture.

Trim is also controlled, no list is allowed, and maximum tolerance for difference of draft fore and aft is 6 to 7 ft. according to vessel's length overall. Vessels should not be down by the head.

Hatchways. All hatches must be kept closed when a vessel is not working. If hatches are found open when a vessel is idle, the vessel is fined.

Garbage. A garbage barge goes round the port every morning to take away the garbage, which must be left in drums slung over the stern ready for lowering into the barge. It is also possible to arrange for a barge to take off refuse from holds, old dunnage, bedding, etc. Collection is often a rushed affair, and good watch must be kept for the barge. Fines are imposed if garbage is not removed.

Working Hours. Ordinary working hours are now fixed as from 0700 to 1300 and 1300 to 1900 hrs. Tugs are now also on this same time table.

Overtime can be worked from 1900 to 0100 hrs. and from 0100 to 0700 hrs., but Stevedores are not allowed to take two consecutive shifts.

Custom House guards and other official workers follow the same schedule from Monday to Friday, but earn overtime on Saturdays, Sundays and holidays.

TELEPHONE: There is no special installation for vessels in port. Many Agents have one or more lines of their own, which can be placed on board, if there are connections available in that sector. The telephone company makes a connecting charge each time, at a high cost to the vessel, plus the usual charges for the service.

CONSULS:

Algeria	Montevideo 1889	Tel. 41-0271
Australia	Sta. Fe 846	32-6841
Austria	French 3671	72-7095
Belgium	Defensa 113, 8th floor	33-0066
Bolivia	25 de Mayo 611 2nd floor	31-7365
Brazil	Paraquay 580 2nd Floor	31-7743
Bulgaria	Manuel Obarrio 2967	83-7458
Canada	Suipacha 1111 25th floor	32-9081
Czechoslovakia	F. Alcorta 3240	80-3917
Chile	San Martin 439 9th floor	49-8271
China, Peoples Rep.	Sucre 3001	73-1950
Colombia	Sta. Fe 782 8th Floor	31-4381
Corea-South	F. Alcorta 3221	83-4633
Costa Rica	Libertador 1146	42-6181
Cuba	Virrey del Pino 1810	73-4349
Denmark	L.N. Alem 1064 9th floor	32-6901
Dominica	Maipu 844 5th floor	392-2381
Ecuador	Quintana 585 10 Piso	42-6408
El Salvador	Talcahuano 1038	42-6192
Finland	Sta. Fe 846	32-0600
France	Sta. Fe 846	32-2425
Germany, West	Maipu 938	32-9424
Great Britain	Luis Agote 2412	80-7070
Greece	R. S. Pena 547	34-2838
Guatemala	Lavalle 1759	46-4662
Haiti	Viamonte 1167	45-8796
Holland	Maipu 66 1st floor	34-8778
Honduras	Rodriguez Pena 336 2nd floor	40-0484
Hungary	Cnel. Diaz 1874	83-0767
Iceland	J. A. Roca 610 7th floor	34-3454
India	Paraguay 580 3rd floor	31-3020
Indonesia	Mariscal Castilla 2901	80-6622
Iran	Ocampo 2901	83-9314
Ireland	Sta. Fe 782 7th floor	32-4360
Israel	Arroyo 916	392-4481
Italy	M. T. Alvear 1149	42-9841
Jamaica	Corrientes 127 4th floor	31-4872
Japan	Azcuenaga 1035	83-1031
Lebanon	Lib. Gral. Sn Martin 2354	821-0466
Liberia	Florida 142	49-5543
Mexico	Cordoba 1367	42-0723
Nicaragua	Venezuela 146 2nd floor	37-8375
Norway	Esmeralda 909 3rd floor	32-1904
Pakistan	Alvear 1402	44-0355
Panama	Talcahuano 1038 5th floor	42-9651
Paraguay	Maipu 464 3rd floor	392-6536
Peru	Corrientes 330 3rd floor	31-3374
Philippines	Castex 3123	80-5068
Poland	Av. M. Aguado 2870	821-9681
Portugal	Cordoba 315 3rd floor	32-3524
Rumania	Arroyo 962	392-2630
Sierra Leone	Cordoba 1233	40-9573
South Africa	M. T. Alvear 590	31-8991
Spain	Guido 1760	41-0078
Sweden	Tacuari 147	38-3001
Switzerland	Sta. Fe 846	31-6941
Syria	Callao 956	42-2113
Thailand	Av. Belgrano 265 9th floor	33-3690
Turkey	R. S. Pena 852 8th floor	46-8779
United Arab Republic	Guido 1530	42-8542
U.R.S.S.	R. Pena 1741	42-1552
Uruguay	Corrientes 545 6th floor	49-4129
U.S.A.	Sarmiento 669 3rd floor	46-3211
Venezuela	Esmeralda 909 4th floor	32-2786
Vietnam	Cordoba 1184	46-6533
Yugoslavia	R. Pena 1012	411309
Zaire	Cerrito 1070	44-0902

In Out-ports, the available Consular representations are stated under each port.

AUTHORITY: Administrador del Puerto Buenos Aires.

AGENT: Christophersen Internacional (Maritima) SA.
25 De Mayo 375 Buenos Aires. Telephones: 31-8349 31-0164.
Cable Address: Cristofsen. Telex: 122584 AB CRIBA.

CAMPANA: 35.15 S. 58.58 W. (See Plan)

(Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina I and River Plate Ports.

On the left bank of the Parana de las Palmas arm of the Delta from seaward, 155 miles by river from Buenos Aires. The only pass which obstructs navigation is the Martin Garcia.

The port is mainly used for receiving and despatching petroleum and its products. There are also facilities for handling timber and general cargo, as well as steel tubes for the petroleum industry, both for internal requirements and for export, which are made here.

RESTRICTIONS: Draft is controlled by depth of water at Martin Garcia Bar. Daily draft forecasts made by local authorities. See "Mitre Channel" (Under, The River Plate).

MAX. SIZE: Up to 27 ft. draft, dependent on local river conditions.

TUGS: Not required.

BERTHS: From North to South the berths are:

National Mole. 20 ft. alongside, used for shipment of the steel tubes and movement in general. The mole is 116 m. long, with three electric cranes, 4 ton capacity and two mobile cranes.

Esso Mole H. Concrete pierhead, 16 m. long, over which crude oil is discharged through an 8 in. line. there is deep water at this mole which is mainly used for import cargo. There is also a belt conveyor equipment for loading petroleum coke in bulk.

Esso Mole G. A mile South of Mole H, fitted with an 8 in. line for discharge of crude from smaller tankers, in 18 ft. Length 14 m.

Esso Mole E. 130 m. long, with 24 ft. There are two intakes on this mole, of 6 in. the former being used for shipments of clean products and the latter both for crude and for shipment of clean products.

Esso Mole F. In 26 ft., 16 m. long, with a 10 in. line which can be used crude and for lubricants.

200 m. downstream there is a wharf, 70 m. long, in 14 ft. used for discharge of timber and sand.

There are no facilities for handling of grain or other produce.

HEALTH: Free Pratique can be obtained in the usual way, by notifying Buenos Aires Agents. Tankers lightening part of their cargo in Buenos Aires Roads, can take pratique here, provided that the convoy formed by the tanker and barges follows up to Campana, and no one on board has any contact with shore until after the medical visit. If the vessel is "unclean" however, pratique is taken before lightening.

MEDICAL: Doctors and hospital available.

DENSITY: Fresh water.

FRESH WATER: Available at Esso Moles and National Mole.

FUEL: Available at Esso berths. No barges.

CONSULS: At Rosario and Buenos Aires.

REPAIRS: Can be effected.

AUTHORITY: Administracion de los Puertos Parana.

AGENT: See "Buenos Aires".

CONCEPCION DEL URUGUAY: 32.29 S. 58.12 W. (See Plan)

Km. 183 – River Uruguay (Province of Entre Rios) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

On the left bank of the River Uruguay from seaward, 182 miles from Buenos Aires.

APPROACHES: Access to the port is by a channel 1,000 m. long, 45 m. wide, which is now only 11 ft. 5 in. at zero.

The roads of the port extend from the buoy marking the entrance to the channel, and about 2 km. up river, where vessels may anchor if awaiting berth.

Access is governed by the water on the Montana and Altos y Bajos passes, where there is normally no more than 17 ft. and this draft should be taken as a determining factor.

PILOTAGE: Pilots for Uruguay River board off Buenos Aires entry channel.

ANCHORAGE: In Uruguay River, about 900 m. North of entry channel buoy.

RESTRICTIONS: Day and night navigation allowed. Channel dredged to 20 ft. LW. Depth on bars, 17 ft. LW.

MAX. SIZE: Maximum permitted draft in Uruguay River is 18 ft. Fresh water, subject to local conditions.

HEALTH: 8 hours before arrival, radio Agent advising last port of call, number passengers and crew on board and health condition of vessel requesting free pratique. If this procedure is followed there should be no delay in obtaining pratique when officials board on arrival, provided vessel's health conditions are satisfactory.

Masters may either advise their Agents in Buenos Aires, or direct to Agents in Concepcion del Uruguay, using station LSQ 57, on 477 kc/s. A1, and may proceed direct from sea to this port.

RADIO: The port station LSQ 57 transmits daily information at 1300 hrs. GMT on the state of the River Uruguay from San Javier to Gualeguaychu. It operates on 477 kc/s., A1 power 0.5 kW.

TUGS: Compulsory both for entering or sailing and for movements in port.

BERTHS: There is a quay frontage of 1,500 m. of which 1,100 m. are for ocean-going vessels, with presently 16 ft. 4 in. alongside at zero. The other 400 m. is for river traffic.

There are five cranes on the quay, one of 5 tons, the others of 3 and one tons, and there are two portable 5 ton cranes.

New elevator capacity 20,000 tons, working with one tube 300 t.p.h.

There are several wharves at the South end of the mole for discharge of tankers.

Due to silting alongside quay, vessel should be prepared to be fendered about 1.5 m. off the quay.
MEDICAL: All medical facilities available.
TANKERS: Two berths for tankers up to 18 ft. draft.
YPF Berth: Eight hose connections, 12 in. and 6 in. diameter.
Esso Berth: Hose connections, 8 in. for naphtha, 6 in. for other products.
DENSITY: Fresh water.
FRESH WATER: Available, there are several hydrants of 1.5 in. diameter on the mole.
FUEL: Available from the State Oil Company at the pier, or by drums from other suppliers.
REPAIRS: National and privately owned workshops for all types of minor repairs.
DRY DOCKS: One, owned by Ministerio de Obras Publicas, length 70 m.
REPATRIATION: Can be arranged subject to Immigration formalities.
AIRPORT: Situated 3 km. away, with daily services to Buenos Aires.
CONSULS: There are Italian, French, Spanish and Uruguayan representatives.
POLICE/AMBULANCE/FIRE: Police tel. 2222; Fire Service tel. 2860; Ambulance tel. 1792; Hospital tel. 2464.
TELEPHONES: Arrangements can be made for placing telephone on board.
SHORE LEAVE: Permitted subject to Immigration control.
AUTHORITY: Capitania del Puerto Concepcion del Uruguay.
AGENT: See "Buenos Aires".

DIAMANTE: 32.05 S. 60.33 W. (See Plan)

Km. 533 – River Parana (Province of Entra Rios) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.
On the right bank of the River Parana from seaward, above Rosario and 286 miles by river from Buenos Aires.
APPROACHES: There is ample depth of water in the port and approaches, which is governed by the water on the various bars on the river, the shallowest above Rosario being Isla de los Pajaros, at km. 468 to km. 473.
PILOTAGE: There is no resident port Pilot, and Pilot has to be ordered from Rosario. Minimum 10 hours notice required. The river Pilot ends his duties in the outer roads.
HEALTH: Vessels arriving directly from abroad must take Free Pratique at San Nicolas or Rosario, with the usual pre-advice to Agents there, which is essential for preparation of Notice of Readiness.
RADIO: Nearest station is Rosario LSQ 38, on 477 kc/s. A1 LSQ broadcasts daily, at 1305 hrs., the depth of water in the Parana River from Los Ratones to Los Pajaros, and also the minimum depth between Santa Fe and Rosario.
TUGS: None available locally, but one tug is required on sailing from the new elevator berth and has to be ordered from Santa Fe.
BERTHS: Grain is loaded from the new elevator at the North end of the port, section 4, where there is 30 ft. Only one vessel may load at a time. Loading rate is up to 600 tons per tube per hour, work being possible with two tubes simultaneously.
It is possible to load a second vessel, lying second off, if the beam of the vessel alongside permits.
Storage capacity in port is about 50,000 tons, of which 20,000 tons are in elevator at section 4.
There are tanks for Vegetable Oil with a capacity of 4,000 tons. Pumping rate is about 120 t.p.h. to vessels' tanks.
FRESH WATER: Available at the new elevator berth.
FUEL: Not available.
REPAIRS: Only minor repairs possible.
DENSITY: Fresh water.
MEDICAL: Hospital available.
CONSULS: None. Outward bound consulate despatches should be requested from Rosario or Buenos Aires.
AGENT: See "Buenos Aires".

IBICUY: 33.39 S. 59.15 W.

Km. 218 – River Parana (Province of Entre Rios) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.
Situated 3.5 miles up the River Ibicuy, on the right bank of the River Parana Pavon from seaward, 117 miles from Buenos Aires by river.
This is the Northern end of the Rail ferry from Zarate, and which is destined to close down when the Zarate/Brazo Largo bridge is opened.
PILOTAGE: If no port Pilot is sent from Rosario, the river Pilot will berth the vessel.
HEALTH: Notify Buenos Aires Agent for arranging Free Pratique.
TUGS: Not available, and not required.
BERTHS: There is a steel wharf, depth 18 ft., 160 m. long, with four railway lines. There are 2 portal cranes 1.5 tons, one fixed crane of 10 tons and one 5 ton portal crane.
Coal is discharged here by grabs for the railway, rate about 200 tons per hatch per 8-hour day. Oil is also discharged at another wharf nearby into tanks belonging to the railway, there being 25 ft. here.
No grain has been loaded here for many years.
MEDICAL: Facilities available.
DENSITY: Fresh water.
FUEL: Not available.
FRESH WATER: Available on the quay; the railway provides hose, delivery rate 60 t.p.d.
REPAIRS: Not available.
CONSULS: None, clearance must be made at Buenos Aires.
AGENT: See "Buenos Aires".

LA PLATA: 34.54 S. 57.55 W. (See Plan)

(Province of Buenos Aires) "B" category port.
N.B. Refer to beginning of Argentina and River Plate ports.
This port is situated on the left bank of the estuary of the River Plate from seaward, 30 miles South of Buenos Aires. It is the capital of the Province of Buenos Aires and is rapidly becoming industrialised.
APPROACHES: Access to the port is by a channel, which leaves the main entrance channel to Buenos Aires at km. 57. This is constantly dredged, being usually at 28 ft. maximum. La Plata Roads extend for 3.5 miles from the moles.
PILOTAGE: Coming from the sea, or Montevideo, the Recalada or Uruguayan pilot will take the vessel to La Plata Roads 27 ft. where a La Plata port Pilot comes aboard.
From up river to La Plata, the river Pilot is dropped at Intersection, where a new Pilot takes the vessel to La Plata Roads for the Port Pilot to come aboard.
RESTRICTIONS: Vessels navigating in the entrance channel have preference over those in the River Santiago, and those which by reason of size must turn at Four Mouths have priority over others in their vicinity.
There must be no crossing or overtaking of vessels over 75 m. long or 11 m. beam, or 20 ft. draft and for this reason vessels ready to sail from Gran Dock will not let go while any vessel is entering by the entrance channel.
Vessels over 200 m. in length can only manoeuvre in daytime, with a minimum visibility of 1,000 m. and with a wind not exceeding 10 knots.
On entering or sailing on a rising tide minimum depth cannot exceed vessels draft, and on a falling tide there must be 50 cm. (1 ft. 8 in.) under the keel.
Regulations for the Santiago River Channel prohibit movement between sunset and sunrise for vessels over 140 m. long, or drawing over 24 ft. Vessels over 11 m. beam cannot cross or overtake, and vessels in this channel must not interfere with those moving in Four Mouths.
ANCHORAGE: Four miles S.E. of Recalada. The Navy controls a reserved zone between 34° 46′ and 44° 48′ S. and between the meridian 57° 48′ W. and a true bearing 220 from the buoy km. 7,700 at the end of the Eastern arm of the port, for Naval ships only.
MAX. SIZE: Regulations limit length, beam and draft to 215 m., 30 m. and 9.15 m. (30 ft.) respectively.
HEALTH: Free Pratique — radio messages should be sent direct to Agents in La Plata if vessel is entering direct.
RADIO: Station LOM 524 kc/s., A2. State oilfields have a VHF service, range 50 km. for communication with their vessels on 156.5 Mc/s. during the first 15 minutes of each hour.
TUGS: Two tugs must be used, each of a minimum 820 h.p. Normally join vessel in entrance channel.
BERTHS: The port comprises Rio Santiago, Gran Dock and the Propulsora berth, five km. up the river Santiago, also known as Port Ingeniero Rocca.
Rio Santiago: The grain elevators on the West side of the entrance channel are no longer in use, and their installations would require considerable repair. This berth is 450 m. long, due West of the Four Mouths turning basin. Four tanks for reception of liquid chemicals have been installed here, capacity 2,300 tons.
There are no fixed cranes at the berths, but a number of mobile units are in use. No lighters are available, unless brought from Buenos Aires.
Of the two Packing plants, one, Armour, is completely closed down and would need considerable repair to re-open. The other, Swift, is operating at less than capacity, for local demand, and any export Meat is trucked to Buenos Aires for shipment.
Gran Dock: Seventeen berths, depth 26 ft. alongside.
Propulsora: A cold rolling steel mill has been built inland and a 5-km. channel dredged to 30 ft. from "Cuatro Bocas". There is one berth here, 154 m. long, though vessels of up to 205 m. l.o.a. have operated here. The material used in the mill is imported in coils, and exports of cold rolled sheets and wire are also handled. There is one crane, 30 ton capacity and rate of discharge can reach 3,000 tons per 24-hour day.
Some 600 m. from the wharf itself, there is a turning basin 300 m. diameter. Vessels go in bow first, as there is less water to the South end of the wharf, and turn in this basin before returning down channel to La Plata proper. Only one vessel can operate at a time here. Vessels are secured to bollards on shore at the bow, and a mooring buoy astern.
TANKERS: Four tanker berths in Gran Dock, which are used exclusively for YPF. No facilities for slop discharge:
YPF Terminal handles crude oil, diesel, kerosene. Bunkers available ex-wharf.
Gran Dock is now used only for tankers by the National Oilfields. The turning basin at the South end being only 180 m. in diameter is sufficient for the larger vessels now operating here, and a new turning basin at Cuatro Bocas or Four Mouths, is dredged to 30 ft.

on a 400 m. diameter. This is at the junction of the access channel, River Santiago, and Gran Dock. Tankers head in to Gran Dock and reverse back to this basin.

In the 11 berths the intakes include one 24 in. line, and several of 16 in., 14 in. and 12 in.

In the West Channel, behind Gran Dock, there is one berth for liquid gas tankers, with a 12 in. line, with several discharge manifolds at 4 in.

Special regulations for Gran Dock permit vessels to moor with bows either inwards or outwards, indiscriminately. Those moored bows inwards (facing South) will be assigned, preferably to intakes 4, 5, 10 and 11, and must sail immediately after finishing operations, taking preference over others about to sail.

Vessels between 175 and 215 m. length, or drawing 22 ft. or more can navigate ahead or astern, and will turn in Four Mouths on entering or sailing as the case may be. When such vessels are moving stern first, the Prefecture will make sure that there are no craft of more than 5 m. beam moored on either side of the Armour Freezer, shifting these if necessary.

Vessels of less than 175 m. length or with a draft of less than 22 ft. must turn in the Turning Basin on entering or sailing.

Turbine steamers of over 140 m. in length will only use the Turning Basin in daylight.

For safety reasons there must be one tug and one fire-fighting craft on service and ready to sail.

No mooring second off is permitted except for tugs and vessels receiving dirty ballast or liquid from cleansing of tanks, or when supplying steam.

Degassing tanks is prohibited in port.

Heated repairs can only be carried out under deck and on special authorization from authorities.

MOORING: Vessels of up to 150 m. length will employ four men for mooring, and those over 150 m., six men. Mooring hours in ordinary time are from 0600/1800 hrs. on week days, 0600/1200 hrs. on Saturdays. There is a 50% extra from 1800/2400 hrs. on week days or from 1200/1800 hrs. Saturdays, and 100% at all other times.

SEMAPHORE: For night signalling of the depth of water in the access channel, the system is analogous to that at Martin Garcia and Riachuelo, Buenos Aires. By day signals are hoisted on a tower at km. 4,460 on the access channel arm if tide is rising. If the river is stationary or falling, no flag is hoisted.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Delivery by barge, capacity 300 tons and pumping with barge's own pump, 100 t.p.h. There are also connections at the berth.

FUEL: Obtainable from YPF terminal. No barges available.

REPAIRS: All repairs can be effected except those requiring a dry dock.

CONSULS: Following countries are represented in La Plata: Belgium, Brazil, Great Britain, Italy, Norway and Spain. All other consuls at Buenos Aires.

SHORE LEAVE: Allowed, provided crew members in possession of Identification Cards.

AUTHORITY: Capitan de Puerto de La Plata.

AGENT: See "Buenos Aires".

RAMALLO: 33.32 S. 59.59 W. (See Plan)

Km. 326 – River Parana (Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

APPROACHES: The port is on the left bank of the Parana from seaward, where the river is divided into two by the Isal de las Hermanas. Traffic up river normally keeps to the starboard channel at this point, or the port when downstream and the entrance into Ramallo, although buoyed, is not lighted. No depths are given for the access but as a guide, when the main channel of the Parana is at say 24 ft., then vessels can safely load to 18 ft. in Ramallo. However, with the building of a new elevator, 20,000 tons capacity to replace that damaged some years back, movement has recommenced and the River Bulletin publishes 21 ft. for the elevator mole, and 24 ft. 6 in. for the hardboard mole. Nevertheless, it is advisable to check on access depths.

PILOTAGE: According to the Maritime Digest, port Pilot must bring the vessel in from the main channel, and take her out there again, a distance of 5 miles. The Roads are technically in the main Parana, but it is usual to anchor 150 m. off the wharves.

BERTHS: Apart from two damaged moles, out of use, there are, from South/North:

Grain Board Mole. There is an elevator, capacity 12,000 tons and two loading belts, load rate 250/300 t.p.h. each. The berth, for one vessel not over 145 m. length, consists of a small jetty and several dolphins and two mooring buoys.

National Mole. Concrete wharf 100 m. long, with three sheds on it, used by sand hoppers, and by river craft.

Fiplasto Mole. Used for discharge of fuel to the hardboard factory, from tankers. There are two dolphins with 24 ft. 6 in. water. As the current runs fast here, vessels may roll with any wind, and it is recommended to put out more ropes than usual, both fore and aft.

RADIO: Agents at San Nicolas must be contacted either through Buenos Aires Radio, or via Rosario, LSQ 38, on 477 kc/s. A 1.

TUGS: None required; in case of need they could be brought from Villa Constitucion.

FUEL: Not available.

FRESH WATER: Not available, except by drums from a tank on the National Mole.

MEDICAL: Attention available, but no hospital.

CONSULS: None; consular clearances can be effected at San Nicolas.

AGENT: See "Buenos Aires".

ROSARIO: 32.57 S. 60.33 W. (See Plan)

Km. 420 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

APPROACHES: Outer Roads, between buoys 410 and 413.

PILOTAGE: The port Pilot will come on board off km. 411, by launch. Vessel should whistle for him if not here to meet the ship (two long, one short).

ANCHORAGES: Between kilometres 410 and 413. Both anchors should be used.

RESTRICTIONS: *Fog.* In thick fog, special permit must be obtained to enter or leave. There is an average of six days fog per month in the period April/August but only one day per month in the rest of the year. Electric storms are frequent.

Maximum speed in Zone. From Saladillo stream North, there is a limit of six knots, up to Punta Barrancas.

There are no restrictions as to length and breadth of vessels, but draft and size of vessels are subject to river depth, which is very variable and no standard information can be given. Vessels up to 27 ft. draft are permitted to navigate the River Parana up to Rosario and San Lorenzo, provided vessels speed exceeds 10 knots and that there is at least 1 ft. keel clearance. Above Rosario controlling depth 22 ft. Vessels loading in Parana Ports must keep close contact with Agents for daily forecasts of admissible draft crossing Martin-Garcia Bar to avoid risk of overloading and consequent delays.

HEALTH: Free Pratique, use Radio LSQ 38, on 477 kc/s., or via Buenos Aires radio.

TUGS: Two tugs are available, controlled by Port Authority. However tugs are not normally required for berthing or unberthing.

RADIO: All messages through Pacheco Radio, call sign LPD, operating on 425 kHz. Pilots equipped with VHF radio Channel 16.

BERTHING: Alongside quays. There are seven elevators with the rate of loading up to 300 t.p.h. of grain. Also there are four warehouses for loading light grains or seed. Between these closed sheds are paved spaces which are used for delivery of cargo to road vehicles and vice versa.

Montserrat Wharf. Used by river craft only.

Unit I. Of the four jetties, only Nos. 1 and 2 are in use, and can deliver 170 tons of grain per hour each, accommodating one vessel in 21 ft.

Refineria Argentina Mole. In use for discharge of fuel oil only.

Unit II. Only one berth in 24 ft. 9 in. with two spouts, 200 t.p.h. each or 125 tons by-products.

Unit III. Known previously as Unit IV, can work with 2 tubes, 250 tons each, berth for one vessel only. The space between Units II and III is now out of use.

Unit IV. This is still under repair, a belt joining the three sheds previously known as Units 5, 6 and 7 is being installed. Eventually there will be two loading tubes and berth for one vessel.

Old Unit No. 8 has been dismantled and taken to Victoria.

Deposits 3 to 30. These still exist, but the area 3 to 17, originally allotted to Bolivia for use as a Free Zone, has now been replaced by the transfer of sheds 23 to 30 to the Bolivian zone.

In June, 1976 only sheds 23/4 and 25 had been readied for Bolivia, using a frontage of 342 m., with three portal cranes. The final transfers will be for a total of 54,667 sq.m., against the present 17,300 sq.m. and a frontage to the river of 998 m. There is no indication as to when this longstanding agreement will be fulfilled, and in the meantime, the area of sheds 3 to 17 is being used for transhipping cargo to Paraguay.

Sheds 29/30 have been rented, and the wharf being used in breaking up the navy aircraft carrier.

Unit V. Is the Old Unit X, renumbered. Two vessels can berth here and there are two spouts workable per vessel at 200 t.p.h. each spout.

What was Unit XI is now rented for the storage of oilseeds, and Unit XII has been dismantled. Vessels can berth here to load Wharf Offals.

New Pier. At this point the new pier, 616 m. long, has been finished, though with no cranes installed as yet, lines being in place for the expected portal cranes. Neither are there any sheds and for the moment the wharf is used for loading expellers, ex truck, over portable conveyors. There is a 30 m. gap between the South end of the wharf and Unit VI, with a slight change in line of the river front. Immediately behind this a larger basin is being dredged, to 30 ft. which will add 4,250 m. of new quay frontage to the port. It is intended to centralise here the movement in fuels, coal, gravel, sand, etc., and to use it for discharge of grain barges which now form a large part of the pusher trains in use on the river, and which have materially changed the type of river transport. Dredging of the basin itself is well advanced. Work on an 80,000 ton elevator at the South end of the 616 m. wharf has commenced, to load either to the river side or into the new basin berths, to the West.

Unit VI. The South Elevator, previously numbered XIII, now has 29 ft. at zero, and can handle two vessels, if both under 150 m., or one if over that length. Load rate is 1,200 t.p.h per berth, over three tubes to each vessel, or five tubes if to one vessel only (2,000 t.p.h.). Storage capacity is 125,000 tons. A further 360,000 tons storage capacity in the underground deposits in the cliffs on the far side of the future river basin will eventually be connected to Unit VI. At present their cargo is shifted to truck or rail.

Immediately South of the existing elevator a new 80,000 ton elevator is under construction, and which will form part of the Unit VI complex, which will then have six berths to the river front, and possibly others to the river basin.

The former Shell petrol storage tanks, behind the elevator, are now used for vegetable oils. There are four tanks, capacity 800 tons each, connected to a line loading 100 t.p.h. at Unit VI.

Entrance to the future river basin will be South of the extended Unit VI, and to the North of the Meat packing plant and cattle ramp, while South of this a shipbuilding yard is under study. The pier at the packing plant is 175 m. long.

The port zone proper ends at Saladillo stream, on the South side of which the Swift Meat Packing plant has a pier, 175 m. long, for the loading of its products. There is also a line here for loading vegetable oils in bulk, capacity 100 t.p.h.

The projected basin will have its entrance between the Inflammables zone and the Cattle berth, and South of the Cattle berth a shipbuilding yard is projected.

Cranes. There are a large number of electric cranes, and the port is built in such a way that with few exceptions all cargo discharged must be handled by shore cranes. If the river is high, and shore cranes cannot operate to the vessel, the ship may discharge to shore, for the shore crane to place on railway cars, etc.

Bills of Lading covering lifts of 2.5 tons or more should be claused in such a manner that any extra expense in landing them is for account of the cargo.

Floating cranes. There are two, 90 and 50 tons.

Allotment of berths. May depend on the availability of grain to the particular shipper, but normally berths are allotted in order of arrival. Loading on second tier is not customary now, as the capacity of the port is such it is not necessary.

Fenders. Vessels must use fenders for keeping them off, and can use their own or hire from the port.

Ashes, etc. Arrangements can be made with Agents for daily removal.

STEVEDORES: Gangs supplied according to vessels requirements by private companies under Government supervision.

Normal capacity per gang, per shift:

20 to 25 t.p.h. frozen meat.

120 to 140 tons per shift general cargo.

MEDICAL: Private and state-owned hospitals. All facilities available.

TANKERS: Discharge at Moles 3 and 4.

FRESH WATER: Only available at the berths on the Southern part of the port.

FUEL: All grades available, by barge.

REPAIRS: All repairs excluding dry docking, can be effected. Floating crane available, capacity 50 tons.

AIRPORT: 16 km. from port. Daily flights to Buenos Aires.

CUSTOMS ALLOWANCE: 60 cigarettes per day, and 2 bottles spirits each man.

CONSULS: The following countries are presented at Rosario:

Belgium	Great Britain	Peru
Brazil	Greece	Spain
Chile	Italy	Sweden
Denmark	Lebanon	Switzerland
Dominican Republic	Netherlands	Syria
Ecuador	Nicaragua	U.A.R.
Finland	Norway	Uruguay
France	Panama	Yugoslavia
Germany	Paraguay	

POLICE/AMBULANCE/FIRE: Police 29071; Ambulance 45600; Fire 20147.

TELEPHONES: Can be placed aboard.

SHORE LEAVE: No restrictions.

AUTHORITY: Rosario Port Administration.

AGENT: See "Buenos Aires".

SAN LORENZO: 32.45 S. 60.38 W. (See Plan)

Km. 442 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

On the left bank of the River Parana from seaward, 16 miles above Rosario and 238 miles by river from Buenos Aires.

The port includes the separate sections of Puerto Borghi, Puerto San Lorenzo and Puerto San Martin.

APPROACHES: Access is controlled by the passes Destileria and Borghi above Rosario.

ANCHORAGE: Vessels may anchor in the roads between buoys 447 and 449.

TUGS: Not required.

MAX. SIZE: Up to 27 ft. draft depending on river depths.

HEALTH: Vessels coming in from abroad, should take pratique in Rosario Roads, advising Agents there in good time.

RADIO: Use Radio Rosario LSQ 38, on 477 kc/s. A1. This broadcasts, in Spanish at 1305 hrs. daily depth of water in the river between Santa Fe and Rosario.

BERTHS: *Puerto Borghi.* Is a privately owned berth used for loading zinc ores, cinders and sulphuric acid. It consists of 3 dolphins each 6 × 9 m., spaced 21 m. apart, giving 60 m. alongside which vessels can lie. Both anchors must be laid out and moorings taken to shore. There is a conveyor belt, rate 60/80 t.p.h. fixed by a crane to work at an angle of from 20/25 degrees, so that if vessels are loading both fore and aft they must shift to position their holds. The belt is reversible, and can be used for discharging vessels fixed with bucket dredge gear in each hold. There is ample water alongside.

This port comes under Rosario for Customs, but under San Lorenzo for Maritime Prefecture control, and stevedores are taken from San Lorenzo.

San Lorenzo proper is a third category Custom House and thereby independent of Rosario. There is an important petrochemical complex here which is being extended, which may lead to an improvement in port facilities.

The roads are between buoys 443 and 445 in the main navigation route and within this area vessels may anchor to await entrance to port, without paying dues.

This was originally a grain port but this now takes second place to industrial developments.

At km. 443 there is a short concrete mole 50 m. long, with 21 ft. alongside used for liquids, (Duperial Berth), chemical and petrochemical products.

There is a grain elevator at Unit VIII (ex. 14), with a total storage capacity of 80,000 tons, and 39 ft. alongside. The elevator has one tube, with a load rate of 150/180 t.p.h.

There is also a pipe-line at this berth for loading vegetable oils in bulk, rate from 30 to 70 t.p.h. (if using tanker trucks).

A line for loading fuel oil has also been installed here.

State Oilfields YPF have a large cracking plant here, with 3 concrete piers of 80, 60 and 80 m. long respectively, in deep water and situated just North of Unit VIII. Piers 1 and 3 operate in the discharge of crude from overseas or coastal tankers and in the loading of products with four 6 in. and 10 in. lines. No. 2, with the same size lines is used for coastal tankers only.

Esso have two dolphins here for discharge, with 6 in. and 10 in. lines respectively, but in 23 ft. only.

San Martin is immediately alongside San Lorenzo, and the access channel commences off San Lorenzo, by the cross river car ferry terminal (service San Martin to Victoria, on the left bank of the Parana).

This channel is 75 m. wide, dredged to 20 ft. at zero, and two miles long.

At the entrance to San Martin is the ferry basin in 6 ft. 6 in. and also a small basin for river craft.

Immediately North of this is the State Gas mole, in deep water used for handling liquid gas and fuel oil.

Unit 15 is no longer used for shipping, but the storage capacity is made use of. Linseed oil is loaded over the Pereda mole, in deep water with a 10 in. loading line. This mole is also used for the discharge of tankers and nearby is another mole used for discharge of oilseeds.

Unit X (ex 17), in 29 ft. 5 in. has capacity of 52,000 tons, load rate 150/180 t.p.h. over one spout.

At km. 451, there is a petrochemical plant which has a concrete mole 96 m. long, with 26 ft. 2 in. There is one 2.5 ton crane on the mole, which is authorised to work with light fuels.

FUEL: Available.

FRESH WATER: Not much available; Masters are recommended to take elsewhere if possible.

MEDICAL: Attention available.

REPAIRS: Small repairs attended to. It is also possible to bring specialists from Rosario if bigger jobs have to be handled.

CONSULS: Consular clearances must be made at Rosario.

AUTHORITY: Administracion de los Puertos Parana Medio.

AGENT: See "Buenos Aires".

SAN NICOLAS: 32.22 S. 60.12 W. (See Plan)

Km. 343 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

On the left bank of the Parana River, from seaward, below Rosario, and 188 miles by river from Buenos Aires.

APPROACHES: Between San Nicolas and Rosario are the "Paso Paraguayo" and "Abajo Yaguaron" passes, and below San Nicolas, apart from Martin Garcia, the "Tonelero" and las "Hermanas" passes.

The old-time characteristic of a grain port has been submerged in the industrial complex which has grown up around the steel mill, but grain is still shipped here.

The entrance channel to the port from the river is kept dredged to 24 ft. 6 in. at zero.

MAX. SIZE: Draft up to 24 ft. depending on river conditions.

RADIO: Use LSQ 38, Rosario, on 477 kc/s. A1.

BERTHS: From North to South the sections of this port are:

Old Port. Alongside the city of San Nicolas, originally composed of seven sections on a cliff some 18 m. high, and under which vessels moor, having to keep themselves off with an anchor and a kedge. Only two sections now work and loading of grain is carried out from the sheds or from railway wagons on the cliff, by chutes. Sections 1 and 6 can load at 90 t.p.h. from each of the two tubes at each berth.

Section 2 can only load bagged cargo, again by chutes.

Shed capacity is 16,000 tons, increased by direct discharge from railcars. Depth of water alongside 26 ft., in almost still water.

At the Old Port, a wooden float is used to keep the vessel at the required distance from the cliff.

New Port. Three km. downstream from San Nicolas. It consists of a berth formed by a dolphin 60 m. upriver from the end of a concrete mole 287 m. long, with ample water alongside, there being room for two vessels.

On the mole there are five portal cranes (3 of 1.5 tons and 2 of 3 tons) as well as two cranes, capacity 20 tons at 15 m. radius, or 12

tons at 25 m. Railway lines are installed but there are no sheds on the wharf.

Just downstream from the wharf a loading gallery is being built for a new 16,000 ton elevator, to be connected by belt to the large warehouse of the old Alcohol Distillery, which will be used for storing grain, capacity 75,000 tons. There will be berth for one vessel here, with five tubes, two to load simultaneously at, it is expected, 500 t.p.h. each. Once this elevator commences to operate, the remaining berths in the Old Port, which are in very poor condition, will be closed.

This new berth also incorporates the short jetty once known as the Distillery Mole.

Superusina Mole. This is the last of the sectors of San Nicolas proper, and consists of a concrete mole 200 m. long, with ample water alongside. There is a fixed heavy lift crane here, with a reach of 25 m. and capable of lifting 140 tons out of the square of the hatch of a vessel, or 180 tons from on deck. This part of the mole is reinforced.

There are also a 16 ton and an 8 ton crane for grab discharge of coal to an endless belt system working a coal stacker, handling 1,500 tons daily.

Puerto Buitagro lies South of the Ramallo brook, and comes under the district of Ramallo, although administered by the San Nicolas port authorities. It handles all the movement of the State Steel Mill, Somisa, the capacity of which is presently being increased to produce 2,500,000 tons of steel per year.

Again, from North to South, the moles are:

Ing. Buitagro general mole. 300 m. long, for movement of general cargo. It is 16 m. wide and has one 30 ton crane and two 15 ton cranes.

Gotaas Larsen berth. This berth consists of four dolphins, 35 m. apart, with bollards on the 1st and 4th. No longer in use as the lightening vessels discharge with their own gear at a new extension South of the Ing. Buitagro wharf, while ocean carriers discharge at this extended wharf. Now known as Somisa wharf.

Ing. Buitagro wharf. 680 m. long, immediately South of the Gotaas Larsen berth. Dredging is carried out continuously and there is 26 ft. at zero alongside. Four vessels of up to 22,000 tons can operate, plus two more in second tier. Storage capacity in the yards adjacent to the wharf is 1,370,000 tons iron ore and 300,000 tons of coal. Discharge is by grab, one of 45 tons and two of 12 tons each giving a discharge rate of 4–500 t.p.h. provided hatches are sufficiently wide to permit easy working.

Capacity of the belts is being increased, to meet the requirements of the larger capacity, now raised to 2,500,000 tons installed capacity, and which will be increased to four million tons in 1978. These include a new 1,400 t.p.h. discharge unit for ore and/or coal, a new system of conveyor belts 860 m. long, a stock piler capacity 5,000 t.p.h. and belts for moving coal 1,200 m. from stock pile at 3,000 t.p.h. with a transfer tunnel 600 m. long fitted with 13 vibratory screen feeders.

At Puerto Buitagro all discharge or loading is carried out by factory personnel, no outside stevedores engaged.

The bulk wharf has been extended South with a berth for self-discharging ore carriers, or colliers, and also for ore carriers using shore installations. At the moment this berth is used by the Gotaas Larsen lightening vessels only.

TUGS: Compulsory for vessels over 1,000 NRT at Old Port. It is usual, however, to use tugs only once, when entering if the vessel is turned and remains with her bow facing the entrance channel, or on leaving if moored with bow upstream, and therefore having to turn to leave. If vessels operate without a tug. Master is responsible for any damage incurred to installations, etc., and when there is a high wind it is advisable to use one. For movements in port use of a tug is optional, but again, high winds may make it advisable.

DENSITY: Fresh water.

FRESH WATER: Available at berths.

FUEL: Available, but must be delivered from Buenos Aires or San Lorenzo by truck.

MEDICAL: Doctor, hospital facilities available.

CONSULS: Italian, Portuguese and Spanish.

AGENT: See "Buenos Aires".

SAN PEDRO: 33.42 S. 59.39 W. (See Plan)

Km. 277 – River Parana (Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

On the left bank of the Parana River from seaward, below Rosario and 151 miles from Buenos Aires, by river.

APPROACHES: There are no bars below this port, except Martin Garcia, and vessels can therefore load to this limit almost the year round.

The roads are 1,500 m. down-stream from the entrance channel.

HEALTH: Free Pratique can be taken, but it is advisable to radio Agents at Buenos Aires for them to arrange, since there is no radio here and the Doctor must come from San Nicolas.

RADIO: None; use Rosario LSQ 38, 477 kc/s. A1, or Buenos Aires.

ANCHORAGE: Vessels can anchor if necessary about 500 m. from wharf.

TUGS: Can be made available if required.

MAX. SIZE: The entrance depth has been dredged to 25 ft. The factor governing draft is the water level in the Parana River at the Martin Garcia Bar. See "Mitre Channel" (Under River Plate).

BERTHS: The main mole has been rebuilt and a loading gallery 35 m. high installed, working with 7 telescopic tubes, though only one can work at a time, load rate being reported at 1,000 t.ph. Storage capacity in the elevator is limited, maximum 7,000 tons but there are nearby deposits for 90,000 tons.

As rebuilt, only one vessel can load from the grain elevator, maximum length, according to Ports Department, 200 m.

There is a second berth available for operating from portable belts, etc., in 24 ft. 6 in. There are no railway lines on the berths and no cranes.

There is also a wharf for river traffic in 8 ft.

DENSITY: Fresh water.

FRESH WATER: Available at the berths.

FUEL: Not available.

MEDICAL: All medical assistance can be obtained. Hospital.

REPAIRS: Minor repairs can be effected.

CONSULS: None; consular clearances effected at San Nicolas.

AGENT: See "Buenos Aires".

SANTA FE: 31.40 S. 60.37 W. (See Plan)

Km. 585 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Situated on the Santa Fe river, a tributary of the Parana, 90 miles by river from Rosario and 312 miles from Buenos Aires.

APPROACHES: Entrance to the port is through an access channel, 6,085 m. long, and with 24 ft. at zero.

On this section of the river, from Rosario to Santa Fe, vessels must keep 2 ft. under the keel if measuring less than 50 fiscal units, or 2 ft. 6 in. if over. This applies when the hydrometer at Santa Fe indicates over 1.70 m. of water over zero. If the hydrometer measures less than 1.70 m. (5 ft. 7 in.) then vessels must have 2 ft. 6 in. and 3 ft. 6 in. respectively under the keel.

PILOTAGE: Port Pilot comes aboard in the Parana, at the mouth of the entrance channel. Six hours advance notice is required for the Pilot to be in position.

ANCHORAGE: Until mid 1974 it was possible to wait in the Roads at km. 583/5. Now, however, the access channel is being dredged thoroughly, and until further notice vessels can only enter or sail between 0900 and 1700 hrs. and if unable to enter within this period must wait in Diamante Roads (km. 533) and follow radio instructions from the Prefecture. If the Diamante Roads have already been passed, a vessel may lie below Punta Alvear, or eventually at km. 568 (Animas de Paracao) but must immediately notify the Santa Fe Prefecture.

Vessels sailing must leave with sufficient margin to be able to pass "Los Pajaros" (km. 468/473) in daylight, and avoid anchoring in the sectors indicated above as reserved for Northbound vesels.

A report received mid 1976 advises vessels not to load beyond 17 ft. draft, as the shallowest part of the river between Santa Fe and Rosario dropped in one week from 22 ft. to 20 ft. 6 in.

SIGNALS: There is now a signal station on the top of the tower of the new elevator (unit 1) in visual and radio contact with the control station tower at the river end of the access channel, where the signals are hoisted. It is also possible to observe movement in the roads from here.

The signals in the entrance channel are:

By day (shown at both ends of the access channel)

White globe, 60 cm. diameter	Channel free for overseas vessels.
Red biconic mark	Exit only for overseas vessels.
Green cone	Free movement of coastal vessels.
Yellow cone	Movement of coastal vessels allowed, but with precaution.

By night (interior signal staff only)

White flashes	Entrance free for overseas vessels.
Red flashes	Exit free for overseas vessels.
Green flashes	Free movement for coastal vessels.
Green and red flashes	Coastal movement only with restrictions.

Absence of signal – signifies port and channel closed.

All vessels will await the corresponding signals, which can be asked for by whistling, repeating one long, three short, for overseas vessels, or two short, one long, for coasters.

Should the absence of signals be due to a failure of the system, instructions will be sent by the Authorities.

NAVIGATION: *In the Channel.* Maximum speed in the entrance channel is 5 knots, however, the Pilot can advise on other speeds.

Movement by night is possible, but usually Pilots will not take a vessel out after 1500 hrs., since navigating the passes down river might oblige a vessel to lie in the roads, and turning there would require the use of two tugs, it being easier to wait until through transit down stream is possible.

During fog. During fog, usual international precautions must be observed, but if the fog is very thick, entrance or departure of vessels is prohibited without special permission. There are no official statistics as to frequency of fog, but in the period May/August there may be five to six foggy days a month, and in the rest of the year one or two a month.

HEALTH: Free Pratique. As there is no radio station here, Master should radio Agents with the usual request.

RADIO: Regulations in this port prescribe that Agents or Consignees must give written notice to the Port Authorities 24 hours before ETA, with details of vessel, cargo carried etc., or if in ballast, indicating for account of whom the vessel will load.

ETA should be confirmed if there is any change, since the port Pilot and tugboat must be sent out to the main river to meet the vessel. This will also allow the preparation and presentation of the Notice of Readiness without delay.

Radio LSQ 38, on 477 kc/s. A1, at Rosario, transmits river depth at 1305 hrs. GMT.

TUGS: One tug is required by all vessels over 20 Fiscal units and up to 165 m. o.a.l, with a second tug standing by at km. 592 unless the Pilot calls for its services (high winds, etc.).

Vessels over 165 m. will have a second tug standing by in the roads. Outbound vessels over 20 fiscal units will take two tugs, and let go the stern tug at km. 592, the bow tug continuing until the roads are reached. However, if sailing from Basins 1 or 2 or the Terminal berth and with no other vessels in the way, one tug only may be taken, provided the wind is below 22 knots.

BERTHS: The port is composed of four parts:

Dock No. 1, with stone wharves, 564 m. frontage on the East and 672 m. on the Western side, 120 m. wide and well equipped with cranes, and sheds; 24 ft. at zero.

Between Dock 1 and Dock 2, on the pierhead there is a fixed 20 ton crane for heavy cargo.

Dock 1 is the main import area, while in berth No. 2 there are tanks for vegetable oil, capacity 5,000 tons and pumping capacity 2/300 t.p.h.

Dock No. 2 lies parallel to Dock 1, and has a piling frontage 900 m. long on the East, 720 m. on the West and 120 m. wide. 22 ft. at zero.

Both docks are served by broad and narrow gauge railway lines.

Derivation Channel. 2,178 m. long, lies to the West of Dock 2. It has open banks, with no stone or wooden frontage. There are a number of dolphins and mooring facilities. It is reserved for Inflammables and there are also two deposits for Quebracho Logs and for Bones. Although there are railway lines, there are no cranes or facilities for handling cargo. Vessels awaiting orders or effecting repairs can lie up in the Eastern side of the Channel, North of the Esso plant. Shell and YPF plants on the Western side, where vessels may take on bunkers.

Coastal Wharf. Concrete wharf, 810 m. long, lying between the West side of Dock 1 and the Elevator at Unit 1. It has 4 dolphins and can berth and work two vessels simultaneously in 24 ft.

Allotment of berths. Allotted by the port by order of arrival. If berthing in the Derivation Channel, spars must be placed to fend the vessel off the bank, and an anchor may also be cast, but this must be done under the direction of the port Pilot.

Loading Grain. There are two units here, comprising three elevators in use. Unit 1 on the South end of the West quay of Dock 1, next to the coastal section, can berth two vessels in 24 ft. The elevator which is new, has a capacity of 50,000 tons, and the loading gallery has eight spouts with three belts, so that both vessels can operate simultaneously, although no more than three spouts can be in use together, with a load rate of 300 tons each, rising to 400 tons in favourable conditions, or when only one vessel is loading.

Unit 2 is now composed of the ex Bunge Elevator on the Northwest of Dock 2, capacity 12,000 tons, and with 6 tubes, loading simultaneously by two at a rate of 200 t.p.h. each, and also of the De Ridder Elevator, on the Southwest side of the dock, capacity 6,000 tons, and with two tubes, capacity 200 t.p.h. each.

FUEL: Available at the pipe-lines in the Derivation Channel. If small quantities only are required, these can be delivered by truck.

FRESH WATER: From hydrants in Docks 1 and 2, or by tug in the Derivation Channel.

REPAIRS: Can be arranged. There are several tugs and lighters equipped to render assistance to vessels.

MEDICAL: Doctors and hospital facilities available.

TANKERS: Berths owned by Esso, Shell, and YPF in Derivation Channel.

CONSULS: At Santa Fe following countries are represented: Italy, Paraguay, Spain. Other consuls at Rosario and Buenos Aires.

AIRPORT: 17 km. from Santa Fe, regular flights to Buenos Aires and other Argentine cities.

CUSTOMS ALLOWANCES: For consumption on board each man allowed 40 to 60 cigarettes a day and one litre of spirits a week.

POLICE/FIRE/AMBULANCE: Police: Tel. 21141; Ambulance: 36220 and 24687; Fire: 21212.

TELEPHONES: On board connection is only made for naval vessels.

SHORE LEAVE: Allowed, provided crew members in possession of identification cards.

AUTHORITY: Administracion de los Puertos Parana Medio.

AGENT: See "Buenos Aires".

VILLA CONSTITUCION: 33.15 S. 60.17 W. (See Plan)

Km. 365 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

On the left bank of the River Parana from seaward, 33 miles below Rosario and 197 miles by river from Buenos Aires.

PILOTAGE: Port Pilot available, and obligatory.

MAX. SIZE: Up to 25 ft. draft depending on river depths.

TUGS: Vessels over 2,000 NRT must use two tugs.

RADIO: Rosario LSQ 38, on 477 kc/s., A1.

BERTHS: *In Villa Constitucion* the old overseas moles are closed, owing to bad condition. The coastal wharf is also being dismantled, but a concrete mole next to it is being used for this trade. There is a proposal to recondition the old railway wharf in view of increasing movement.

In Unit Two. Two vessels can load grain, but the condition of the installations is very precarious and may well be condemned.

At the Elevator berth two vessels can operate, in 27 ft., North and South. At each berth there are several loading tubes, but only one can operate at a time, giving 3/400 t.p.h. on each berth.

Capacity of the elevator is 50,000 tons, plus 170,000 tons in underground deposits. There is also a belt for bag loading.

Puerto Acevedo. Two km. South of Villa Constitucion is Acindar Mole, otherwise known as Puerto Acevedo, where a large steel mill is installed. The port is under the jurisdiction of Villa Constitucion and pending a definite resolution as to Villa Constitucion Roads, vessels awaiting berth anchor off the Acindar mole.

The mole is 110 m. long by 34 m. wide, in 29 ft. and is used for the discharge and storage of steel billets. It is fitted with two 45-ton electric cranes.

Port Pilot from Villa Constitucion attends here, but tugs are not necessary. No facilities are available, except for water, to obtain which a vessel will have to supply a long hose to be coupled up to the factory itself.

Rate of discharge depends to some extent on capacity of ship's derricks, with three-ton lifts 80 tons per hatch per hour can be maintained, but with only one-ton lifts, no more than 40 t.p.h.

FRESH WATER: Obtainable.

FUEL: Not available.

MEDICAL: Doctor and hospital facilities available.

REPAIRS: Can be effected, if necessary bringing men and equipment from Rosario, or San Nicolas.

CONSULS: Consular despatches must be taken at Rosario.

AGENT: See "Buenos Aires".

ZARATE: 34.09 S. 59.05 W. (See Plan)

Situated on the West bank of Parana River, 150 miles above Buenos Aires.

N.B. Refer to beginning of Argentina and River Plate Ports.

TUGS: Not required.

MAX. SIZE: Up to 26 ft. depending on river depths.

BERTHING: The river here is wide and deep, but the 8 wharves are no longer used for ocean going cargo, and have silted up, there being only ten feet at the largest, or National Mole. This is the base for the rail ferry communicating Buenos Aires with the Province of Entre Rios and eventually communicating, with another rail ferry, with Paraguay. A rail road bridge is under construction here, which will cross the Parana Guazu arm of the Delta, at Kilometre 180 on the main route upstream.

DEVELOPMENTS: One of the first developments has already been authorized by the Port Authority. This will be a Petroleum storage plant for Paraguay, at km. 112.6 on the Parana de las Palmas river, just upstream from Zarate. It will be for the exclusive use of Crude imports for Paraguay, where ocean tankers will discharge to tanks, and river tankers continue transport to Medin, near Asuncion. Work is expected to commence shortly, but it is not known yet if the berth will be known as "Zarate" or by some other name although it will come under the Zarate port authority.

FRESH WATER: Available at Smithfield Wharf.

FUEL: Not available.

medical: Doctor and hospital facilities available.

CONSULS: Italy is represented locally. All other consuls at Buenos Aires.

REPAIRS: Small repairs can be effected.

AGENT: See "Buenos Aires".

III. *SOUTH ATLANTIC PORTS*

Bahia Blanca
Caleta Cordova
Caleta Olivares
Caleta Olivia
Comodoro Rivadavia
Galvan
Ing. White
Mar del Plata
Necochea
Puerto Belgrano
Puerto Deseado
Puerto Madryn
Puerto Rosales
Punta Ancla
Punta Ciguena
Punta Colorado
Punta Medanos
Quequen
Rio Gallegos
Rio Grande
San Antonio del Este
San Julian
San Sebastian
Santa Cruz
Ushuala

BAHIA BLANCA: 38.47 S. 62.16 W. (See Plan)

(Incl. Galvan, Ingeniero White, Puerto Belgrano, Puerto Rosales, Punta Ancla and Punta Ciguena.)

(Province of Buenos Aries) "B" category port.

N.B. Refer to Argentina, Section I.

APPROACHES/PILOTAGE: *Entrance Channel.* Commences at Rincon Light Buoy, which is a whistling buoy, fitted with radar reflectors and is stationed some 17 miles S.S.W. from the Recalada Lighthouse. It is a large buoy, painted with black and white vertical stripes, it can shift or be extinguished, being rather exposed. In case of doubt vessels are recommended to sound and stay outside the ten fathom line until daylight or fog has cleared. Pilots must be requested 24 hours in advance. See "VHF".

From this buoy vessels must proceed past buoys 1 to 10, and the Bay Pilot comes aboard near buoy 11 (39° 05′ S. and 61° 48′ W.).

Distance Table
Montevideo and Buenos Aires to Ushuaia and intermediate ports
Nautical miles

	Montevideo	Recalada Practicos	La Plata	Interseccion Practicos	Buenos Aires	Mar del Plata	Necochea y Quequen	Arroyo Pareja	Ing. White	San Antonio	Madryn	Comodoro Rivadavia	Deseado	San Julian	Santa Cruz	Gallegos	Virgenes (Lighthouse)	Magellan Straits	Ushuaia
Montevideo	—	16	118	108	128	206	279	452	466	626	671	850	891	1015	1076	1151	1167	1182	1376
Recalada Practicos	16	—	102	92	112	190	263	436	450	610	655	834	875	999	1060	1135	1151	1166	1360
La Plata	118	102	—	10	30	292	365	538	552	712	757	937	978	1101	1162	1237	1253	1268	1462
Interseccion Practicos	108	92	10	—	20	282	355	528	542	702	747	927	968	1091	1152	1227	1243	1258	1452
Buenos Aires	128	112	30	20	—	302	375	548	562	722	767	947	988	1111	1172	1247	1263	1278	1472
Mar del Plata	206	190	292	302	302	—	73	246	260	434	479	658	700	823	884	959	975	990	1184
Necochea y Quequen	279	263	365	355	375	73	—	173	187	361	405	584	642	762	823	898	918	933	1135
Arroyo Pareja	452	436	538	528	548	246	173	—	14	280	316	500	568	682	743	818	838	853	1080
Ingeniero White	466	450	552	542	562	260	187	14	—	294	330	514	582	696	757	832	852	867	1094
San Antonio	626	610	712	702	722	434	361	280	294	—	227	411	473	603	664	739	759	774	1009
Madryn	671	655	757	747	767	479	405	316	330	227	—	274	345	473	534	609	629	644	875
Comodoro Rivadavia	850	834	937	927	947	658	584	500	514	411	274	—	156	293	354	429	449	454	703
Deseado	891	875	978	968	988	700	642	568	582	473	345	156	—	153	214	289	309	324	564
San Julian	1015	999	1101	1091	1111	823	762	682	696	603	473	293	153	—	96	171	200	215	487
Santa Cruz	1076	1060	1162	1152	1172	884	823	743	757	664	534	354	214	96	—	114	146	161	450
Gallegos	1151	1135	1237	1227	1247	959	898	818	832	729	609	429	289	171	114	—	67	82	390
Virgenes (Lighthouse)	1167	1151	1253	1243	1263	975	918	838	852	759	629	449	309	200	146	67	—	15	333
Magellan Straits	1182	1166	1268	1258	1278	990	933	853	867	774	644	454	324	215	161	82	15	—	315
Ushuaia	1376	1360	1462	1452	1472	1184	1135	1080	1094	1009	875	703	564	487	450	390	333	315	—

There is no pilot ship on station, and vessels arriving at this point after sunset must stand off until daybreak, unless a Pilot has been ordered and is approaching, when vessels can anchor and wait near buoy 11. To avoid delay and waiting time, Masters should keep Agents well advised by radio to station LPW 2, which listens from 0700 to 2400 hrs. on 500 kc/s. from 19 to 25 minutes past each hour, every hour. As the coast is shallow here, with South or East winds it is advisable to stand well off at night as there is also a tidal current favoured by these winds.

The Bay Pilot takes the vessel to the Bahia Blanca roads, which commence for Ing. White and Puerto Nacional between Naposta brook and the South Elevator. For Galvan he takes the vessel as far as the South Elevator. At either of these points the port Pilot comes aboard for actual berthing operations.

Vessels bound for Punta Ciguena, Punta Ancla, Rosales or Puerto Belgrano, take on their port Pilot (ordered in advance through the Agents by radio), at buoy 17.

In the access channel the following regulations must be observed:

(a) in the areas included between the pairs of buoys 07–08, 12–16, and 26–29, it is prohibited to approach or cross in front of any vessel which because of its draft has to remain in the centre of the channel, such vessels always having priority.

(b) in the event of two vessels meeting whose drafts do not permit them to depart from the centre of the channel, the vessel leaving port has priority, the vessel entering having to effect such necessary manoeuvres so as to not interrupt its navigation.

The access channel is 150 m. wide and is marked with light buoys, which permit navigation by night, except between buoys 26 and 28 where the width is 75 m. Between buoys 12–16 the depth is 30 ft. and in the access channel to port Ingeniero White, between pairs of buoys 26–28, the depth is 28 ft. The maximum draft for vessels navigating the channel is 35 ft., and dredging operations are in hand to bring the depth to 36 ft. 7 ins.

Buoys 01, 02, 03, 04, 05, 06, 09, 18, 19, 20 and 21 are mid-channel, and all illuminated. There is a degaussing buoy between Nos. 18 and 19, conical, painted blue and white checks.

Special warning. At very low neaps, and with strong N. winds there may be up to 5 ft. less water than is shown on charts.

Tidal range is 12.6 ft. at springs to 6.4 ft. at neaps, but as much as 19 ft. has been observed with S.W. winds, whose action is similar to the Plate winds.

Inner Roads. From Ing. White to Galvan there is room for two vessels drawing 32 ft. to anchor, as well as a number of vessels drawing 24 ft. The access channel to Galvan has been dredged to 32 ft. for the new Inflammable berths, and a turning basin 400 m. in diameter at 33 ft. dredged due South of Galvan pier. The Inflammable berths are also at 33 ft., the intention being to dredge down to 38 ft. at zero.

ANCHORAGE: Merchant vessels which have to wait their turn to come alongside quays in the Bahia Blanca Estuary and oil discharge points at Ancla and Ciguena Points, must remain anchored 2 miles E.S.E. of buoy 17.

RESTRICTIONS: Vessels of drafts greater than 30 ft. must navigate in daylight and with precaution between pairs of buoys 26–29, by reason of the narrowness of the channel. It is anticipated that very shortly this part of the channel will be deepened and widened from 75 m. to 150 m., which will permit safe navigation by night.

MAX. SIZE: Currently the maximum draft for the access channels is 35 ft., although it is expected that this will be deepened to 36 ft. 7 in. shortly and ultimately to 40 ft., with the channel and elevator locations being dredged to these maximum depths.

RADIO: LPW 2 on 500 kc/s. A2, working frequency 431.5 or, LPW 45 on 4415.8. A3.

For weather forecasts in English, use either Radio Pacheco at Buenos Aires LPD 5 on 512 kc/s. A2, or Radio Comodoro Rivadavia LPX 2 on 474 kc/s. A2.

VHF: Pilots now use VHF, and Channel 12 is set as a "listening channel' during transit of the entrance and the Naval Base at Belgrano acts as receiver/repeater.

Channel 8 is kept for manoeuvring in port, after contacting tugs and walkie-talkies are used by Pilots and tugs in this band.

Any "bridge to bridge" communications will use Channel 6, returning later to Channel 12.

Channel 9 is reserved for oil tankers for Punta Ancla or Punta Ciguena.

Channel 4 is reserved for Navy use in the Navy Base, but may be used in emergency.

TUGS: No tugs are required at Punta Ancla or Punta Ciguena. For Rosales and Puerto Belgrano tugs are requested from the Naval Base at Puerto Belgrano, and make contact between buoys 24 and 25.

For the other ports (White, etc.) tugs come alongside in the anteport, where the port Pilot boards.

Argentine vessels are berthed by the Bay Pilot at any of the berths, but foreign flag vessels take a Port Pilot, who comes on board at the Inner roads on one of the tugs, regulations for which are as follows:

Vessels over 3,000 tons gross require two tugs, those from 500 to 3,000 tons, one tug, and under 500 tons none.

For the Iron mole, vessels up to 10,000 tons do not need a tug, from 10,000 to 15,000 gross, one tug and over 15,000 tons two tugs.

For Puerto Galvan, vessels over 3,000 tons gross take two tugs on entering, and one on leaving provided they berth bows outwards, otherwise they need two tugs. Between 1,000 and 3,000 tons, vessels take one tug when entering and leaving if they berth bow inwards. If mooring bow outwards they must take two tugs on berthing, but require none on leaving.

These rules are for normal weather conditions. Masters can ask for more tugs, or alternatively not pass cables to the tugs if this could be dangerous to the vessel or tugs, but in this case, tugs must accompany the vessel during the manoeuvre to act in emergency.

BERTHS: N.B. Agents must give fourteen days advance notice of arrival of reefer vessels to the Authorities, and check this with 48 hours confirmation of arrival. Precedence for berthing granted in accordance with arrival at buoy 11 at the entrance channel. All requests for free pratique by radio are made in the usual manner to Agents, with twelve hours advance notice.

The ports in the Bahia Blanca area are, from East to West:

Punta Ciguena, Puerto Rosales, Puerto Belgrano — adjacent to each other between buoys 21 and 22 of the access channel.

Ingeniero White, Puerto Nacional — also adjacent, and some 14 miles West of Puerto Belgrano.

Galvan — about 2 miles West of Ing. White.

Punta Ciguena and Punta Ancla

There is a rotary buoy with connection on the starboard side of tankers. The oil tanks belonging to the State Oil Company have a capacity of 240,000 cu.m. and are connected by pipe-line to the State Refinery at La Plata.

At Punta Ciguena there is a mooring for tankers with four mooring buoys and port side connection. It is currently out of service, and it is intended to replace it by another rotary buoy. As at Punta Ancla, this mooring belongs to the State Oil Co.

Puerto Rosales

An old grain port which is used by small craft. The pilot launches are based here.

Puerto Belgrano (Saluting Base)

This is the principal Argentine Naval Base. It consists of an anteport and basin, at the end of which there are two large dry docks, repair sheds and a hydroplane mole. Dry docks and repair sheds can be used subject to Naval permit.

The entrance channel, two miles West of Punta Ciguena buoys, is 1.7 miles long, 150 m. wide and dredged to 30 ft. at zero.

Being a Naval base, care must be taken to observe regulations. In daytime signals are hoisted at the head of Mole C, and at night lights are shown at a height of 34.5 m. from the signal station, being visible for ten miles. A strong green light prohibits entry, and a white light above green prohibits sailing from the port. Two green lights, vertical, both entry and leaving prohibited.

There is a reserved zone for Hydroplane, between 38° 51′ 7″ S. 62° 06′ 08″ W.; 38° 52′ 04″ S. 62° 09′ 03″ W.; 38° 54′ 06″ S. 62° 07′ 02″ W. and the buoy at the end of the S.W. breakwater.

Most of the heavy machinery for the power plant at Chocon has been landed in this port, and it will again be used for the requirements of the petrochemical plant to be installed in Ingeniero White in 1975/76.

Gunnery Exercises. Captains are warned that in order to avoid any danger, the greatest care should be taken when navigating or anchoring in the security zone, between the coast and an imaginary broken line which passes through the following:

(A) Lat. 39° 00′ 01″ S. Long. 61° 37′ 01″ W.
(B) Lat. 39° 05′ 02″ S. Long. 61° 40′ 01″ W.
(C) Lat. 39° 02′ 05″ S. Long. 61° 47′ 09″ W.
(D) Lat. 38° 58′ 02″ S. Long. 61° 51′ 00″ W.

Danger Zone. Situation Lat. 38° 53′ S., Long. 62° 06′ W. (approx.).

During gun practice at the Naval Base of Puerto Belgrano, navigation is prohibited in the circular area of 180° from the central point of the Signal Station which extends from 152° to 332°. The boundary of this area passes 9 miles off the Signal Station.

While gun firing is being carried out, the Signal Station will hoist during the day two "B" flags of the International Code on the same yard-arm. This signal will be hoisted half an hour before practice commences and will be furled when firing ceases.

At night the signals will be substituted by three vertical lights, the top one, red, and the following two, white. In addition a searchlight will sweep the zone every fifteen minutes, casting a beam of three minutes duration.

The Sub-Prefecture of Ingeniero White will notify all ships in good time of the expected hour and date on which firing practice will commence.

Should exercises not commence on the date and hour fixed for same, the fire signal will be hoisted half an hour before the appointed time, and on the other yard-arm, the flag "N" (negative of the International Code). These signals will be shown for half an hour from the time they are hoisted.

During exercises, the firing intervals will be signalled in the following form: during day, by hoisting "N" flag, and at night by two vertical lights; the top one white, and the bottom one, green.

Ingeniero White

South Elevators. Nos. 1 and 2: These are now obsolete, and are being dismantled. As a result berths 1, 2, 3 and 4 are at present out of service. A new loading gallery is to be built here, and the depth of water will be increased to 40–45 ft.

Central Elevator: There are two berths each 300 m. long, known as quays 5–6 and 7–8, both in 29 ft. of water. Warehousing capacity 141,000 tonnes. Each quay (5, 6, 7 and 8) has two loading belts and six tubes with a nominal loading capacity of 500 t.p.h. per belt. It is normal only to berth two vessels at a time, since the vessels are normally longer than each individual quay.

Elevator 5: This has a new berth (No. 9) 227 m. long in 40 ft. It has twelve loading tubes and 4 belts each of 700 t.p.h. nominal loading capacity. Warehouse capacity 60,000 tonnes. Elevator 5 will only serve this berth.

Iron Quay: These berths are used for general cargo and fruit to and from lorries, and fuel oil is loaded and discharged at Berth 11. There are five berths, total length 975 m., with depths varying from 22–29 ft.

General Cargo Quay

Lies behind and to the North of the Iron mole. There are four berths in this section, three on the North, or land side, which is in total 450 m. long in 19 ft. to 24 ft. at low water, fitted with six electric cranes × 3 tons on an apron 25 m. wide with three rail tracks. There are several cold storage chambers here for fruit, capacity over 500,000 boxes mainly apples/pears. On the South side of the basin there is one other berth, No. 20, 210 m. long in 26 ft. with three 3-ton cranes and a 125,000-box cold storage plant. There is yet another cold storage chamber on the so called "high mole", 100,000 boxes, and one with 300,000 boxes in town, making a total capacity of over one million boxes.

Loading Fruit. The Authorities have fixed maximum loading times for staying alongside at the Nacional berths, and also at the Iron mole, as follows:

up to 51,000	cases	3 days
51/66,000	cases	4 days
66/86,000	cases	5 days
86/111,000	cases	6 days
111/114,000	cases	7 days
141/176,000	cases	8 days
over 176,000	cases	9 days

these times can be extended according to circumstances, and other vessels can also be allotted the fruit berths as need arises. Normally, loading is as fast as vessels can receive, and these periods are fixed to cover the occasional delays due to any temporary delay in receiving fruit from the interior.

Galvan

The oil companies have their tanks near the port, with the following lines all connected to berths 5 and 6:

Esso	one 11″ line	State Railways	two 8″ lines
	one 10″ line	Shell	two 6″ lines
La Isaura	one 8″ line	YPF	two 6″ lines
	one 6″ line		

A new wharf for tankers, two berths, has been completed facing on to the access channel, West of the entrance to Galvan. Depth of water at the foot of the quay is 40 ft.

The berth is 741.6 m. long, divided into two, No. 1 for Oil tankers and No. 2 for Gas, both fitted with Chiksan arms, set on a platform measuring 30 m.×20 m. and with a number of mooring dolphins either way. The berth is connected to shore by a 483 m. long roadway, 750 m. wide and on which are the pumping stations, fire installations, etc., the whole connected to the existing storage tanks on shore.

Quays 1 and 3 (25 ft.) are used for general cargo and minerals.

Now that the Inflammable Quay has been fitted out, quays 5 and 6 (29 ft.) previously used for oil products will now also be used for general cargo and minerals.

DRY DOCKS: Capacity of the dry docks is:

No. 1 215 m. OA, width on the sill 22.12 m. or at 34 ft. above the sill, 26.25 m.

No. 2 235.45 m. OA, afloat, or 205 m. closed there is also a floating dock for smaller vessels 65.8 m. OA, beam 13.46 m., capacity up to 750 tons.

FLOATING CRANE: There is a 50-ton floating crane in the Naval base at Puerto Belgrano, which can be hired for use in other ports. Apart from hourly hire, the user must pay for towage and overtime. Towage must be effected in daylight hours and in good weather.

LOAD-LINE: Vessels North- or East-bound may load to Summer Marks all year round.

WEATHER: Average velocity of winds is 11 knots, direction N. and N.E. 30%, and W. and N.W. 32%.

Rainfall averages 558 mm., with July/August the driest months.

Maximum temperature in Summer about 31° C, with an absolute maximum of 42.5° C, and a minimum of about 15° C. In Winter, maximum of about 15° C, average minimum 3.5° C, and absolute minimum minus 8.8° C.

MEDICAL: Good attention available. Hospital.

FRESH WATER: Available at any berth at Ing. White, Galvan and Puerto Belgrano, at 10 t.p.h.

FUEL: All grades available ex-wharf or by barge.

REPAIRS: All classes of repairs possible including dry-docking.

CONSULS: Belgium, Chile, Denmark, France, Greece, West Germany, Italy, Netherlands, Norway, Peru, Portugal, Spain, Sweden.

AIRPORT: Regular air service with Argentine cities.

AUTHORITY: Capitan de Puerto Bahia Blanca.

COMODORO RIVADAVIA: 45.51 S. 67.27 W.

(Province of Chubut) "B" category port.

N.B. Refer to Argentina, Section 1.

On the San Jorge Gulf, 947 miles South of Buenos Aires.

ANCHORAGE: Anchorage within the five or six fathom line offers little difficulty for regular work to lighters, but the reserved zone off the YPF pier must be respected.

RESTRICTIONS: Port should be entered at high water in daylight only. Tidal range from 19 ft. 6 in. to 7 ft. 4 in.

MAX. SIZE: Dry Cargo, Length 150 m., draft 15 ft. Tankers up to 30 ft. draft.

RADIO: For radio regarding free pratique, or reporting ETA call LPX 2, on 474 kc/s. This station transmits weather forecasts in English at 0400 and 1800 hrs. GMT Radiotelegraphy 500 kHz. Radio telephone 4123, 8786, and 12,133 kHz.

TUGS: Not required.

FRESH WATER: Obtainable at National wharf and YPF wharf. Ships supply own hoses.

FUEL: Fuel oil and diesel available at the YPF pier in Comodoro Rivadavia.

CARGO: It is advisable to stow inwards cargo aft for this port, as lighters lying at hatches one or two receive little protection from sea and swell, and in any case, owing to the limited number of lighters, vessels usually work with two or three gangs at most.

To avoid loss of time, it is the custom in this port to leave the sling loads "as is" in the lighters and therefore a large quantity than usual of slings have to be hired from the Agents.

It is advisable to establish in Bills of Lading that lighterage is at the risk of the cargo.

BERTHS: The main part of the port consists of:

National wharf. At the end of the breakwater built over the Punta Borja reef, and still unfinished. It is L shaped, presently 1,160 m. long with 23 ft. at the extreme. Vessels can only go alongside in the last inner sections, with 15 ft. at zero. The breakwater gives some protection from the S.W. and S.E. winds, but vessels with large superstructure should not go alongside, and it is recommeded to leave the pier after work is finished each day in case North or West winds blow strongly.

Apart from inward cargo, wool is shipped in quantities over this berth, where there is a Titan crane, now permissible up to 30 tons only two 9-ton electric cranes and two 5-ton steam cranes on the

pier, which is also equipped with railway lines connected to the State Railway.

If working here to lighters, the best anchorage is in 25 ft. at zero, 700 m. from the wharf and with the light buoy at the end of the YPF mole bearing 329°.

YPF Mole also known as km. 3, is built over the Coronel reef a short distance North of the town. It has a length of 956 m. and 21 ft. at low water. It is used exclusively for discharging cargo consigned to YPF and for loading their oil and other products, so that special permission from YPF is required to operate here. There are two 15-ton cranes and one 4-ton crane on the mole.

The privileged zone extends 150 m. either side of an imaginary line projected from the mole, and 2,500 m. seawards, reserved for tankers loading YPF products, and other vessels cannot moor in this area. There are five mooring buoys, two each side of the mole near to its head, the fifth is 200 m. from the beacon at the sea end of the mole bearing 020°.

Kilometre 5. Three miles North of the town there is a wooden wharf, 75 m. long, with only 3 ft. at low water. Vessels using this wharf for discharge over lighters, anchor 1.25 miles off the coast.

The wharf shows a fixed red light at its head and is used for cargo consigned to the Railways. There is one 8-ton electric crane and two 5-ton steam cranes on the wharf. With E. or S.E. winds the wharf cannot work.

TANKERS: The oil berths within the Comodoro Rivadavia port area are, from North to South:

Caleta Olivares, at 45° 46′ S. and 67° 22′ W.

A loading berth for crude, which can only operate by day. A minimum of twelve hours advance notice of arrival must be given to Agents in Comodoro Rivadavia. There is a launch which assists in mooring to the four bouys, which are cylindrical painted black and clearly numbered. There is another cylindrical buoy, also black, but unnumbered marking the end of the line.

It is necessary to obtain, in advance, from the pumping station the regulations, instructions and signal code in use, signals which are made from a semaphore mast, 13 m, above sea level (land height 7.4 m.) both by day and night. There is a small wharf for landing of passengers, crew, etc., and a floating crane, capacity 30 tons. All supplies, water, etc., must be made through Comodoro Rivadavia.

Caleta Cordova, at 45° 43′ S. and 67° 21′ W. approximately, and some 10 miles North of Comodoro Rivadavia, to which it is connected by phone. This is also a loading berth for crude. Four light beacons on shore indicate the entrance. Astra, showing its light at 40 m. elevation, Loma Blanca at 55 m. (white light). With these two lights in line the concrete block, in 34ft. which sustains the end of the loading line, is 1,325 m. from Astra. Vessels should enter bearing these two lights or marks on 268° and anchor where the cross bearings of this line intersect with the line from the Novales beacon, a white light at 79 m. height, and Cordova, also a white light at 53 m.

This point is 300 m. from the block or pillar, in 36 ft. Vessels then swing on their anchor to moor by the stern to the four moorings buoys. Anchorage is good, in spite of an uncomfortable sea with winds in the 1st, 2nd or 3rd quadrants. S.E. storms are dangerous, however, and it is necessary then to go out to sea at the first sign thereof.

There are two small wharves for small boats, in the S.W. of the bay, one for high and another for low-water, the latter being covered at half tide.

There is also a floating crane for heavy lifts, but as in Olivares, all supplies, etc., must be taken via Comodoro Rivadavia.

Caleta Olivia, the third oil-loading berth, is South of Comodoro Rivadavia at 46° 26′ S. and 67° 31′ W.

There are two petroleum intakes here, North and South, a mile apart, each well once secure alongside this delayed loading for 5 hours.

Shiploader:– This is a single conveyor belt fed gantry having a range of travel of 165 m. along the quay but the loading arm has no facility to svailing wind is offshore but with fresh Easterly winds vessels must be prepared to leave their anchorage at any time.

Average wind velocity 17 knots, with 79% from S.W. or N.W.

The port is open to N.E. and E. winds.

Rainfall is scarce, 189 mm. yearly, evenly distributed.

Temperature. Summer maximum is 25.5° and minimum 13.4° C, while in Winter maximum averages about 11° and minimum 3°.

DEVELOPMENTS: Dredging to increase depth to 26 ft. alongside wharves.

WATCHMEN: Recommended. Normally arranged by Agent.

HATCHES: According to port regulations, stevedores open and close hatches at commencement and end of cargo operations.

MEDICAL: Hospital available.

CUSTOMS ALLOWANCES: Only sufficient for normal daily consumption on board. *Custom House.* Fully authorised for import/export cargo, including reception of explosives for commercial use.

REPAIRS: Urgent repairs can be carried out by the oil companies, and there is a permanent service of divers, equipped to operate to 150 ft.

CONSULS: British, Chilean, Dutch, Greek, Italian, Belgian and Spanish.

AIRPORT: Situated 11 km. from port. Daily services to Argentine cities.

POLICE/FIRE/AMBULANCE: Regional Hospital 2451; Clinica Central 2282; Police 2778; Fire Brigade 2505.

TELEPHONES: No connection aboard vessels.

AUTHORITY: Capitania de Puerto de la Patagonia.

MAR DEL PLATA: 38.00 S. 57.32 W. (See Plan)

(Province of Buenos Aires) "B" category port.

N.B. Refer to Argentina, Section 1.

On the Atlantic Coast, 302 miles from Buenos Aires.

APPROACHES: The port is some 3 miles South of the main town, sheltered by two breakwaters (Northern arm 1,099 m. long, Southern arm 2,750 m., entrance, facing North 300 m. wide). Both breakwaters carry roads and access is open to all traffic, so that car headlights and street lighting can cause confusion at night on taking the Southern bearing.

DEPTHS: Currents constantly form a sandbank off the end of the Southern arm, which requires continuous dredging, and ruling depths are announced constantly by the authorities. Usual minimum depth on the bar is 22 ft. at zero, but under favourable conditions this may be up to 25 ft. This requires checking before committing a vessel near these limits, as in the past vessels drawing up to 30 ft. have entered and sailed. Tidal range is from 3.8 ft. spring to 1.2 ft. neaps, but sudden storms can destroy a month's dredging in hours.

There is often a heavy swell in this port, causing vessels to range in all berths, fenders being essential. It is safer to lie outside in 36 ft. to 42 ft. if awaiting berth than in the anteport within the breakwaters.

PILOTAGE: Pilotage compulsory. Pilots requested through Agent, or in emergency, direct to Prefecture Maritime Station frequency 500 kHz. ETA by radio to Agent required 24 to 48 hours in advance.

Pilot boat about 8 m. long, grey-white in colour. Pilot boards approximately 1 mile from port entrance.

ANCHORAGE: Possible within two to three cables from port entrance. Bottom sand and mud. Occasional gales may be expected in winter months.

The best anchorage bears 191° on the Southern breakwater light beacon and 313° on the Cape Corrientes buoy, or even farther out. Holding ground is good and strong winds may safely be ridden out here, even with a big swell.

MAX. SIZE: Draft dependent on state of tide. Keel clearance of 2 ft. 6 in. required. Normal maximum draft 27 to 30 ft., or up to 33 ft. maximum in best possible conditions.

RADIO: For radio regarding free pratique or reporting ETA call LPM 2 on 512 kc/s. A2. English weather forecasts from Radio Pacheco, Buenos Aires, LPD 5, on 512 at 0148 and 1630 hrs. GMT.

TUGS: Use of tugs is obligatory; vessels over 1,000 N.R.T. must use 2 tugs.

BERTHING: Big swell causes vessels to range, therefore Captains recommended have ready fenders for use at berth. Vessels can enter or sail any time day or night.

Basin A: Used only by fishing trawlers.
Pier Head No. 1 20 ft. depth.
Pier Head No. 2 30 ft. depth.
Basin C: Grain elevator 27 ft. depth.

This is a Naval submarine base, the Northern part of the port being reserved for that purpose.

There is considerable activity with the fishing fleet, consisting of some 300 coastal craft and 55/60 deep-sea trawlers, and the Southern part of the basin is reserved for the fishing boats. A protecting breakwater has been built out 280 m. long, from the inside of the Southern breakwater, 1,200 m. from land to minimise swell and to protect the fishing basin, and is also equipped with bunkering facilities for the fishing boats.

250 m. farther North from this there is a quay, with two dolphins, in 22 ft. for discharge of Butane and or Propane gas, connected to the tanks inland.

There are three commercial basins in the port, the Southerly one being reserved for small fishing craft. The central basin originally had eight coastal berths, but now seems to be taken over by the trawlers. There is 22 ft. here.

The third basin has a length of 178 m. on the South side, and 300 m. on the North, all in 30 ft. On the Northern side there is a new grain elevator, with a loading capacity of 400 t.p.h. on each of two belts, with a total of eight tubes available which can be divided between two vessels, or leave 4 or 5 available for one vessel. On the South side there are two loading towers for grain, capacity 350 t.p.h. each.

On the inside of the Northern breakwater arm, there is a berth for passenger/tourist vessels, admitting vessels up to 220 m. LOA but with no facilities beyond those for landing tourists with vessel's gangway to a paved road. Depth alongside is 30 ft. Vessels at this berth must moor bow to the South, laying out their starboard anchor.

Floating crane. There is a 40-ton floating crane (Navy), present capacity 20 tons, and also four mobile two ton cranes.

MEDICAL: Assistance obtainable alongside. Captain should telegraph Agent in good time expected date and hour of arrival. Hospitals and sanatoriums.

TANKERS: Only fuel oil discharged at berth No. 7.

DENSITY: Sea water.

FRESH WATER: Available at all berths, delivery from 7 to 10 t.p.h. at the northern tourist berth through 3 hydrants, total 60 t.p.h. Being slightly salty is not recommendable for boiler use.

FUEL: Bunkering in Basin "C", Pier Head No. 2, also Basin "B". Subject availability and permission from Govt. Oil Dept.

DEVELOPMENTS: Dredging to obtain depth of 30 ft. in channel and port.

WATCHMEN: Compulsory. Arranged by Agent.

STEVEDORES: Gangs engaged by Port Authority according to vessels requirements.

Normal capacity per gang, per shift:
150 to 175 tons fish (direct transhipment).
70 to 100 tons general cargo.
OPENING/CLOSING HATCHES: Can be performed by crew, but in any case subject to charter party terms.
CARGO: *Loading marks.* Vessels can load to their summer marks all year round if sailing Northbound.
Import cargo. This is a fully authorised Custom house. Berth 6 in the central basin is the most appropriate berth for handling import cargo, there being little space on shore at the other berths. Berth 7, the pierhead here, has 30 ft. and is also reasonably suitable for discharging, but in the Northern basin there is little or no room for depositing cargo alongside.
Import of Potatoes. Is permitted here, this being near the main potato growing region but permission must be obtained for the discharge of certified seed potatoes.
WEATHER: *Wind.* There is no really predominating wind, 42% being from W., N.E. and N.W., average velocity being 11 knots.
Rain. Rainfull averages 941 mm. evenly distributed.
Temperature. Summer maximum about 25° and 13° minimum, while in Winter the maximum averages 14° and minimum 3.5°. Absolute maximum and minimum are 41.6° and minus 6.7° C.
REPATRIATION: Can be arranged.
IDENTIFICATION CARDS: Compulsory. Arranged on board immediately after arrival.
CONSULS: French, Italian, Portuguese, Spanish, Uruguayan.
REPAIRS: All types of repair possible, except dry-dock repairs.
AIRPORT: Six miles distant. Two regular lines: Austral and Aerolineas Argentinas, two services/day between Mar del Plata and Buenos Aires.
HOLIDAYS: None. Work every day during year.
TELEPHONES: No telephones are available on board or on the berth.
DELAYS: In accordance grain elevator capacity. Normally none.
AUTHORITY: Captain of the port: Port Administrator.

PUERTO DESEADO: 47.46 S. 65.54 W. (See Plan)

(Province of Santa Cruz) "B" category port.
N.B. Refer to Argentina, Section 1.
988 miles South of Buenos Aires. The port is situated on the right bank of the river, and at its mouth. There is a meat packing plant.
APPROACHES: The approaches and entrance to the harbour are determined by two pairs of beacons as range or leading lights. Care must be taken not to confuse the installed portal cranes, each 18 m. high, with the beacons, which are painted the same colour.
There is 27 ft. on the bar, at low water: tidal range is 17 ft. 6 ins. to 6 ft. 2 ins.
PILOTAGE/ANCHORAGE: The Pilot will be on board, under standard instructions, but if for any reason he has to be picked up here, he will only come out about one mile, for lack of suitable craft. In such cases vessels should anchor in the roads at 47° 47′ 5″ S. and 65° 47′ 8″ W.
BERTHING: Vessels moor starboard side. Best time for entering is on an ebb tide and sailing on a rising tide, and for berthing within the hour of high tide. With a narrow entrance channel flow of tides often exceeds five knots. There is a mud and gravel bank almost opposite and slightly West of the wharf, some 200 yards out from it, with only 16 ft. at zero. When sailing, a back current runs inside the bank, and assists in opening the bows from the wharf. Vessels then usually steam across the bank, drop anchor on the outer edge and swing on the still rising tide until facing the entrance.
No tugs are avaiable.
The fiscal wharf has been extended to 129 m. overall, in 27 ft and is being extended to 275 m. There are two portal cranes on it, each 12 tons capacity. West of this, there is a space of 90 m. which is being filled in to extend the wharf, and then a 62 m. concrete wharf also in 27 ft., but bearing 312° while the fiscal wharf is on 284°. Both sections of the wharf have wooden fenders and there is ample storage space. Rail connections have not yet been extended to the more Westerly section, where coastal vessels discharge direct to trucks.
RADIO: For radio regarding free pratique, or reporting ETA call LPO 5 on 461 kc/s. A1. For weather reports in English, tune Comodoro Rivadavia LPX 2, on 474 kc/s., at 0400 and 1800 hrs. GMT.
FUEL: Not available.
FRESH WATER: Available at the wharf, but in limited supply in Summer.
MEDICAL: Attention available.
REPAIRS: Minor repairs only.
WEATHER: Conditions are generally good, and winds seldom exceed 40 knots. If anchored awaiting Pilot or berth, care should be taken to watch for strong winds against the current. When a strong W. wind blows there can be heavy dust storms, which impede proper visibility; in such cases it is advisable to keep position by radar and stand off or anchor until the visibility improves.
Yearly average for winds is 14 knots, 63% of the time from W., S.W. or N.W.
Rainfall is low, 202 mm. yearly with an average 74 days a year evenly distributed. Maximum temperature in Summer months is 35.6° C., while in Winter maximum ranges to 15.6° and minimum to minus 8.6°.

PUERTO MADRYN: 42.46 S. 65.02 W. (See Plan)

(Province of Chubut) "B" category port.
N.B. Refer to Argentina, Section 1.
On the Atlantic coast, 767 miles South of Buenos Aires. One of the most sheltered and deepest harbours in Argentina.
PILOTAGE: This is obligatory both on entering and sailing. There is no resident pilot, and one of the Southern zone group of pilots is sent from Buenos Aires by air as required, staying on for sailing if stay in port is to be short. The pilot will board at anchorage, unless he has brought the ship in from elsewhere. As there are no tugs it is advisable to berth in the early morning, before the wind rises.
ANCHORAGE: Half mile from pier terminal good anchorage in 60 ft. depth in protected bay. Anchorage used for transhipment cargo to smaller vessels.
RADIO: Trelew Radio (LPZ) frequency 500 and 527 kc/s., also 4428.6 and 4123.6 kc/s. Radio telephony LPZ–87 at 1500 hrs. local time on 8786.4 kc/s. At 0948 and 2200 hrs. local time area broadcast bulletin on 500 and 527 kc/s. At 1000 and 1300 hrs. local time navigation broadcast on 500 and 527 kc/s. At 1418 hrs. local time broadcast of LSQ Buenos Aires.
TUGS: None.
MEDICAL: Attention available.
BERTHING: The new pier for the aluminium plant is 1,477 m. in length, the first viaduct being 1,133 m. long, 12 m. wide, of which 3 m. are for the conveyor belt; there are 2 general cargo berths, on the Southside, one for vessels drawing 20–24 ft., lying in 20–29 ft. and which consists of a series of 7 mooring dolphins, close to the pier. Any vessel operating here would have to discharge ashore with her own gear.
The main general cargo berth, with 31 ft. at zero at the shore end and 37 ft. at the East end is 130 m. long and can take vessels up to 160 m. in length, drawing 30 ft. There are 2 mooring dolphins, one at each end of the berth, which is ample and wide – a total width of 55 m. at this point, vessels discharge with their own gear, to trucks, the long viaduct having room for 2 trucks to pass easily. There are two 12 ton electric cranes at this point, and two 25 ton cranes are also to be installed.
To seaward, on the North side of the pier, is the bulk berth, with 37 ft. at the shore end and 50 ft. at the East end, 217 m. long and 35 m. wide. There are 2 mooring dolphins, one off each end. Discharge is by grab, on a travelling tower which moves the full length of the berth, and delivers on an endless belt to the stockpiles on shore. Installed capacity is 1,000 t.p.h., but installations are by no means complete yet and actual yields are much lower. On windy days there is a problem with the dusty Bauxite blowing, and it is advisable to keep the ship's quarters tightly shut.
The old jetty, 458 m. long, with 16 ft. at the head and 12 ft. at 125 m. in, at low water, lies 2500 m. to the South and is still in use for smaller vessels operating with their own gear. There are no lighters in the port.
FUEL: Not available.
FRESH WATER: Presently available at the end of the old pier, 5 t.p.h., vessel supply hose.
WEATHER: *Winds* mainly West, with a yearly average of 8.3 knots but reaching 15 knots in Summer months.
Rainfall scarce, average 173 mm. distributed throughout the year.
Temperature. Summer maximum is 27° C and minimum 13°, and in the rest of the year maximum 21° minimum 8°.
Tidal range is 18 ft. 8 ins. and 6 ft.
HATCHES: According to Port Regulations, stevedores open and close hatches at commencement and end of cargo operations.
CUSTOMS ALLOWANCES: Sufficient for daily requirements only.
CREW IDENTIFICATION CARDS: Required.
CONSULS: Italian Consular Agent at Madryn. British and Spanish consuls at Trelew.
REPAIRS: Minor emergency repairs only, also divers available.
REPATRIATION: No facilities for effecting crew changes. Repatriation facilities only.
AIRPORT: Trelew distant 64 km. Scheduled flights to Buenos Aires and other cities.
POLICE/AMBULANCE/FIRE: Police and fire tel. 249. Hospital 240.
TELEPHONES: No arrangements for placing telephones on board.
SHORE LEAVE: Crew members allowed ashore but must be provided with identification cards.
DELAYS: Possible delays due congestion owing berth shortage and tide.
DEVELOPMENTS: There are plans in hand for installing a shipyard, to build vessels of up to 150,000 tons, and also for setting up a new Steel mill, but it will be some time before either develops.
PORT AUTHORITY: Delegation of the Capitania (Harbour Administration) del Puerto de la Patagonia.

PUNTA COLORADA: 41.42 S. 64.54 W. (See Plan)

The mechanical loading arm for the Iron Ore movement from Siera Yrande mines has finally been placed at Punta Colorada, a small peninsula, mid-way between Point Pozos and Point Porfido, the neck of land often being under water at high tide.
BERTH: After grinding and concentrating at the mines, which are some 25 km. due west of the coast, the slurry will be pumped to the Pelletising plant at Punta Colorada, stockpiled there and taken by conveyor some 1,600 m. to a retractile loading arm. This has a loading rate of 2,000 t.p.h., and turns on an arc permitting it to load

over a length of 112 m. without shifting position of the vessel. There is 42 ft. at the berth at L.W.S.T., vessels lying due North/South.

The plant is now under construction and should be operating some time in 1977.

PUNTA MEDANOS: About 280 km. South of Buenos Aires.

New deep-water port project to be completed before 1980. Expected to accept vessels up to 50 ft. draft.

QUEQUEN/NECOCHEA: 38.35 S. 58.42 W. (See Plan)

(Province of Buenos Aires) "B" category port.

N.B. Refer to Argentina, Section 1.

On the Atlantic Coast, 375 miles South of Buenos Aires, Necochea, is on the right bank, and Quequen, on the left bank of the Quequen River. The ports, whose administration is centered in Quequen, are the outlet for a very rich agricultural zone.

APPROACHES: The port is at the mouth of the river, protected by two breakwaters, the western arm being 1,192 m. long, lying from N.W. to S.E., and the easterly arm 572 m. long and lying North/South. The passage between the arms is 210 m. wide, and the entrance channel proper 100 m. wide. The channel is at present dredged at 27 ft. but improving constantly.

PILOTAGE: Pilots must be applied for as usual through Agents at least 24 hours ahead, using Radio Pacheco LPD 5 on 512 kc/s. A2, since there is no radio station at Quequen. This can be done by phone from Buenos Aires or other ports if vessels are not coming from abroad.

No Pilots will come out in bad weather. The small pilot boat is painted green, with a yellow deckhead, and the Pilot comes aboard about 1.5 miles off the South end of the breakwater.

ANCHORAGES: Not advisable to anchor in bad weather due extremely dangerous winds from West through South to East. Anchorage in open sea 800 – 1500 m. from cliffs.

RESTRICTIONS: Day and night entry possible. Vessels with length in excess of 175 m. require channel navigation permit obtainable from Maritime Prefecture.

MAX. SIZE: *Admissible Draft.* The following restrictions now rule vessels up to

150 m. o.a.	26 ft. 07 in. at zero
175	26 ft. 02 in.

However, vessels lying close up to the dolphins often find less depth, as the dredgers could not work too close in. The pool inside the breakwater is at 30 ft. but as there are no buoys for mooring, it is safer for vessels to await their turn outside.

HEALTH: Free Pratique is now given only when alongside, or in the pool. Master should advise Agent in advance of health situation aboard. If proceeding from another Argentine port, health inspection not required. Deratisation Certificate to be shown.

RADIO: For radio regarding free pratique, or reporting ETA call Radio Pacheco LPD 5, on 512 kc/s. There is no station here and advice to Agents can be given by phone or telegraph from Buenos Aires or other ports, also Costera del Mar de Plata (LPM).

TUGS: Two tugs must be used both on entering and leaving and these come alongside at the entrance, and are also needed for movements in the port. Both are old, however, and within sufficient power for anything other than work inside the port. Ship's lines used.

Two vessels cannot be in the entrance channel at the same time. Should the weather make it imprudent for the safety of the ship and/or tugs to make fast ropes in any position, the tugs will continue at the side of the vessel to be engaged when necessity arises. In every case tugs must be paid for, used or not, and any damage done by the non use or late engagement of the tugs will be attributable to the vessel.

BERTHING: Allotment of berths is effected by order of arrival, and vessels awaiting turn to load must do so in the outer roads until the pool inside the breakwater is fully dredged. Shippers consider the Outer roads as open sea, and will not accept Notice of Readiness until a vessel enters port.

There are only eight berths in the port, one of which is not yet in service. No work lying two abreast is possible, since the tubes will not do more than just reach, and with the restricted number of loading points only one vessel could work at a time.

Total storage capacity of grain in the port and anteport can be estimated at 600,000 tons.

Loading marks. Vessels are authorized to load to their Summer marks all year round, provided they are Northbound.

Movement inside the Port. At this port it is customary for the vessel lying second off to pay for the tugs attending her own movements. Vessels lying second off must shift to allow the inside vessel out, and then occupy the vacant berth, effect two movements, as there are only two tugs available. Of these two movements only one is charged to the vessel second off, but if either of the movements is in overtime, the extra is also charged.

Fenders. Good fenders are often needed in this port, although surge has diminished with the extension of the breakwater. It is recommended that these should be at least 3 ft. thick.

QUEQUEN SIDE

Unit 1 National Elevator "Ministro de Tomaso" (Dolphins 3/4 5/6 l.h.)

This elevator, built by the Government, has a capacity of 80,000 tons, a loading bridge with eight tubes but only four conveyor belts. Two vessels can load simultaneously. The berths consist each of two piers 10 m. wide and 70 m. apart, with two railway sidings (broad gauge) running parallel to them. There are twelve mooring bollards distributed between these landing places. A loading bridge has been constructed for the new berth from the Elevator Terminal, while it receives directly from an automatic truck discharging plant at 600 t.p.h., and being at a slight angle it is feared will interfere with a vessel of more than 140 m. long loading at Dolphins 5 and 6.

Unit II (Ocean going vessels and Ultramar Prolongation).

On this wharf which is 350 m. long there are 12 mooring bollards and two large sheds, one of 7,650 tons storage capacity and the other of 16,000 tons. There are also two railway sidings running parallel to it. On the cliff at the back of the sheds there is an elevator of 14,000 tons connected to the Ultramar berth by a loading bridge 85 m. long. The Ultramar Prolongation berth has a loading bridge with two tubes and two conveyor belts, and is fed from adjacent piles and wagons. These two bridges are connected by an underground conveyor, load rate 230 t.p.h., each two vessels being to berth here, one tube each. Unit II has been modified for the loading of cereals. Depth at zero tide is 36 ft.

Unit III (Dolphins 1 & 2 r.h.)

Beyond Unit III, in the direction of the breakwater, there are four sheds with a capacity of 29,750 tons and two piers reinforced concrete, 10 m. wide and 70 m. distant from each other. A pipe line runs alongside the pier for the purpose of eventually discharging tankers. Beyond these two piers, and at right angles to them, a breakwater of 120 m. length has been built as a further protection to ships at this berth.

NECOCHEA SIDE

Unit IV (Coasting vessels: Dolphins 1, 2 & 3 l.h. and 4 & 5 r.h.).

Situated on the western bank of the river and consists of the following berths: (Coasting vessels) A concrete pier 300 m. long with 12 mooring bollards. There are three brick-built sheds known as "Galpones A, B & C" of 5,000 tons each. Two vessels can moor at the same time, and load bagged cargo depth between 18 ft. and 20 ft.

Dolphins 1, 2 & 3 l.h. and 4 & 5 r.h. consists of three piers 18 m. wide and 70 m. apart and two piers 18 m. wide and 70 m. apart respectively. There are two direct discharge lines for Fuel oil for the Power plant.

The right-hand dolphin quays Nos. 1, 2 & 3 are used for fuel discharge, the pipelines are 12 in. diameter.

There are two sheds, Nos. 4 and 5 of 9,750 tons, one at each pier. Vessels can load bags or bulk by cutting bags on board. There are seven mooring bollards distributed between two berths. These, however, are not used now for export movement.

The old railway bridge is now used for road traffic, and the railway crosses higher up the river. The previous road bridge has been cut in the middle, and the area between the two bridges is being converted into a fishing port, which in turn will ease the congestion in port, especially on the Necochea side where trawlers and fishing vessels presently operate.

Importation of cargo. The Custom house here is authorised as a deposit zone, thus permitting the import of cargo.

WEATHER: *Winds,* average velocity is 7 knots, with 46% from N., N.E. and E., and only 29% from S.W., W. and N.W.

Rainfall. Averages 909 mm., evenly distributed.

Temperature: Summer maximum averages 26° C and minimum 14° with an absolute maximum of 39.9°, while in Winter the maximum is around 13° and the minimum 4°, with an absolute recorded minimum of minus 4°.

Tidal range is 5 ft. 2 ins. spring to 2 ft. neaps.

TANKERS: Fuel oil discharged.

DENSITY: Salt water.

FRESH WATER: Obtainable from hydrants on the wharves, vessel must supply hoses.

MEDICAL: Attention available.

FUEL: Advance notice essential as deliveries must be lightened from Buenos Aires, Mar del Plata, or Bahia Blanca.

DEVELOPMENTS: New New quay under construction for loading cereals and grain. No facilities for discharge of general cargo.

The dredging has been finished, although not to the target of 40 ft., and the present max. length admissable is 160 m., with an official figure of 26 ft. draft at zero. However, vessels lying close up to the dolphins often find less depth, as the dredgers could not work too close in. The pool inside the breakwater is at 30 ft. but as there are no buoys for mooring, it is safer for vessels to await their turn outside, from 800–1,500 m. from shore, in 50–60 ft., but with heavy winds from West through South to East they must put out to sea.

WATCHMEN: Compulsory.

HATCHES: Opened/closed by stevedores additional charge made.

REPAIRS: Minor repairs only.

REPATRIATION: Through Buenos Aires.

AIRPORT: Five miles distant. Daily flights to Buenos Aires.

TIME: GMT minus 4 hours.

CONSULS: Danish, Italian and Spanish. Consular clearances for France and Uruguay must be effected in Mar del Plata, and must be done the day the vessel sails. Brazilian clearances have to be taken at La Plata Consular offices.

HOLIDAYS: Vessels worked every day of year.

POLICE/AMBULANCE/FIRE: Police, Necochea 2148 and Quequen 6008; Ambulance, Necochea 2350 and Quequen 6052; Fire, Necochea 4900.

TELEPHONES: No arrangements for placing aboard.

SERVICES: Any special services required, technicians sent from Buenos Aires.
SHORE LEAVE: Not permitted.
DELAYS: Daily cargo work 18 hours/day. One waiting berth available. Delays up to four days can occur in January and February.
AUTHORITY: Capitania de Puerto, Administrador de Puerto.

RIO GALLEGOS: 51.33 S. 68.59 W.

(Province of Santa Cruz) "B" category port.
N.B. Refer to Argentina, Section 1.
About eight miles up the river, 1,247 sea miles South of Buenos Aires.
PILOTAGE: Access to the channel is well buoyed, and the authorised Southern zone Pilot must be on board. There are 2 channels for entering port, the Southern channel though of less depth is preferred as it is more sheltered and the current is weaker.
ANCHORAGE: Good anchorage when awaiting tide is off Punta Loyola in 30 ft. or on the Northern coast in front of Punta El Gancho or between Punta Bustamante and Isla Deseado, this latter in the case of N.W. storms only.
In the port itself, the town anchorage is the best and is deepest in front of the packing house plant. Vessels discharge to or load from lighters, and ocean going vessels are permitted to use their own launch for connection with shore while in port.
RESTRICTIONS: Entrance to the anchorage is buoyed. The Northern Channel has a shingle bank bar 13 ft. at low water. The Southern Channel is more sheltered and the current not so strong. Rio Gallegos is a tidal port, the height of tide being as much as 40 ft. at times.
The port is characterised by the intensity of the currents, up to six knots, and should be entered on a rising tide there being only 22 ft. in the pool of the port at low water.
RADIO: For radio regarding free pratique, or reporting ETA call LPG 2 on 486 kc/s. A2. For weather reports in English tune Comodoro Rivadavia LPX 2 on 474 kc/s. at 0400 and 1800 hrs. GMT.
TUGS: Tugs are not required but there is a small tug available.
BERTHS: Apart from the freezer wharf, there is the coal wharf, T shaped, fitted with an endless belt capacity 300 t.p.h., for the loading of the coal vessels taking the coal to Plate ports. There is only 20 ft. at this wharf.
There are nine lighters with varying capacity from 120 to 400 tons, which are usually unloaded or loaded when aground at low water.
FRESH WATER: Available by barge in very limited quantities. Vessel's pumps used.
FUEL: Not obtainable.
MEDICAL: Doctor available.
REPAIRS: Workshop facilities for small repairs.
AIRPORT: Daily air service to Buenos Aires.
WEATHER: *Winds.* Characterised by constant winds from W. and S.W. averaging 16 knots during the day. In Spring and Summer 25 knots rising to 75 knots at times. Easterly winds are rare, usually with rain.
Rain. There are usually about 100 days with rain, in total 222 mm. distributed from April to October.
Temperature. Average maximum temperature in Summer is 18° C, maximum recorded being 29°, Summer minimum is 5.8° while in Winter the average maximum is 6.5° and minimum minus 11.
Tidal range is 39 ft. 4 ins. spring and 9 ft. 6 ins. neaps, tides of over 40 ft. have been registered.
CONSULS: British, Chilean, Spanish and Italian.
AUTHORITY: General Ports Administration.

SAN ANTONIO OESTE 40° 49′ S. 64° 54′ W.

ANCHORAGE: There is a natural deep water pool here which will allow vessels of up to 33 ft. to lie in complete shelter.
BERTHS: A new pier is being built on the north side of Villarino Point on the opposite side of the bay from the old fishing port, now abandoned. The berth is designed to take vessels up to 170 m. long, using 2 dolphins to extend the 100 m. long jetty.
The main object is to handle the movement of the Solvay Soda plant to be built here. It is unlikely that any thing will be ready until 1978, although work on the port has commenced.

SAN JULIAN: 49.18 S. 67.43 W.

(Province of Santa Cruz) "C" category port.
N.B. Refer to Argentina, Section 1.
In the creek of the same name, 1,111 sea miles South of Buenos Aires.
APPROACHES: Access is well buoyed, but vessels must wait for high tide to enter.
PILOTAGE: Southern Zone Pilot must be on board.
ANCHORAGE: Best anchorage situated in front of the town, in 22 ft. at LWS. When heaving anchor care must be taken as the 3-knot current drives vessels towards the shore. Puerto Scholl is the best of several anchorages.
RADIO: For radio regarding free pratique, or reporting ETA call LPY on 428.5 kc/s. A2. For weather forecasts in English, tune LPX 2, Comodoro Rivadavia on 474 kc/s, at 0400 and 1800 hrs. GMT.
TUGS: None.
BERTH: A quay has recently been put into use, 62 m. long by 20 m. wide, and in 24 ft. with two mooring dolphins, so ending the previous use of lighters.
FUEL/FRESH WATER: Not available. In emergencies, water could be supplied by lighter in drums.
MEDICAL: Doctor, and hospital available.
CONSULS: None.

SANTA CRUZ: 50.07 S. 68.25 W.

(Province of Santa Cruz) "C" category port.
N.B. Refer to Argentina, Section 1.
On the estuary formed by the rivers Santa Cruz and Chico, 1,172 miles South of Buenos Aires.
APPROACHES: The entrance to the port is by a channel ten miles long. The Santa Cruz lighthouse and nine other beacons determine four pairs of leading lights for the approaches and entrance to the harbour, which can be entered only at high water, as both in the bar, either North or South passage, there are shoals on the leading lines, and also just before taking the anchorage in front of the town.
PILOTAGE: Southern Zone Pilot must be on board.
ANCHORAGE: The port is well sheltered and vessels can lie in up to 30-36 ft. half a mile off the town in good holding ground.
RADIO: For radio regarding free pratique or reporting ETA call LPT 2 on 441 kc/s. A2. For weather forecasts in English tune Comodoro Rivadavia LPX 2, on 474 kc/s., at 0400 and 1800 hrs. GMT.
TUGS: None.
FUEL: Available in small quantities, in drums, from the local YPF agency.
FRESH WATER: Available in drums, ex lighter, to be pumped out by the vessel.
LOADING: Loading is from lighters, which come alongside with the falling tide and return unladen on the rising tide, working two tides a day. Lighters always operate port side to vessel. There are 20 wharves or piers. Load rate is slow, say 150 tons mutton per day.
WEATHER: A dry zone, with an average of 186 mm. rain, spread over 72 days throughout the year. Wind averages 11 knots and the average, maximum/minimum temperature, Summer and Winter, is 20° or 7.9° and minus 8°, the maximum ever recorded being 34.9° Summer or 15° Winter, and absolute minimum 7.9° Summer, or minus 8° Winter.
Tidal range is 39 ft. 8ins. to 9 ft. 4 ins.
MEDICAL: Attention available.
CONSULS: None.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Australia

GENERAL:
Pilot Ladders: The Merchant Services Guild of Australia has advised that as from 1st December, 1975, Pilots will not board any ships on which the height from sea level to point of access exceeds 9 m., unless prior written assurance is given by the owner or Agent that arrangements have been, or will be, made to satisfactorily alter the ship's construction or equipment at the earliest opportunity. The only acceptable means for boarding ships with freeboard in excess of 9 m. is by a pilot ladder secured at an opening in the ship's side, or by an approved combined system of pilot ladder and accommodation ladder. The notice has been issued by the M.S.G.A. as, although the "9 m. rule" has been part of Australian and SOLAS regulations for some years, their members have found that a high number of vessels are not fully complying.
Hold Ladder Policy: For easy reference, summarised below is the Waterside Workers Federation official policy for hold ladders in Australia. Details of acceptable designs for special type vessels, i.e. car carriers, shallow 'tween deck refrigerated ships, etc. are available from Agent's office upon request.
1. *General Cargo Vessels* – The standard acceptable ladder construction would be an upper vertical section limited to 3 m. (subject to this being technicaliy possible) with the balance of the access hold ladders being of stairway design angled to the tank top.
2. *Bulk cargo Vessels* – The standard acceptable ladder construction would be an upper vertical section limited to 3 m. (subject to this being technically possible) with a bottom vertical section limited to 6 m., (in order to reduce damage by grabs, bulldozers, etc.) and with the balance of the access ladders between the upper vertical section and lower vertical section being angled and of stairway design with the angle being not greater than 65° in both the above classes of vessels.

ADELAIDE, S.A. (Port Adelaide): 34.51 S. 138.30 E. (See Plan)

PORT LIMITS: The seaward boundaries of the port are: An area embraced by a line drawn to seawards 4 miles from Outer Harbour through the Fairway Beacon and then extended 5 miles North and South returning due East to the coastline.
DOCUMENTS: See "Melbourne".
PILOTAGE: Advance notice 24 hours, telegraphic requests through ship's Agent. VHF Channel 16. Call sign "Adel. OH" Pilot launch black hull, white deck house, "Pilot" on each side. Give pilot launch good lee and safe pilot ladder. Pilot boards 1.5 miles seaward of Fairway Beacon.
ANCHORAGE: 0.5 mile West of Fairway Beacon.
RESTRICTIONS: Controlling depth in channel is 30 ft. (9.1 m.) ISLW.
Vessels up to 28 ft. (8.5 m.) require 3 ft. (0.91 m.) keel clearance; vessels up to 28–30 ft. (8.5–9.1 m.) require 3 ft. 6 in. (1.06 m.) keel clearance; vessels over 30 ft. draft require 4 ft. (1.21 m.) keel clearance.
Night berthing/unberthing subject to Harbour Master's approval.
MAX. SIZE: Inner Harbour – length 585 ft. (178 m.) OA; draft 31 ft. (9.4 m.), subject to tide. Outer Harbour – length 703 ft. (214 m.) OA; draft 35 ft. (10.7 m.), subject to tide.
HEALTH: Including Document A in short form. Also see "Melbourne".
RADIO: Adelaide Radio VIA.
TUGS: 4 available. Use tugs wires – charge A$4.
BERTHING: Tug power as required by Pilot. Depth at berths 26 ft.–35 ft. (7.92 m.–10.67 m.).
STEVEDORES: No advance ETA required.
RADAR: Decca Type RR 1219 installed in new signal tower.
MEDICAL: Contact Quarantine Department in ample time.
TANKERS: Vessel carrying inflammable cargoes or not gas-free restricted navigation during darkness. "Leak free" advice to Harbour Master to be given through Agent. 500 tons slop discharge facilities. 27 Berths 26 ft.–35 ft. (7.91 m.–10.70 m.). Unauthorised persons not allowed on board.
Berths:
Shell Co. Depth alongside 8.2 m.
Mobil Oil Co. Depth alongside 8.5 m.
B.P. Ltd. Depth alongside 8.5 m.
Caltex Co. Depth alongside 8.5 m.
DENSITY: Slightly denser than sea water; not affected by tide.
FRESH WATER: Through Hydrants at 12–15 t.p.h.
FUEL: Fuel oil, thin fuel oil, diesel, gas oil. 48 hours notice required. A bunkering barge capable of transporting 1,000 metric tons of bunkering oils operates in the port. The use of this bunkering barge will enable vessels to bunker without leaving their loading berths or using road tankers.
DEVELOPMENTS: Channel between Inner and Outer harbour now 9.1 m. ISLW and being widened to a minimum of 150 m. On completion, vessels 210 m. OA and 9.8 m. draft will use channel on average neap tide (1.5 m.).
A riverside berth and shore facilities in the Inner Harbour for roll-on/roll-off vessels of 247 m. length for steel products from the Eastern states of Australia.
A wharf, crane and large terminal for cellular type container vessels at the Outer Harbour is being constructed, with completion in 1976.
GANGWAY/DECK WATCHMEN: Optional except for white spirit tankers. Cost varies according to time of shift.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES:
Last Port Customs clearance.
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment.
Light Dues Receipt.
Ship's Articles (British Vessel).
CUSTOMS ALLOWANCES: Each Crew member 200 cigarettes or 40 cigars or 8 oz. tobacco. Limited amounts spirits per man.
CARGO GEAR: Accordance Australian Regulations. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: The following countries are represented:

USA	Greece	Netherlands
Austria	Guatemala	Norway
Belgium	Italy	Peru
Denmark	Japan	Philippines
Finland	Lebanon	Portugal
France	Liberia	Sweden
Germany		

REPAIRS: All repairs possible.
DRY DOCKS: None.
REPATRIATION: Available.
AIRPORT: Adelaide 8 miles, regular airlines.
TIME: GMT plus 9 hours 30 minutes.
HOLIDAYS: Xmas Day, Waterside Workers' Picnic Day (late January), Good Friday, Anzac Day (25th April), Adelaide Cup Day (15th May), Eight Hours Day (2nd Mon. October). Restricted holidays, Boxing Day, New Year's Day.
TELEPHONES: Port Adelaide Police 475466, Ambulance (Wharf) 461616, Fire Brigade 471515.
Note: $12 connection fee plus cost of calls.
SERVICES: Garbage disposal, cleaning out and fitting out and compass adjusting.
AUTHORITY: Dept. of Marine and Harbors.
AGENT: Patrick Agencies, POB 107. 15 Divett Street, Port Adelaide SA 5015. Tel. 47–4655. Telex AA. 82624. Cables: "Rikpat Adelaide".

ALBANY, W.A.: 35.02 S. 117.53 E. (See Plan)

PORT LIMITS: All the waters of King George Sound and Princess Royal Harbour Westward of a line drawn from Herald Point to Bald Head.
DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilot boards vessels about 1 mile (1.60 km.) East of Mistaken Island.
ANCHORAGE: 1.5 miles (2.4 km.) East of Possession Point (or in Frenchman's Bay if going to Whaling Station or for shelter).
RESTRICTIONS: The entrance channel from King George sound to Princess Royal Harbour has a width of 1,800 ft. (548.64 m.) land to land, the navigable channel therein being 500 ft. (152.40 m.) wide, with a depth of 33 ft. (10.06 m.) LWOST. Depth of swinging basin in the harbour is 33 ft. (10.06 m.) and vessels with a draft of 31 ft. (9.45 m.) can work the port. Vessels can be berthed day or night.
HEALTH: Inform Port Quarantine Office 12 hours before ETA. Also see "Melbourne".
VHF: Limited VHF, channels 6 and 16.
TUGS: Motor tug available, bollard pull approx. 14 tons.
BERTHING: Two jetty berths. Largest 800 ft. (243.84 m.) North side of harbour 3 berths, total length 1,996 ft. (608.69 m.), depth 33–36 ft. (10.06–10.97 m.).
FRESH WATER: Available all wharves. Rate 60–80 tonnes/hour.
STEVEDORES: No ETA required. Private companies.
FUEL: Bunkers available all berths, also Lt. Diesel.
CERTIFICATES:
Last Port Customs Clearance.
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Light Dues Receipt.
Ship's Articles (British Vessel).
CUSTOMS ALLOWANCE: Each crew member 200 cigarettes or 40 cigars or 226.8 gm. tobacco. Limited amounts spirits per man.
IDENTIFICATION CARDS: See "Melbourne".
TIME: GMT plus 8 hours.
HOLIDAYS: Xmas Day, Waterside Workers' Picnic Day (late January), Good Friday, Anzac Day (25th April), Labour Day (1st Monday in March). Restricted holidays, Boxing Day, New Year's Day.
DEVELOPMENTS: The port plans to improve the present draft limit. The turnaround basin, the channel and No. 3 Berth will be deepened to 11.5 m. A new grain gantry is to be built on No. 3 Berth.
CARGO GEAR: See "Melbourne".
AUTHORITY: Albany Port Authority.
AGENT: Patrick Agencies, Box 525 PO, Port Road, Albany, Western Australia, 6330. Cables "Rikpat". Tel. 413538.

ARDROSSAN, S.A.: 34.26 S. 137.55 E.

DOCUMENTS: See "Melbourne".
PILOTAGE: Not compulsory but available and recommended.
RESTRICTIONS: Max. size 20,000 d.w.t. for berthing and loading.
BERTHING: BHP Jetty length 3,055 ft. berth length 800 ft. at "T" head with 6 dolphins. Depth 27 ft. MLWS. Belt conveyor system. Fixed chute from conveyor system necessitates vessel warping along quay head during loading. Loading rates: dolomites 8/900 t.p.h.; wheat 350 t.p.h.; barley 340 t.p.h.; salt maximum 600 t.p.h. Height of chute above LW – 36 ft. 06 ins.
TIDE: Average rise and fall 6–8 ft., max. 10 ft. at spring tides.
GRAIN: Vessels loading bulk grain must be fitted out and passed by Navigation Dept. prior to arrival. Surveyors will attend vessel during loading, travelling by road from Adelaide.
VHF/TUGS/FUEL: None.
STEVEDORING: Arranged with private companies.
FRESH WATER: Limited quantities only. Delivery rate about 7 t.p.h.
AUTHORITY: The Broken Hill Pty Co. Ltd. Whyallla. Department of Marine and Harbours, Adelaide.
AGENT: Sub-agent of Patrick Agencies, Adelaide.

BALLAST HEAD, Kangaroo Is.: 35.45 S. 137.48 E.

In Eastern Cove, Kangaroo Island. Small private bulk loading installation from which charter vessels load gypsum for shipment to factories in Eastern Australian states. No facilities for discharging cargo and no Customs, health or other government departments' facilities available.
DOCUMENTATION: For vessels chartered to carry gypsum to Eastern Australian ports, Bills of Lading prepared on completion of loading.
PILOTAGE: No Pilots resident at Ballast Head but pilotage can be arranged through Harbour Master, Port Adelaide if required.
ANCHORAGE: Sea approach is unobstructed, with deep water anchorage and turning basin of Eastern Cove, 3 miles wide and extending 0.5 miles South of berth. Minimum depth about 35 ft. Sand bars exist immediately South of berth but well inside line of dolphins.
RESTRICTIONS: Vessels may proceed to anchorage at any time, but can berth only during daylight hours. Loaded vessels can leave berth or anchorage at any time without concern for tide conditions.
HEALTH: Pratique must be obtained at Port Adelaide.
TUGS: No tugs are available, but can be arranged from Port Adelaide, if required. However, a launch is available for running ships' lines, and must be used.
BERTH: The berth consist of a line of 8 dolphins running North/South, 600 ft. (183 m.) overall length forming a T-head jetty with loading conveyor gantry. Depth of water alongside 26 ft. (7.9 m.) LWOST. Berthing signals by radio instruction or mast head.
MAX. SIZE: Jetty can accommodate vessels up to about 7,000 d.w.t. Maximum length 400 ft. Maximum breadth 55 ft. Ships must exercise extreme care in berthing to avoid damage to dolphins or head frame.
LOADING FACILITY: Loading equipment consists of conveyor system to fixed loading gantry supporting luffing boom conveyor. Discharge from boom conveyor feeds to gimbal-mounted chute that can be pivoted mechanically in any direction up to 20° off vertical to trim to square of hatch. Boom conveyor operates only in horizontal position and loading chute does not telescope. Fixed loading gantry situated at centre of line of berthing dolphins. Maximum workable distance from wharf edge to centre line of loading unit – 26 ft. Distance from low water level to outlet end of loading chute in loading position – 19 ft. 3 in. Maximum handling rate of rock gypsum on conveyor system, 870 t.p.h.
RADIO: Ship-shore VHF radio. Call sign "Ballast Harbour". Frequencies, 150.80 mc/s. for distress and calling; 156.60 mc/s. for working.
ARRIVAL ADVICE: At least 8 hours notice of ETA is required to S.A. Gypsum Adelaide Office, tel. 454751 or after hours, Adelaide 356.5606 or Kingscote 2.2287.
MEDICAL: Doctor available at Kingscote, 25 miles distant. Hospital also at Kingscote.
FRESH WATER: None available.
FUEL: No facilities available.
GANGWAY/DECK WATCHMEN: None required.
OPENING/CLOSING HATCHES: Carried out by crew.
CONSULS/REPAIRS/DRYDOCKS/REPATRIATION: No facilities available.
AIRPORT: Local airport approximately 20 miles distant. Regular air service to Adelaide – at least one flight daily.
TIME: 9 hrs. 30 mins. in advance of GMT from March to October inclusive. One hour Summer saving time operates from November to February inclusive.
HOLIDAYS: Loading carried out on any day but at least 24 hours notice of ETA required for loading on public holidays.
POLICE/AMBULANCE/FIRE: Police station, Kingscote 2.2018; Ambulance, Kingscote 2.2037 or 2.2028; Fire, Kingscote 2.2200.
TELEPHONES: No arrangements exist for placing telephones on board.
SERVICES: None available.
DELAYS: Berth accommodates only one vessel at a time, but once berthed the loading continues without break until completion except for the time taken to shift ship from hatch to hatch and check draft.
AUTHORITY: S.A. Gypsum, Division of CSR Ltd.

BARROW ISLAND, W.A.: 20.49 S. 115.53 E.

(See Plan)

DOCUMENTS: Refer to "Melbourne".
TERMINAL OPERATOR: West Australian Petroleum Pty Limited.
LOCATION: The Barrow Island Tanker Terminal is a crude oil loading installation located on the East side of Barrow Island, Western Australia. The tanker moorings are located approximately 32,400 ft. offshore at Lat. 20° 48′ 52″ South, Long. 115° 33′ 04″ East.
PILOTAGE: A terminal Mooring Master will meet and board tankers bound for the Island Tanker Terminal in approx. position tanks (conspc.) bearing 300° and 2 miles off the moorings. Tankers waiting to berth, etc., are requested to anchor in this position.
RESTRICTIONS: Vessels equipped with adequate searchlights may be berthed during the hours of darkness. Two × 12 in. reflector diameter searchlights, one fitted to each port and starboard wing of the bridge in such a manner as to provide a wide scanning range, are considered adequate. Tankers not fitted with searchlights, may berth in daylight hours only.

Slack water at the terminal moorings occurs approximately two hours after HW and LW at springs and 1.5 hours after HW and LW at neaps. The direction of the flow is approximately 245° flood tide and 065° ebb tide, and attains a rate of approximately one knot at springs.
MAX. SIZE: The minimum depth of water in the berth is 46 ft. and an under keel clearance of 5 ft. is required. Tankers exceeding the following dimensions cannot be accommodated at the sea berth:
Deadweight tonnage (loaded): 70,000 tons.
Overall length: 820 ft.
Moulded depth: 58 ft.
Draft: 41 ft. plus height of tide above Chart Datum.
HEALTH: Tankers arriving from foreign ports must make prior arrangements for quarantine and customs clearance through their Agents. Port Hedland, Western Australia, is the nearest port where customs and quarantine clearances can be obtained.
RADIO: All tankers proceeding to the Barrow Island Terminal shall notify the West Australian Petroleum's Perth Office, tel. 25–0181 or cable address "Wapet Perth", their estimated time of arrival, not less than 96 hours before arrival amending or confirming this ETA at intervals of 48 and 24 hours prior to arrival. A final ETA is to be confirmed 12 hours before arrival at Barrow Island. Failure to comply with the above procedure may result in a Berthing Master not being available on the tanker's arrival. Quantity and condition of ballast on board should be advised in original ETA message.

During normal daylight working hours, the Company's Marine Superintendent, Barrow Island, can be contacted by means of the International Maritime VHF radio-telephone. Frequencies in use are:
Channel 16: 156.8 Mc/s. safety and calling.
Channel 12: 156.6 Mc/s. terminal operations; ship/shore
Call sign: "Barrow Island".
Channels 6 & 14 are also fitted.

At times other than normal working hours, contact may be made by pre-arranged scheduling. In all events tankers are required to tune their VHF sets to Channel 16 when within 100 miles of Barrow Island.
MOORING: Vessel berths at a seven-point conventional buoy mooring. Tankers must have at least one set of mooring bitts on the port and starboard sides at the after end of the main deck and a minimum of four sets of mooring bitts on the poop deck to which mooring lines and/or wires can be hove tight and made fast. Self-tensioning winches will not be accepted in lieu.

Both bow anchors are required to have a minimum of ten shackles of chain. All anchors and chains are to comply with the requirements of a Classification Society recognised by the Australian Department of Shipping and Transport.

Tankers should have sufficient mooring ropes and/or wire so that single or doubled up, they have a total breaking strain of 80 tons to each of the six mooring buoys. Six such lines or combinations not less than 120 fms. in length are required.

Permanent 5-in. circumference wires are fitted to No. 1, 2, 3, 4, and 6 mooring buoys. These wires are provided to supplement the tanker's own lines relative to the prevailing weather conditions at the time. These wires are fitted with 110/200 ft. of 3.125 in. wire and 4.5 in. × 100 ft. Terylene messengers. A good ship's rope messenger is required to bring the 4.5 in. Terylene messenger to the tanker's winch drum.
HOSES: The tanker's derrick must be capable of lifting the 5 ton submarine hose on the starboard side.

The sea line delivering the oil is 20 in. OD × .375 in. steel pipe with a 2 in. thick concrete external coating. The line is terminated with 200 ft. of flexible submarine loading hose consisting of 150 ft. of 16 in. and 50 ft. of 12 in. hose. The sea end of the 20 in. pipe-line is marked with a white spar buoy, and the pick-up end of the flexible hose is marked with a white cone buoy.

The submarine line is left full of crude oil between tanker arrivals. After picking up and connecting the hose, the system will be pressurised to about 25 psi. After the hose has been hoisted and secured at the ship's rail, the blank flange on the end of the hose assembly is removed and the hose connected to the tanker's manifold by the deck hose and the adaptor spool assembly previously delivered to the tanker by the mooring launch.

The tanker should furnish necessary personnel to perform all work involved in the connecting and disconnecting of the cargo hose. During these operations a senior officer must be present to approve the hose connections and supervise the tanker's crew members in this work.

25 ft. × 10 in. and 18 ft. × 10 in. deck hoses and 14 in. to 12 in. and 12 in. to 10 in. reducers are available.

All flanges are U.S.A. Standard. An adaptor from 10 in. diameter U.S.A.S. (flange pitch circle diameter 14.25 in.) to 10 in. diameter British Standard (flange pitch circle diameter 15 in.) is available.

BALLAST: There are facilities for receiving ballast from vessels loading at Barrow Island. Tankers are required to arrive ballasted to at least one-quarter of their deadweight. Owing to the time factor involved in pumping dirty ballast ashore, it is recommended that tankers arrive with clean ballast and preferably deballast concurrently with loading. However, if required, ballast on arriving tankers may be pumped to shore using ship's pumps through the 20-in. submarine line then through a 12-in. deballasting line to the ballast receiving pond.

The following deballasting procedure is used at the Terminal:

After the hose has been connected, at least one-third of the cargo must be loaded before deballasting. Part of this oil is to be used to displace ballast from the submarine line after all the ballast aboard the tanker is pumped to shore. The line displacement of the 20 in. loading line is approximately 12,250 barrels (1,650 tons).

It is necessary to load at least one-third of the cargo before deballasting operations begin in order to keep the ship in as heavy a condition as possible and thereby minimise the effects of sudden changes in sea and weather conditions.

When the preceding operation is complete, deballasting operations start. When the oil-water interface is detected onshore, the stream is diverted from the crude oil storage tanks to the ballast receiving pond. Pumping of the ballast continues until all ballast is discharged from the ship.

At this time the Barrow Island crude oil previously loaded is pumped into the line in order to displace all ballast from the submarine pipe-line.

When the water-oil interface is detected ashore, the stream is then diverted to the shore tanks and the ship's pumps are requested to be stopped. During the displacement operations, pumping rates should be kept as high as possible to keep line contents in a turbulent condition in order to sweep the line as clean of water as possible.

LOADING: CAUTION – Whilst loading, the flow of oil from the shore pumping station via the submarine pipe-line is not to be shut off by closing ship's valves or the pipe-line valve without prior approval of the Mooring Master. At least one tank is to be fully open to the inflow of oil from the submarine pipe-line at all times, and in order to reduce back pressure as many tanks as possible should be open during loading. In all events, the back pressure at the ship's rail is not to exceed 100 psi.

The loading pumps are rated to deliver a maximum of 17,000 bbls. per hour of crude oil to tankers with a nominal pressure of 50 psig at the ship's side.

Barrow Island crude oil has an approximate API gravity range of 35.5 to 37.1 and an approximate temperature range of 74°F to 98°F.

The Mooring Master is to be advised when 200 tons is required to complete loading so that pump motors can be eased down slowly, and again at 50 tons when the pumps will be stopped and loading completed by gravity. On completion of loading, the manifold valve is to be closed slowly to minimise the surge of oil in the pipe-line and the consequent quick build up of back pressure.

Portable radios are supplied for communication between tankers and the Terminal. To minimise the possibility of a dangerous position arising due to undetected radio failure, tankers are required to keep an hourly test call schedule with the Terminal at which time they should advise the Terminal of the rail pressure.

MEDICAL: No facilities at the Tanker Terminal.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No facilities available.

CONSULS: None at Barrow Island.

TELEPHONE: No service available.

REPATRIATION: Ships' crews cannot be accommodated ashore on the Island.

GENERAL: Notice of readiness is accepted.

(a) *Where the Marine Terminal is available;* when the vessel is all fast in the berth, i.e. all lines secured to the buoys and preventers made fast.

(b) *Where the berth is not available;* 6 hours after the vessel drops anchor at a nearby anchorage. Laytime ceases for the period of time taken for the vessel to move from the anchorage and is resumed when the vessel is all fast at the berth.

(c) *Where a vessel with inadequate lights arrives at night;* 6 hours after daybreak following arrival or when the vessel is all fast at the berth – whichever occurs first.

Tankers are required to victual and provide sleeping accommodation for the Mooring Master and Operator and to victual only, the three-man launch crew.

BOTANY BAY, N.S.W.: 34.00 S. 151.14 E.

DOCUMENTS:

2 Crew Lists (Form M. & S. II).
Stores List (Form 42 A).
Personal Effects List (Form 5).
2 copies Health Report (Form A Q360).
3 copies Ports of Call List (Form C & E 886).

If vessel has an animal aboard as ship's pet, Master will also be required to complete Forms QA 4 and QA 5.

PILOTAGE: Compulsory. Ordered by Agent basis Master's ETA. Pilot boards outside Botany Bay heads. Vessels waiting for Pilot not to proceed West of 151.15 E. Pilot can be contacted by VHF Channels 16, 12 and 14.

ANCHORAGE: Inside Heads for vessels up to 31 ft. draft. In bad weather vessels should not anchor but put to sea.

RESTRICTIONS: Vessels not berthed after sunset. Mooring normally effected two hours before HW.

RADIO: Sydney Radio. VHF to Harbour Control, Sydney. Also see "Sydney – VHF".

MAX. SIZE:

Kurnell	No. 1	Length	600 ft.	Draft	32 ft.
,,	2	,,	650 ft.	,,	35 ft.
,,	3	,,	780 ft.	,,	38 ft.

SBM Terminal, up to 40 ft. draft.

TUGS: 24 hours notice required. Tugs join vessel at sea buoy. Ship's lines used.

BERTHING: *Kurnell Jetty:* Operators: Australian Oil Refining Pty. Ltd. Finger pier with 2 berths; No. 1 – Eastside No. 2 – Westside. Vessels held 5–10 ft. off wharf face by 10 in. ship's lines to breasting off buoys situated fore and aft about 700 ft. from pier. Crude 1 × 26 in. 1 × 18 in. lines – 8 in. hoses. Fuel 1×24 in. 1×12 in. lines – 8 in. hoses. White 6 in. – 16 in, Bunkers and FW ex-wharf. Slop facilities up to 8,200 tons (1,000 t.p.h.).

Kurnell No. 3 Berth: Operators: Australian Oil Refining Pty. Ltd., also used by "Boral". Vessel moors using both anchors frd. and ropes to 5 buoys in semi-circle (astern). Hoses connected midships – 1×16 in, or 2×8 in. to 16 in. submarine line (crude). Bunkers, fuel and diesel. FW 70 t.p.h. ex-pipe-line.

"Boral" mooring: Operators: Bitumen and Oil Refineries (Australia) Ltd. Vessels moor using both anchors and ropes to 4 buoys situated stbd. quarter, stern, port quarter, port bow. Midships hose connection. Crude: 1×12 in. 600 t.p.h. No bunkers. Fuel 1×8 in. 190 t.p.h. FW ex-tug (100 tons each lift).

"Total" mooring: Operators: Total Oil Products (Australia) Ltd. Details as for Boral. White products: 1×10 in. line and hose, 200–600 t.p.h. No bunkers. FW ex-tug (100 tons each lift).

SBM Terminal: A single point mooring for up to 80,000 d.w.t. tankers, at 40 ft. draft, located just inside bay entrance. Crude: 2×12 in. hoses, up to 1,500 t.p.h. White products: 1×12 in. hose, 600 t.p.h. Fuel: 1×12 in. hose, 600 t.p.h. Bunkers available. Fresh water ex-tug at 100 tons per lift.

Boral No. 2: Conventional buoy mooring for LPG vessels up to 250 ft. length and 18 ft. draft. Fresh water ex-tug at 100 tons per lift.

DENSITY: 1025.

FRESH WATER: Hose at jetty. Pipe-line from Kurnell No. 3 privately owned by A.O.R. Ltd.

FUEL: Marine Fuel and Diesel Oil. No barging available, deliveries by pipe-line only.

FIRE PRECAUTIONS: Normal restrictions.

GANGWAY/DECK WATCHMEN: None available.

IDENTIFICATION CARDS: See "Melbourne".

DEVELOPMENTS: Work commenced on development of Botany Bay as an ancillary port of Sydney. First stage includes dredging entrance to 70 ft. depth, and building an armoured embankment to reduce wave effect in the Bay.

The new container terminal at Botany Bay will be capable of accommodating the world's largest container vessels. Plans revealed recently are for a five-berth container complex with depths alongside wharves of 50 ft. A total area of 150 acres has been set aside for the container terminals. The berths will each have a length of approximately 1,100 ft. The first of the new terminals will be available in three years with the remainder being developed as required.

Facilities will also be provided for dry and liquid bulk cargoes. The first berth for bulk cargoes will be available mid 1976.

REPAIRS: Most repairs. Ships not allowed to be immobilised.

DRY DOCKS: Nil.

AIRPORT: 10 miles – regular airlines.

TIME: GMT plus 10 hours.

HOLIDAYS: Cargo worked all days.

POLICE/AMBULANCE/FIRE: Tel. 2222.

TELEPHONES: At Wharf and Kurnell No. 3. AOR Ltd.

SERVICES: Compass adjusting only.

DELAYS: Normal only.

AUTHORITY: Maritime Services Board of NSW.

AGENT: Patrick Agencies, Head Office, Box 3918 GPO, Sydney, NSW 2001.

BOWEN, Queensland: 20.01 S. 148.15 E.

(See Plan)

PORT LIMITS: The Port of Bowen limits is an area comprised within a line commencing at Cape Edgecumbe and proceeding thence to Cape Gloucester.

DOCUMENTS: See "Melbourne".

PILOTAGE: Vessels requiring a Pilot should radio Agent giving sufficient advance notice. No VHF communication presently available. Pilot boarding ground is 1 mile outside Fairway Buoy, a distance of 4 miles from the port. Pilot requires ladder, rigged 5 ft. above the water, man-ropes rigged and heaving line ready.

RESTRICTIONS: Vessels will not be berthed at night. It is necessary for vessels to be at Pilot boarding ground 1 hour before sunset. Vessels should have at least 1 ft. keel clearance in the swinging basin.

Depths available: South Entrance Channel 23 ft. LWOST;
North Entrance Channel 12 ft. LWOST;
Swinging Basin 22 ft. LWOST.
Vessel may sail at night.

MAX. SIZE: Length about 540 ft. overall. Berth depth from 22 ft. 9 in. to 30 ft. LWOST.

HEALTH: See "Melbourne".

RADIO: Vessels arriving from the North use Townsville Radio. Vessels from the South use Sydney and Brisbane radio stations.

TUGS: Tug available for berthing and departure. Motor launch used to run lines to berth.

BERTHING: Normally carried out at high water.

Berth	*Length (Metres)*	*Depth (Metres)*
No. 1.	203.00	7.6
No. 2.	203.00	7.6
No. 3.	167.64	9.1
No. 4.	152.40	6.9

SPECIALISED CARGO-HANDLING FACILITIES: Berth No. 3 is specially equipped for the handling of the export of bulk cargoes (coal, ore, grain, mineral, sands, etc.) by a ship loader equipped with telescopic chute and jet slinger fed by a belt conveyor from stockpile areas. Loading rate 610 t.p.h.

STEVEDORES: Ordered by Agent. Port quota is 55 men which allows 3 gangs. Loading rates: coal 600 t.p.h.; bulk tallow 60 t.p.h.; frozen meat 7 tons per gang/hour; hides 8 tons per gang/hour; bagged bone meal 11 tons per gang/hour.

A ship loader with loading belt conveyor, telescopic chute, and jet slinger, with loading capacity of 700 t.p.h., can handle coal, minerals and maize.

MEDICAL: Hospital facilities available. No advance notice required. Tel. No. 29.

DENSITY: Average density at berths 1025 to 1027.

FRESH WATER: Available at all berths up to 50,000 gallons/hr.

FUEL: Oil bunkers not available but small quantities can be obtained from Townsville by road or rail tankers.

GANGWAY/DECK WATCHMEN: Watchmen available, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.

REPAIRS: Engineering and welding services available.

DEVELOPMENTS: A five-year development plan includes improvement of coal export facilities, and building a single buoy mooring terminal for bulk liquid carriers.

Plans call for the port to be dredged to 70 ft. for VLCCs in the future.

AIRPORT: 3 miles away with connecting services to major Australian airports.

HOLIDAYS: Christmas Day, Good Friday, Labour Day, and Picnic Day; no work performed on these days.

POLICE/AMBULANCE/FIRE: Police, tel. 20; Ambulance, tel 211; Fire Brigade, tel 5.

TELEPHONES: Ship-board telephones can be rented.

AUTHORITY: Bowen Harbour Board.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

BRISBANE, Queensland (including Fisherman's Island, Hamilton, Pinkenba): 27.27 S. 153.04 E.

(See Plan)

PORT LIMITS: A vessel is considered an "arrived vessel" when it is at the Pilot boarding grounds off Caloundra.

DOCUMENTS: See "Melbourne".

PILOTAGE: Notify Agent approximately one week in advance. Confirm ETA to Duty Harbour Master 24 hours before arrival at pilotage ground, plus max. draft. Master of vessel to radio ETA Pilot boarding ground 8 hours before arrival. Messages should be addressed: Shipserv Caloundra Signal Station.

Contact Caloundra Signal Station by VHF Channel 16 when within range. Pilot boards 3 to 6 miles S.E. of Cartwright Point. Pilot vessel white hull with words PILOTS in black letters. Orange superstructure. Place ladder about 6 ft. from water.

Pilot ground is 42 miles from entrance to river. River then navigable to ocean going vessels for 14 miles from the mouth.

Same Pilot remains to berth vessel. Pilotage time about 5 hours.

APPROACHES: Good navigation conditions in Moreton Bay except in exceptionally heavy weather in Northwest channel. Minimum depth in Northwest channel 42 ft., and Northeast channel 25 ft., in Bar Cutting 38 ft., in Swinging Basin at Luggage Point 40 ft., to Hamilton 30ft., and to Bulimba Point 27 ft. (all LWOST). Dredged channels in Moreton Bay minimum 1,000 ft.. width. River Cuttings 400 ft. width except cutting between entrance beacons and middle beacons of Bar Cutting, which 500 ft. width.

In Moreton Bay and Brisbane River the mean spring rise is 6 ft. 7 in. above LWST and mean neap rise is 5 ft. above LWST. The lowest neap tide 4 ft. above LWST and maximum spring tide 8 ft. above LWST. The visibility generally good except in cyclonic weather when heavy rain.

RESTRICTIONS: Berthing times dependent on vessel's draft in relation to state of tide.

MAX. SIZE: Waterline length in river 750 ft. at 32 ft. draft (special provision made for larger vessels, especially when light draft condition preparing entering Graving Dock). Moulded breadth 105 ft., draft at HWOST for tankers 40 ft.; for cargo vessels 32 ft. No limit on height at present – see "Bridges".

HEALTH: See "Melbourne". Doctor boards at river entrance or at berth. Available 24 hours per day.

RADIO: Most traffic channelled through VIB, coastal radio station Brisbane. VHF Channel 16, 156.6 mc/s. and 156.8 mc/s.

RADAR: Continual watch kept at Caloundra Head, and Lytton Hill Signal Station.

TUGS: Six tugs available up to 2000 h.p. and 33 tons bollard pull. Tugs are privately owned. Tugs join vessel approaching the berth, or as may be required elsewhere in the river. Line boats available.

BERTHING:

Berth		*Length*	*Depth LWOST*
Bulimba Reach			
Capricorn Wharf	No. 1	550 ft.	30 ft. 6 in.
	No. 2	540 ft.	30 ft. 6 in.
	No. 3	680 ft.	28 ft.
	No. 4	450 ft.	30 ft.
Mercantile Wharf	*a.*	535 ft.	30 ft.
	b.	535 ft.	30 ft.
Newstead Wharf	No. 1	470 ft.	30 ft.
	No. 2	620 ft.	30 ft.
	No. 3	360 ft.	28 ft.
Hamilton Reach			
Brett's Wharf (3 berths)		1,415 ft.	30 ft.
Cold Stores Wharf		781 ft.	30 ft.
Hamilton Wharves	No. 1	450 ft.	30 ft.
	No. 2	800 ft.	33 ft.
	No. 3	550 ft.	31 ft.
	No. 4	700 ft.	31 ft.
Cairncross Dock		1,300 ft.	30 ft.
Broken Hill Wharves	No. 1	550 ft.	30 ft.
	No. 2 & 3	825 ft.	30 ft.
Messageries Wharf		900 ft.	32 ft.
Quarries Reach			
Abattoir Wharf		460 ft.	28 ft.
Borthwick's Wharf		412 ft.	28 ft.
Pinkenba Wheat Wharf	No. 1	700 ft.	31 ft.
	No. 2	550 ft.	32 ft.
Shirley's Wharf		402 ft.	32 ft.
Austral-Pacific Fertilisers Wharf		500 ft.	34 ft.

BULK LOADING FACILITIES: Hamilton Wharf Berth No. 4; gross handling rate for loader is 700 t.p.h. Moveable conveyor system services 360 ft. of wharf.

Pinkenba Wheat Wharf: two belt conveyors serving seven loading spouts of which four can be used simultaneously. Nominal handling rate is 1,600 t.p.h

Rutile Sand: Stowage factor 18–20. Loading rate 7,000–9,000 tons per day.

Shipmaster's Report: New bulk handling installation at Pinkenba, Brisbane.

This is a new plant on the old No. 2 wharf officially opened 17th Feb. 1973. A privately owned single traversing conveyor system with one loading head supplied from eight storage tanks each of approx. 2,500 tons capacity, together with additional supply from road transport as required to augment the tanks. A further storage is still to be built.

The "Shiploader" traverses 370 ft. along the wharf. The loading head has an endless belt type trimmer and telescopic chute for lowering into the hatch of the vessel being loaded and the trimmer has a throw of 30–50 ft.

In the stowed position the bottom of the trimmer is 28 ft. above the existing wharf level and has an extension of 54 ft. – this is 40 ft. beyond the edge of the wharf but does not take into account the vertical pile fendering which is approx. 1 ft. diameter logs, therefore outreach would be approx. 39 ft. When in the extended position the telescopic chute and trimming head can be lowered 45 ft. into the hatch – or 17 ft. below existing wharf level.

The trimming machine on the end of the telescopic chute is approx. 4 ft. square, and therefore cannot be used to load into underdeck grain spaces with the normal small "manhole" type loading holes.

Control is effected from a cab 52 ft. above the wharf level.

There is nobody from the installation on board the ship. Communication is by a telephone situated on one of the bogies at the foot of the travelling conveyor. Local union/labour troubles will not permit a telephone to be placed on the ship or even the use of "walkie-talkie's" as supplied to most ships. If a telephone or "walkie-talkie" is used the local unions demand stevedore labour be used.

Loading rate is expected to be approx. 1,500 t.p.h. when the plant is fully run in, at present about 650–750 t.p.h. is being realised.

So far only sorghums have been handled, but the next cargo is expected to be woodchip, and mineral cargo as well as grain is expected to be handled in the future.

There is 32 ft. of water at LWOST alongside.

TANKERS: Two refineries at mouth of Brisbane River. Gas-freeing facilities not available, but chemist available to issue Gas-free Certificate. There are slop discharge facilities at both refineries.

Amoco Bulwer Island Refinery: on North bank, oil bunkering and export berth, 800 ft. length, 32 ft. depth LWOST.

Amoco Luggage Point Wharf: on North bank, crude import berth can accommodate vessels up to 900 ft. length. Berth length 900 ft. depth 40 ft. LWOST.

Ampol Refinery Wharf: on South bank, berth length 550 ft., depth 32 ft. LWOST. At Fisherman's Island, up to 40 ft. draft and berth length 1,082 ft.

Philips Refinery Wharf: can accommodate tankers up to 550 ft. length, depth alongside 30 ft. LWOST.

Shell Wharf: on North bank. Berth length 650 ft., depth 32 ft. LWOST.

Mobil Wharf Colmslie: on South bank, berth length 800 ft., depth 24 ft. LWOST.

BRIDGES: None at present, but one being considered lower reaches of river restricting height to 151 ft.

STEVEDORES: Ample labour available for all cargo working except rush periods.

Normal capacity per gang per shift: 60 tons break bulk; 75 tons palletised cargo. A 45 ton (45.72 tonnes) portainer crane is situated at the Hamilton Wharves. Other cranes from 4 tons (4.06 tonnes) to 30 tons (30.5 tonnes) are available at various wharves.

DENSITY: 63.6 lb. per cu. ft.

FRESH WATER: From mains 90 psi. 180 t.p.h. at all berths.

FUEL: Oil bunkering available at all oil wharves. Also by road tanker at cargo berths. Distillate, diesel fuel or fuel oil. Largest bunkering barge is 1,400 tons for fuel oil.

DEVELOPMENTS: Queensland's Harbour & Marine Department has announced plans for deepening the channels in the Brisbane River to allow vessels drawing 33 ft. to use the container facilities at Hamilton. Additionally, the Cairncross Graving Dock, which is capable of handling bulk carriers of 60,000 tons, has improved facilities to provide a 1,000 ft. fitting-out berth; new cranes of 30 and 60 tons capacity and new service installation for power, water and air.

GANGWAY/DECK WATCHMEN: Normally by crew, but can be hired.

OPENING/CLOSING HATCHES: Performed by stevedores/crew.

CUSTOMS ALLOWANCES: see "Melbourne".

CARGO GEAR: Heavy lift facilities up to 45 tons available certain wharves. Also see "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

CONSULS:

American Consulate T & G Building Queen	229-4677
Austrian Consulate 293 Queen	229-3222
Belgian Consul 380 Queen	221-3116
Bolivian Consulate-General 210 Queen	221-1606
British High Commission 193 NQy	221-4933
Chilean Consul 153 Wickham, Fort Vy	52-2264
Consulate of the Khmer Republic 235 Edward	221-9918
Danish Consulate 9 Rossiter Pde, Ham	268-2630
Federal Republic of Germany 289 Queen	221-7819
Finnish Consulate 47, Dulcie St., Darra	375-5230
French Consular Agent 380 Queen	229-2361
Greek Consulate 293 Queen	229-3222
Italian Consulate 158 Moray NF	258-1860
Japanese Consulate 68 Queen	31-1438
Republic of Korea Consulate 46 Donaldson St, Greenslopes	397-8662
Netherlands Consulate 150 Edward	31-1779
New Zealand Consulate 288 Edward	221-0005
Norwegian Consulate 344 Queen	229-4222
Panamanian Consulate Hyde Rd, Yer	48-7755
Philippine Consulate Logan Rd, Stones Cnr.	397-8407
Portuguese Consulate 379 Queen	221-4833
Swedish Consulate 30 Herschel	221-9977
Swiss Consular Agency 15 Corowa, Wavell Hts	266-9782
Uruguayan Consul 193 Mary	31-0221

REPAIRS: All major repairs undertaken, including main propulsion diesel engines, steam turbines, boilers, reduction gearing servicing, propellers, tailshafts, stern bearings, all engine-room repairs, deck gear, radar, radio and sonar equipment, fitting-out berths.

DRY DOCKS: Largest vessel handled, m/v *Clutha Capricorn,* 83,500 d.w.t. All major facilities available.

The Dock has a bottom width of 110 ft. (33.5 m.), a total depth of 51 ft. (15.5 m.), and a length of 880 ft.(268 m.). The Dock is fully equipped for repair services, including facilities for water blasting, sand blasting, compressed air, Radiographic (X-Ray) facilities, hull cleaning and painting, mechanical and structural repairs, etc.

TIME: GMT plus 10 hours.

HOLIDAYS: New Year's Day; W.W.F. Picnic Day; 31st January – Australia Day; 13th March – Labour Day; Good Friday; Easter Monday; 25th April – Anzac Day; 12th June – Queen's Birthday; Christmas Day; Boxing Day.

Close Holidays – Christmas Day, Good Friday, Anzac Day, Labour Day, W.W.F. Picnic Day (No labour available these days).

POLICE/AMBULANCE/FIRE: Tel.: 000 and ask for service required.

TELEPHONES: At most wharves. Can be connected on board.

AUTHORITY: Department of Harbours and Marine.

AGENT: Patrick Agencies, 443, Queen Street, Box 1460 T, G.P.O., Brisbane, Queensland 4001. Cables "Rikpat". Tel: 31-1871. Telex AA40260. After hours tel.: 78-1998.

BROOME, W.A.: 17.59 S. 122.14 E. (See Plan)

PORT LIMITS: All water enclosed in an East and West line drawn through Station Hill; a North and South line drawn through Fall Point; and an East and West line drawn 3 miles to South of Entrance Point and including the whole extent of Dampier Creek.

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: No resident Pilot. Inform Harbour & Light Dept. Fremantle ETA 2 weeks in advance. Pilot boards approximately 292° (T) distant 4.5 miles from Gantheaume Point.

RESTRICTIONS: Channel between Channel Rock and Middle Bank dredged to 17 ft. LWOST. Vessels of more than 15 ft. draft restricted to height of tide for arrival/departure. HWOST 27.5 ft. HWONT 17.2 ft.

MAX. SIZE: Draft 31 ft.

VHF: Limited facilities channels 6 and 16.

BERTHING: 2 berths. Outer berth max. length 612 ft., 32 ft. LWOST. Inner berth 28 ft. LWOST.

STEVEDORES: 3 gangs working 0800 hrs. – 2000 hrs.

CARGO GEAR: See "Melbourne".

TUGS: None.

FRESH WATER: Up to 100 tons available. Rate 10 t.p.h.

FUEL: Both diesel and furnace oil available, provide prior notice given to BP Agents.

REPAIRS: Not available.

TIME: GMT plus 8 hours.

GENERAL: Tides: Both ebb and flood in direction of line of jetty. Tide has apparent ebb period of 8 hours, flood 4 hours. Slack water 2.5 hours prior HW and LW. "State of Tide" signals ebb, flood, or slack, at masthead. At night red, green or white light – by day black ball, cone, or square. Signals indicate tide at jetty not in channel.

AUTHORITY: Harbour & Light Dept.

AGENT: Sub-agent of Patrick Agencies, Fremantle.

BUNBURY, W.A.: 33.19 S. 115.38 E. (See Plan)

DOCUMENTS:

Number of Crew Lists, 2 official (Forms M & S 11 and 2 flimsy copies).
Passenger Lists, 5.
Customs Documents:
- Last Port Clearance.
- Form 42A Ship's Stores consumed in Australia.
- Form 5 Manifest of Crew's Possessions.
- Loading Ports List.
- Ship's Master's Bond.
- Approved Identification Documents of all crew.
- Commonwealth Light Dues Receipt.
- State Tonnage Dues Receipt.

Health Documents, Smallpox Certificates and other forms handed to Master by Quarantine Doctor.
Manifests, 3.
Bills of Lading, 2.

PILOTAGE: Radio Harbour Master, Bunbury 24 hours and 4 hours notice. VHF Channel 16 – pilot boat and tug. Base set not manned continuously but pilot boat may be contacted 1 hour before arrival. Pilot boat painted white with black rubbing strip, black gunwhale, centre house with orange top. Word "Pilot" painted on sides. Pilot boards 1.5–2 miles from breakwater. Boarding area is with North Shore leads in line bearing 160°–340° and 1 mile from Breakwater Light seawards – no alternative area. Anchorage – main lighthouse bearing 195° distance 1.5–2 miles.

ANCHORAGE: Depth 7 to 9 fathoms. Anchoring not advised in stormy weather; safer to steam offshore.

RESTRICTIONS: 24 hour port but entry not generally carried out at night.

MAX. SIZE: Maximum length 585 ft., maximum draft 28 ft. 6 in. Also see "Bulk Cargo Facilities".

HEALTH: Quarantine inspection required if Bunbury is first Australian port. Quarantine inspection for Health Clearance – hours of inspection 0600–2200 hrs. Also see "Melbourne".

RADIO: Perth Radio.

TUGS: Two tugs available. Join vessel off berth. Ship's lines used if necessary. The tugs are normally manned from 0700 to 1600 hrs. weekdays and 0800 to 1200 hrs. on Saturdays. At other times overtime is charged.

BERTHING: Heavy shore mooring springs used.

BULK CARGO FACILITIES: One ore-loading berth 604 ft. in length. Conveyor system loading at 850 t.p.h.

One grain-loading berth 600 ft. in length. Conveyor system loading at 300 t.p.h.

New Inner Harbour: No. 1 Woodchip berth consists of 6 breasting dolphins fitted with flexible fender units, 2 mooring dolphins and a central shiploader platform and access jetty. The dolphins and platform are connected by steel walkways. Length of berth 381 m. Depth 12.2 m. Wood Chip bulk loader rated at 1,000 t.p.h. The facilities can accommodate vessels up to 44,800 tonnes and 11m. draft. During loading the vessel is warped back and forth alongside the shiploader.

Alcoa's Alumina Berth. Bulk loader rated at 2,000 t.p.h.

The approach channel depth to both berths is 12.20 m.

STEVEDORES: Week-days – ETA to be advised by 0600 hrs. for labour requirements on that day. Week-ends – ETA required by 0600 hrs. Friday.

MEDICAL: Medical attention available. Hospital facilities available. Smallpox vaccinations and valid certificates required.

TANKERS: One tanker discharge berth – draft 28 ft. 6 in.

DENSITY: 1025 – no relation to tide.

FRESH WATER: Readily available – 17 cents per ton.

FUEL: Furnace oil by pipe-line to jetty berths. Marine and light diesel by road and rail car delivery.

DEVELOPMENTS: The No. 2 General Purpose Berth is under construction and should be completed by the end of 1977. It will be suitable for ro-ro quarter ramp type vessels.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Preferably by crew.

CUSTOMS ALLOWANCES: Each crew member 200 cigarettes initially and thereafter as required in reasonable quantities. Wine and/or Spirits, open bottles of spirit on arrival not to exceed 1 quart and thereafter as required in reasonable quantities.
CARGO GEAR: Must comply with Australian Loading and Unloading Safety Regulations. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: Vice-Consul for Norway.
REPAIRS: Facilities available.
DRY DOCKS: Nil.
REPATRIATION: Facilities available.
AIRPORT: Light aircraft landing strip only.
TIME: GMT plus 8 hours.
HOLIDAYS: Days on which work cannot be performed: Good Friday, Christmas Day, Labour Day, Waterside Workers' Picnic Day, Anzac Day.
POLICE/AMBULANCE/FIRE: Emergency Number Bunbury 000.
TELEPHONES: Telephones placed on board free of charge: Rental $1.50 per week plus calls at cost.
DELAYS: Generally no delays.
AUTHORITY: Bunbury Port Authority.
AGENT: Sub-agent of Patrick Agencies, Fremantle.

BUNDABERG, Queensland: 24.45 S. 152.24 E. (See Plan)

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Compulsory. Radio not less than 24 hours ETA; VHF Channel 16.
Pilot boards 1 mile outside Fairway Beacon.
PORT LIMITS: The port limits are defined as the waters contained within a radius of 4 miles of South Head (Burnett Heads) Lighthouse, together with all navigable rivers communicating therewith, and the banks and the foreshores thereof.
DEPTHS: (LWOST) Channel 6.10 m.; Swinging Basin 6.10 m., Sugar Berth 7.62 m.; Oil Berth 7.62 m.. Keel clearance dependent upon Pilot, normally 0.9 m.
RESTRICTIONS: Length 177 m. maximum. Vessels not to pass out through sea reach on ebb. Oil tankers to navigate daylight only. Channel width 76 m.
RADAR/VHF: No radar service. Bundaberg Harbour Board office and craft may be contacted on VHF Channel 16.
TUGS: One tug, 22 tonnes bollard pull, owned by Howard Smith Industries, and one work boat of 4 tons bollard pull, owned by the Harbour Board, which is also used for pushing, are available, both fitted with VHF. Ship's lines or tug's lines are used, and no charge for tug's lines.
BERTHING: No. 1 Bulk Sugar Berth 800 ft. long. No. 2 Oil, Molasses, Aqua Ammonia, 790 ft. long.
SPECIALISED CARGO HANDLING FACILITIES: *Bulk Sugar Berth:* Loading by gantry at 1,000 t.p.h. Ship's crew work vessel along wharf as required during loading.
Bulk Molasses: Loading rate 280 t.p.h. No facilities for containers or roll-on/roll-off traffic.
Oil Berth: Facilities for discharge all petroleum products and aqua ammonia and loading molasses.
MEDICAL: Hospital facilities available.
TANKERS: White-oil tankers not handled at night. 10-inch lines. No slop discharge facilities. Oil tankers, discharge only. Molasses tankers, load only. Depth alongside tanker berth 25 ft. LWOST.
DENSITY: Average density about 1020.
FRESH WATER: Unlimited supplies available, delivered by hose 30 t.p.h. Cost 11 cents per ton.
FUEL: All grades available, 24 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary, but available.
OPENING/CLOSING HATCHES: By crew.
CARGO GEAR: No additional local regulations. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None.
REPAIRS: Almost all types of deck and engine repairs possible.
REPATRIATION: Facilities exist.
AIRPORT: Airport 2 miles from city serviced by regular internal airlines.
TIME: GMT plus 10 hours.
HOLIDAYS: Normal Queensland holidays observed but cargo worked regardless of holidays.
POLICE/AMBULANCE/FIRE: Dial 0–000 from the port.
TELEPHONES: Telephone connection to be placed at tanker berth.
DELAYS: Vessels normally berth within an hour each side of high water, unless of shallow draft when they may berth at low water. Vessels always sail within an hour of high water on flood tide only. No delays during loading, discharging or bunkering.
DEVELOPMENTS: The Harbour Board have plans to alter the main channel to avoid a rocky outcrop, and to widen and deepen the entrance channel and swinging basin. This dredging is expected to be completed in 1977.
The Sugar Board have commenced alterations to No. 1 (Sugar) Berth, to lengthen the wharf and install a travelling loading gantry. This work is expected to be completed early in 1977 in time for the sugar export season mid-year.
AUTHORITY: Bundaberg Harbour Board.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

BURNIE, Tasmania: 41.03 S. 145.55 E. (See Plan)

PORT LIMITS: Southward of a line drawn from the Eastern Island Breakwater Light, to the Round Hill Lighthouse on the Eastern side of Emu Bay.
APPROACHES: Port situated on Western shore of Emu Bay and easy of access. Bay is two miles wide and one mile deep facing in a Northerly direction. The bottom is sand and clay interspersed with patches of reef and rock, particularly in the Southeastern sector of Bay. Vessels may anchor on main leads in vicinity of Pilot boarding ground, but it is not advisable remain at anchor during strong on-shore winds. Port protected by two breakwaters: the inner, founded at inner end of Blackmans Reef, lies in a 110° direction and is 1,250 ft. long. The other, an island structure 1,600 ft. long and protecting the port from Easterly weather, lies in a 130°/310° direction, with its N.W. end bearing 045°, 700 ft. from the S.E. end of the inner breakwater.
DOCUMENTS: also see "Melbourne". (Marine Board only): Inward Manifests to be lodged on arrival. Agents supply Manifests and non-negotiable copy Bills of Lading to Customs for checking prior to vessels arrival.
PILOTAGE: Prior advice through local Agents, ETA by radio telegraphy through Melbourne Radio (VIM) or Hobart Radio (VIH) to Marine Board Burnie. Immediate advice VHF Channels 16 and 12.
Pilot launch – 46 ft. white launch with buff cabin, name "Miowera". International signals apply. Boarding area on main harbour leads 210° (T) with Round Hill Pt. Lighthouse bearing 155° (T). Ladder 5 ft. from water, man ropes, no boat rope.
ANCHORAGES: See "Approaches".
RESTRICTIONS: Vessels up to 31 ft. draft, no restriction. Maximum length 814 ft. 24-hour service, weather permitting.
MAX. SIZE: (See "Restrictions"). Tankers at Island Breakwater to 36 ft. draft at all states of tide.
HEALTH: Pratique automatic when from other Australian ports. Otherwise notify local Agent.
RADIO: "Radio Hobart" (VIH).
TUGS: Tug(s) join East of Island breakwater. Usually lashed alongside with tug's lines (no extra charge). When on towing duty, usually ship's line.
BERTHING: Vessels equipped with vegetable fibre ropes or bare spring wires required to use shore springs.
Quayage, Sheds and Depths.
Ocean Wharf. On South side of inner breakwater. 1,000 ft. long, 91 ft. wide. Dredged depth 34 ft. for 600 ft. length, shoaling to 25 ft. at inshore end. Stern loading facilities at inshore end.
McGraw Pier, 790 ft. long and 145 ft. wide (added to Emu Pier, the original concrete breakwater). On North side is 700 ft. of effective berthage with dredged depths ranging from 30 ft. for 500 ft. length, shoaling to 21 ft. at inshore end. A new stern loading ramp now operating at Susbore North McGraw. Apron width is 25 ft. On South side 600 ft. of effective berthage with dredged depths ranging from 27 ft. to 18 ft. at inshore end. One crane of 12-ton capacity, with outreach of 70 ft.
Jones Pier, 150 ft. South of McGraw Pier, is a wooden pile structure 700 ft. long and 100 ft. wide. On North side 500 ft. of effective berthage with dredged depths from 25 ft. to 18 ft. inshore.
Bulk Berth. 900 ft. long with 700 ft. of effective berthage. This berth incorporates a bulk loader with a capacity of up to 1,270 t.p.h. The berth is also suitable for general cargo operations.
Ferry Terminal. Is 270 ft. long and 115 ft. wide. Vessels of up to 650 ft. may berth. The wharf is traversed by a 40-ton portal crane with a 25-ton auxiliary hoist. The crane may be hired when not required for terminal operations. Arrangements for this to be made with the Harbour Master. The stern loading ramp has a width of 28 ft. permitting two lines of traffic. The axle loading of the wharf is 50 tons. The berth is dredged to 31 ft.
New Jones Pier South – berth is 560 ft. long, effective length 850 ft. Apron width to shed 100 ft. Dredged to 31 ft. overall.
BULK CARGO FACILITIES:
Roll on/Roll off facility at Southern Ferry terminal, and at West end of Ocean Wharf.
Lift on/Lift off facility of 40 tons at Ferry Terminal as above.
Conveyor Loader at bulk berth for export of zinc, lead and copper concentrates to 1,270 t.p.h.
Inward bulk berth and crane at South McGraw Pier.
Sulphuric Acid loading facility at Island Tanker Berth, with rate of 1,000 t.p.h.
STEVEDORES: Labour to be ordered (1) by 1500 hrs. for following day (weekdays), (2) by 1300 hrs. Friday for Saturday and Sunday, (3) by 1900 hrs. Sunday for Monday.
RADAR/VHF: No radar service. Port equipped with VHF, R/T operating International Maritime Bands. Pilot vessel, tug, and other floating plant similarly equipped.
MEDICAL: Notify Agent prior arrival of extra requirements other than pratique. General Hospital 0.5 mile from port. Current smallpox and cholera revaccinations arranged by prior notice.
TANKERS: Tanker Berth is 278 ft. long and 100 ft. wide, sited on South side of Island Breakwater. 37 ft. of water in this berth, which will accommodate vessels of up to 650 ft. in length. Diameter of lines are 10 in. No residue discharge facilities. 1 berth, maximum draft 36 ft.
DENSITY: 1,025 to 1,028.
TIDES: Spring Rise, 10.4 ft.; Neap Rise, 9.3 ft.; MTL, 6.2 ft.; HHWS, 13.0 ft.; LLWS, 0.0 ft.
FRESH WATER: All wharves – hose from wharf hydrants. Rate adequate – cost 12c per ton.
FUEL: Diesel and Heavy fuel available from road tankers.

FIRE PRECAUTIONS: Normal. Twenty-four hour ferry service to be maintained to tanker berth.
GANGWAY/DECK WATCHMEN: Watchmen commonly used. Penalty rates apply on weekends and holidays.
OPENING/CLOSING HATCHES: Stevedores will close hatches.
SHIP CERTIFICATES:
Safety Construction.
Safety Equipment.
Safety Radio Telegraphy.
Load Line.
CUSTOMS ALLOWANCE: Tobacco per man on arrival 200 cigs. or 8 oz. tobacco. 120 cigarillos, 40 cigars or 300 biddies every ten days. 40 cigarettes or 1.6 oz. per day per man.
Wine: on arrival part bottle spirits. Every ten days, 2 bottles beer and one bottle wine per day. Every ten days one bottle spirits per man.
CARGO GEAR: Australian Navigation (Loading & Unloading) Regulations apply.
IDENTIFICATION CARDS: Required for Pakistan and Chinese crew only. Also see "Melbourne".
CONSULS: Nil.
REPAIRS: Limited repairs carried out. The Emu Bay Railway Company have a foundry and machine shop.
REPATRIATION: On crew member signing off Agent requires passport, identification card. Agent handles repatriation details and notifies Immigration Department, Hobart, re movements of crew member.
AIRPORT: Daily services: 11 miles distant.
TIME: Local time is Australian Eastern Standard time, i.e. GMT plus 10 hours. Tasmanian Summer Time applies. Dates of operation published in Australian Notices to Mariners.
HOLIDAYS: Cargo work performed on all holidays except Christmas Day, Good Friday, WWF Picnic, Anzac Day, Labour Day.
POLICE/AMBULANCE/FIRE: Police: 31.1444; Ambulance, 31.2111; Fire 31.1155.
TELEPHONES: Telephones are available at all wharves, through Marine Board.
AUTHORITY: The Marine Board of Burnie.
AGENT: Sub-agent of Patrick Agencies, Melbourne.

BUSSELTON, W.A.: 33.38 S. 115.20 E.
(PORT CLOSED 1973)

This port is closed to commercial shipping and it is unlikely that the jetty will be re-opened.
CERTIFICATES/DOCUMENTS/HEALTH/CARGO GEAR: See "Melbourne".
PORT LIMITS: Bounded by lines starting from Quindalup Jetty, and extending due North 3 miles; thence to a point 3 miles due North from Lockville Jetty, thence to a point on the shore 20 chains North-eastward from the entrance to Vasse Inlet.
PILOTAGE: No Pilots.
ANCHORAGE: West of jetty in Geographe Bay about half mile from jetty. Depth at anchorage 30 ft.
RESTRICTIONS: Max. safe loaded draft 21.5 ft. Winter (May to September) or 22 ft. Summer.
BERTHING: 2 berths. Depths 24 ft. 8 in. and 23 ft.
FUEL/TUGS/REPAIRS: Not available.
FRESH WATER: Available at jetty.
TIME: GMT plus 8 hours.
AUTHORITY: Harbour & Light Department, Fremantle.
AGENT: Sub-agent of Patrick Agencies, Fremantle.

CAIRNS, Queensland: 16.55 S. 145.47 E.
(See Plan)

CERTIFICATES/DOCUMENTS/HEALTH/CARGO GEAR: See "Melbourne".
PORT LIMITS: Commencing at Cape Grafton, thence by a line bearing North (magnetic) two miles, thence by a line bearing North 82° West (magnetic) to Taylor Point, thence by the HW line on the mainland to the point of commencement, including all rivers, creeks and navigable waters within the above limits.
PILOTAGE: Arrangements are made by ship's Agent with the Harbour Master. Location of boarding is outside the Fairway Beacon, 7 miles from port.
APPROACHES: Through Grafton Passage, which is 21 miles long and 5 miles wide, and free of any encumbrances, and is lighted by a group flashing light on Fitzroy Island which is visible in clear weather for a range of 29 miles.
Channel: 6.25 miles long, 250 ft. wide, 27 ft. LWOST – defined by beacons 600 ft. apart spaced at intervals of approximately 3,000 ft. and 4,000 ft.
After passing through the channel, the inlet widens to 1,500 ft. which gives a commodious swing basin for ships of 900 ft. length This inlet runs for five miles, carrying up to 30 ft. of water for at least 2.5 miles.
PRATIQUE: Available 24 hours per day, 7 days a week.
RADIO: VHF radio-telephone service is situated at the Piermasters Office, No. 2 Wharf, and operates a service from 0800 hrs. to 1700 hrs. with "out of hours" transmission being every hour, on the hour.
Both the launch and the dredge *Trinity Bay* have VHF and two-way radio. Channel 16.
TUGS: One tug with a 12-ton bollard pull is based in the port and is operated by Moreton Tug and Lighter Co. Ltd.
BERTHING:

	Depth alongside:
Nos. 1 to 5	28 ft. LWOST – 10 ft. from wharf face
No. 6	28 ft. LWOST – 10 ft. from wharf face
No. 8	30 ft. LWOST – 10 ft. from wharf face
No. 10	30 ft. LWOST – 10 ft. from wharf face
No. 12	35 ft. LWOST – 10 ft. from wharf face

BULK HANDLING FACILITIES: *Sugar Loading Terminal:* at No. 12 Wharf. Boom of loader at horizontal working position 44 ft. 6 in. above HW level, but boom is capable of being lifted to a vertical position. Gross handling rate for loader – 850 t.p.h.
Bulk Molasses Terminal: Total capacity of 18,700 tons with pipe-line connection to wharf. Loading rate of 300 t.p.h.
Bulk Tallow Tanks: Rear of No. 6 Wharf. Two tanks, one with a capacity of 300 tons and one with a capacity of 800 tons. Loading rate of 55 to 60 t.p.h.
Container Handling Facilities: There are facilities at No. 6 Wharf for handling containerised and unitised cargoes, including a 25-ton stiff-legged derrick crane and an adequate assembly area adjacent to the wharf.
STEVEDORES: Port quota 80 men.
WATER: Abundant fresh water is available on all wharves. Rate of supply is 70 t.p.h.
FUEL: Oil bunkering facilities are available at No. 10 Wharf. No. 8 Wharf is an alternate oil berth. Nos. 8 and 10 Wharves are connected by pipe-line to adjacent oil tank farm installations.
DRY DOCK: A dry dock, 200 ft. long and 40 ft. wide accommodates vessels up to 190 ft. in length. De-watering rate is 4,000 to 5,000 gallons per minute. Draft of vessels which can be accommodated is equivalent to the height of tide at the particular time.
TELEPHONES: There are 14 plug-in points available to shipping from Nos. 1 to 6 Wharves, and No. 8 Wharf.
AUTHORITY: The Cairns Harbour Board.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

CAPE CUVIER, W.A.: 24.13 S. 113.20 E.

This port is now incorporated in the Port of Carnarvon the limits of which have been extended as follows:—
"A line due West for 4 nautical miles from a point on the mainland in Lat. 24° 10′ S. and Long. 113° 26′ 4.5″ E., and thence in a S.S.W. direction to Cape Ronsard at the North End of Bernier Island" and then as for Carnarvon to the starting point.
OPERATORS: Texada Mines.
DOCUMENTS:
1 Form 5 Personal Property Declaration.
1 Form 42A Stores List.
1 Form AQ 360 Health Form.
2 Forms (M & S11) Crew Lists (prescribed form).
1 Form C & E 886 Previous Ports of Call.
APPROACHES: Red Bluff about 12 miles North of Cape Cuvier can be picked up by radar at a distance of about 20 miles. Cape Cuvier is easily identified by large white salt hill.
PILOTAGE: Pilots will board approximately 200° 1.5 miles from jetty.
Pilot will remain on board after mooring and until vessel is loaded or should weather deteriorate until vessel anchored.
Notice for Pilots is by 'Shipserv' message to Harbour Master, Carnarvon 48 and 24 hours prior to arrival.
Pilots board by tug or workboat.
ANCHORAGE: Recommended anchorage is in position with the jetty bearing approximately 200° (T) at a distance of 1.5 miles. Depth at anchorage is about 15 fathoms. 3 cables off the shore, the depth is about 9 fathoms. Holding ground is good.
RESTRICTIONS: No berthing at night.
MAX. SIZE: Vessels of 65,000 d.w.t. call on a regular basis. Depth alongside is 52 ft. (15.85 m.).
RADIO: Carnavon Radio.
PRATIQUE: Radio pratique is not available.
TUGS: One large and one small tug available.
BERTHING: Vessel is moored to four buoys for'd and four buoys aft, and mooring is attended by mooring crew. Vessel is required to have available five nylon ropes for'd and five aft, in each case three of the ropes should be 300 m. in length and the remaining two ropes should be 200 m. in length.
Berthing is not carried out in adverse weather causing a swell of over 5 ft. in height, nor if wind is from either a North or South direction.
Due to adverse weather vessels may have to wait as much as 24 days to complete loading.
STEVEDORES: Texada Mines.
DENSITY: 1025.
FRESH WATER: Not available. Due to possible loading delays caused by adverse weather it is recommended that vessels arrive with all fresh-water tanks full.
FUEL: Not available.
DEVELOPMENTS: A new warehouse under construction for storage of potash. New conveyor belt for loading potash operational.
WATCHMEN: No shore watchmen available.
HATCHES: To be opened/closed by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes in opened carton, or 0.25 lb. cigars, or 0.5 lb. tobacco, and one opened bottle spirits per crew member.

CARGO GEAR: Not required. Salt loading is by conveyor belt.
REPAIRS: Not available.
DRY DOCK: None.
REPATRIATION: Road connection to Carnavon, which is 65 miles distance from Cape Cuvier, thence air connection with Perth where international flights available.
AIRPORT: Private airfield only, about 10 miles from port of Cape Cuvier.
TIME: GMT plus 8 hours.
TELEPHONE: Available in Harbour Master's office.
SHORE LEAVE: Allowed. A bus connection is available, leaving Cape Cuvier at 0730 hrs. for Carnavon, and returning with departure from Carnavon at 1530 hrs.
GENERAL: Port is gazetted under Western Australian legislation and controlled under Ports and Harbours Regulations. Mooring and loading facilities operated by Texada Mines.
Loading is carried out by Texada Mines Personnel.
AUTHORITY: Harbour & Lights Department, Fremantle.
AGENT: See "Fremantle".

DAMPIER: W.A.: 20.38 S. 116.45 E. (See Plan)

PORT LIMITS: A vessel is considered to be an arrived vessel from the time of crossing the quarantine line, which runs due East from Courtenay Head Lighthouse.
ARRIVAL INFORMATION: *Iron Ore:* Every vessel intending to load a cargo of iron ore at Dampier shall on departure from the last port of call cable the following information, addressing the message **Shipserv Hamiron Dampier.**
(a) ETA, quantity of cargo required, deepest departure draft, and distance between keel and hatch coaming.
Example: Name of ship, ETA pm20/4, 108000lt, 54.0 ft., 79.2ft.
(b) 7 days before intended arrival at the Port confirmation or any variation to the above and indicate loading order by hatches of the product to be lifted.
Example: Name of ship, ETA 1000/4, 108000lt, 54.0ft., 79.2ft., 1/10000 Fines, 7/10000 Fines, 9/10000 Fines, 2/10000 Lump, 4/10000 Lump, 6/10000 Lump, 3/8000 Fines, 5/10000 Fines, 2/8000 Lump, 6/6000 Lump, 7/5000 Fines, 3/8000 Fines, Trim 3000 Fines. Total 108000lt.
Vessels arriving to discharge general cargo: (a) Owners are required prior to accepting cargo for Dampier, to submit a copy of the vessel's General Arrangement Plan for the purposes of ascertaining the vessel's acceptability in sufficient time to permit recommendations to be made on the positioning and stowage of the cargo.
(b) Prior to departure from the loading port, Masters shall forward by first class air mail a copy of the vessel's cargo plan showing the nature, description and weight of the cargo to be discharged at Dampier.
The documents referred to in (a) and (b) above shall be forwarded to Hamersley Iron Pty. Limited, P.O. Box 21, Dampier marked "Urgent ships papers".
Arrival Advices: Every vessel intending to discharge cargo at Dampier shall on departure from the loading port or 7 days before arrival, whichever occurs first, and cable the following information addressing the message "Shipserv Hamiron Dampier".
ETA, quantity and nature of cargo to be discharged, stowage and the deepest arrival draft.
Example: Name of ship, ETA am/4, 4700lt. General 1/1200 2/2000, 3/1500, 22 ft.
ARRIVAL ADVICE: Dampier is a first port of entry and all ships bound for this port are to radio through the normal recognised coast stations, addressing their messages "Pilharb Perth" and prefixing the message "Shipserv".
(a) In the case of vessels arriving from overseas.
(i) 10 days before intended arrival at the port ETA and whether the port is the first port of call in Australia.
(ii) 7 days before intended arrival at the Port, confirmation of any variation of the advice given pursuant to paragraph (i) above including in the message the forward and after arrival draft.
(b) In the case of all vessels, cable "Shipserv Pilharb Perth".
(i) 72 hours before intended arrival at the Port advising ETA at the Pilot boarding ground East of Malus Island, including in the message if not previously given the forward and after arrival draft.
(ii) 48 hours before intended arrival confirmation or any variation of ETA.
(iii) 24 hours before intended arrival confirmation or any variation of ETA.
APPROACHES: From the 100 fathom line in Lat. 19° 20' S, Long. 116° 20' E, a channel 15 miles wide, leading 157° was surveyed by the Royal Australian Navy in 1963 and found to be clear of dangers. This approach is recommended for ships arriving from the North and N.E. Ships arriving from the West pass North of Tyrell Rocks situated to the N.W. of the Monte Bello Islands and then should pass not less than five miles to the North of Rosemary Island on the Latitude of Legendre Island Light. When in a position 6 miles West of Legendre Island Light, course should be altered to the S.W. to pass into the Archipelago.
PILOT STATION: The Pilot boarding area commences from a position bearing 090° distance 1.5 miles from Courtenay Head Light, thence 195° distance 2 miles, thence 090° distance 1.7 miles, thence 015° distance 2 miles, thence 270° distance 1.7 miles to point of commencement. Pilotage is compulsory for all vessels entering, leaving and manoeuvring within the Port except those of a tonnage of 150 tons or less and those whose Masters hold a valid pilotage exemption. Pilotage services operate from the pilot cutter "Pilbara Star".
MAX. SIZE: (Bulk Berth) Length 1,030 ft.; Draft 56 ft.; Beam 156 ft.
HEALTH: In the case of all vessels arriving from overseas following information shall be sent to port health authorities between 12 and 24 hours before arrival, addressing message "Port Health, Pilharb Perth" and prefixing the message "Shipserve". (Also see "Melbourne").
Post Office closes down from 1700 hrs. Friday to 0900 hrs. Monday. Vessels arriving at a weekend should ensure that health messages are received before 1700 hrs. Friday.
(i) the expected hour and date of arrival of the vessel.
(ii) Confirmation that the Master has individually inspected all persons on board within 24 hours of arrival and that there are no cases of febrile illness (high temperature or fever) or skin rashes on board.
(iii) Particulars of any cases of illness on board.
(iv) Confirmation that all persons on board are satisfactorily vaccinated against smallpox and in possession of valid Vaccination Certificates.
(v) A request to cross the Port Quarantine line.
(vi) On receipt of quarantine message Harbour Master will advise anchorage position if vessel not berthing on arrival.
(vii) Inspections may be carried out at the jetty or at anchorage at the discretion of the Quarantine Officer.
(viii) Rat guards are to be maintained on all mooring lines while vessels are berthed in Dampier Harbour.

RADIO:

Call Sign	Dampier Port control
Frequency	Channels 16, 14, 13, 12, 8 and 6.
Channels	13, 12 and 6 are Port working frequencies.
Channels 14 & 8	Can be used vessel to vessel.

A continuous watch is maintained on VHF Channel 16. All vessels approaching the Port or at anchor must maintain a continuous watch on this frequency.
TUGS: Pilbara Harbour Services Pty. Limited own and operate the tugs and lines launches which are available to shipping at all hours.
The following craft are available to assist in berthing and unberthing and for hire:

"Pilbara Mars"	1,700 h.p.	Bollard Pull	27 tons
"Pilbara Comet"	2,400 h.p.	Bollard Pull	33 tons
"Pilbara Neptune"	1,900 h.p.	Bollard Pull	28 tons
*"Pilbara Jupiter"	2,600 h.p.	Bollard Pull	42 tons

(*Delivery June, 1976)
Three (3) Lines Launches
Two (2) Workboats – 400 h.p.
MOORING: Mooring lines are taken ashore by linesboat. Vessels using heavy wire ropes are requested to have the ends terminated with a 9 m. (30 ft.) rope spring finished with a standard eye for placing over the bollards and slip hooks.
All mooring ropes and wires to have a 6 m. (20 ft.) tail of light rope spliced into the eye to facilitate the transfer from the boat to the dolphin.
Vessels shall be ready in all respects to commence loading on completion of mooring, hatches cleaned and opened.
LOADING IRON ORE: Red, green and white list lights, clearly visible to the shiploader operator are recommended fittings on all vessels loading iron ore. A fixed white light shall indicate the vessel is upright.
Masters are cautioned the loading of iron ore is carried out by draft. Frequent "on the run" draft checks between hatch changes should be carried out. Whilst shiploading sequences are equipped with weight scales, these figures are to be used only as a guide and reference to them will not relieve the Master of the responsibility of adequately maintaining draft checks and supervising the loading accordingly.
Final confirmation of tonnages on board will be the result of a draft survey carried out by the Master and the Company's surveyor.
Ballast shall be adjusted to ensure at high water a minimum clearance of 0.64 m. (2 ft.) is maintained between the vessel's structures and the shiploader. Ballast to be discharged at a rate which prevents disruption to loading, final trimming and completion.
STOWAGE FACTORS: The following stowage factors are provided for guidance:

Lump ore	16.0 cu.ft./ton	Fine Ore	15.0 cu.ft./ton
Low Grade Ore	16.5 cu.ft./ton	Pellets	18.5 cu.ft./ton

PARKER POINT ORE JETTY: The ore jetty consists of a tubular steel pile structure carrying a deck and rail traverse of a slewing boom shiploader.
Eight multi-spring pile dolphins fitted with hardwood facings are situated clear of the ore jetty structure and vessels berth port side alongside and moor to these dolphins.
Iron ore is the only product handled and following are principal dimensions:

Length of jetty:	268.9 m. (882 ft.)
Depth of water alongside:	15.5 m. (51 ft. at ISLW)
Travel of shiploader:	166.2 m. (545 ft.)
Radius of ore delivery from fender Facing	23.2 m. (76 ft.)
Ht. under side boom above I.S.L.W.	21.64 m. (71 ft.)
Total length of fendering, No. 1 to No. 8 dolphins	354.8 m. (1,164 ft.)
Rated capacity of shiploader:	6,000 long t.p.h.

The ore jetty is connected to the East Intercourse Island departure channel by a 152.4 m. (500 ft.) wide departure channel dredged to 14 m. (46 ft.) ISLW in 1969.

Parker Point ore loading facility accommodates vessels up to 130,000 d.w.t.

The maximum departure draft from this berth is 15.24 m. (50 ft.) on certain tides. However, it may be necessary for vessels of this size with deeper draft to part load and complete at East Intercourse Island.

EAST INTERCOURSE ISLAND ORE JETTY: The ore jetty consists of a tubular steel pile structure carrying a deck and rail traverse of a slewing boom shiploader.

Nine multi-spring dolphins fitted with hardwood facings are situated clear of the ore jetty structure and vessels berth starboard side alongside, mooring to these dolphins.

Length of jetty 341.4 m. (1,120 ft.), depth of water alongside 18.59 m. (61 ft.) at ISLW. Travel of shiploader 237.8 m. (780 ft.). Radius of slew of loader boom from fender facing 25 m. (82 ft.). Ht. underside boom at ISLW 23.55 m. (77 ft. 3 in.). Total length of fendering No. 1 to No. 9 dolphins 429.8 m. (1,410 ft.). Rated capacity of shiploader: 7,500 long t.p.h.

The ore jetty is connected to the open sea by a 167.6 m. (550 ft.) wide departure channel dredged to 15.85 m. (52 ft.) ISLW.

East Intercourse Island ore loading facility accommodates vessels up to 150/160,000 d.w.t. The departure draft from this berth is 17.07 m. (56 ft.) however a slightly greater draft may be permitted on certain tides.

SERVICE WHARF: All general cargo is received over this facility and vessels are acceptable up to a max. draft of 7.69 m. (25 ft.).

The wharf consists of steel sheet pile cells constructed in water of surrounding depths of 7.01 m. (23 ft.) below ISLW.

A berthing basin 243.8 m. (800 ft.) long and 38.10 m. (125 ft.) wide has been dredged to a depth of 8.23 m. (27 ft.) ISLW on the Western side.

The wharf is 69.5 m. (228 ft.) in length and faced with piles on which are secured rubber fenders. Mooring buoys are positioned off the N.E. and S.W. extremity of the wharf and head and stern lines are secured to these buoys.

Generally ships berth portside to this facility and normal discharge is carried out by 3 gangs using ship's own gear.

Vessels are required to berth ready in all respects to work cargo with hatches open and cargo gear rigged.

On completion, vessels may be required to vacate the berth and cover hatches, stow gear, etc., at anchor.

Tankers delivering oil products are accommodated at this wharf.

MISTAKEN ISLAND SALT BERTH: The salt berth owned and operated by Dampier Salt Limited consists of a tubular steel pile approach structure carrying conveyor belt to a fixed position, cantilever shiploader.

7 multi-spring pile mooring dolphins are situated clear of the shiploader platform, ships berthing starboard side of these dolphins.

Due to the fixed nature of the loader, ships have to be warped along the line of dolphins, to bring each hatch in sequence under the loading boom.

This wharf was built by Dampier Salt Limited, for the handling of salt from their salt pans, situated 6.4 km. from the wharf. The following are the principal dimensions:

Total length of fendering No. 1 to No. 7 dolphins	358.2 m. (1,175 ft.)
Depth of water alongside:	12.5 m. (41 ft.)
Outreach of loader boom from line of fendering:	18.29 m. (60 ft.)
Ht. under side boom at ISLW:	19.51 m. (64 ft.)
Rated capacity of shiploader:	2,800 long t.p.h.

MEDICAL: A doctor is permanently resident at Dampier and a modern 41-bed General Hospital is situated in the town site.

STEVEDORES: Three gangs available (use ship's gear).

CARGO GEAR: See "Melbourne".

FIRE PRECAUTIONS: 1 firefighting tug.

FUEL/WATER/REPAIRS: Fuel for ships' bunkers is not available.

A limited supply of fresh water is available in an emergency.

Stores and provisions can be arranged. For large orders Masters are recommended to cable their Agent giving 7 days notice of their requirements.

Ship repairs of a limited nature can be carried out at the Port. (Note: Port of Dampier By-Laws No. 23).

A 500-ton slipway is available for slipping small craft and tugs.

GANGWAY/DECK WATCHMEN: Crew.

OPENING/CLOSING HATCHES: By crew.

SHIP CERTIFICATES: See "Melbourne".

REPATRIATION: Limited facilities available.

AIRPORT: Twice-daily service to Perth, and twice-weekly service to Darwin. Karratha Airport is 15 km. from the port.

TIME: GMT plus 8 hours.

TELEPHONES: Ship-to-shore telephones are available at all berths for ship-to-shore communications. Ships and jetty telephones are barred access to STD and trunk line facilities.

SERVICES: None available.

AUTHORITY: Pilbarre Harbour Services Pty. Ltd., Dampier.

AGENT: Sub-agent of Patrick Agents, Fremantle.

DARWIN, N.T.: 12.28 S. 130.51 E. (See Plan)

LOCATION: The port is located in a sheltered land locked position on the Eastern side of the harbour and is accessible by vessels of draft up to 40 ft. (12.19 m.).

DOCUMENTS:

2 Crew Lists, Form M & S 11 (3 at outports).
5 Passenger Lists, Forms M. 308 and 309.
1 Port of call list.
3 Barber's stocks and stock in ship's shops and canteens (Form 5) continuation on the back Form 5 AA.
1 List of customable articles, Form 5 (crew).
3 Return of goods of barber's stock, etc., Form 5 AA.
3 Stores List, Form 42 A.
1 Clearance from last port.
Ship's log.
1 Derat. Certificate.
1 Light dues if paid previously.

PILOTAGE: Notice of arrival and requirement of a Pilot should be given 24 hrs. before the expected time of arrival at Channel Rock Buoy and should be addressed "Shipserve Harbour Master Darwin". This arrival time should be amended or confirmed 2 hrs. before arrival at the Channel Rock Buoy. During normal port working hours (0800 to 1621 hrs. Monday to Friday) the aforementioned 2 hrs. notice may be given direct to Harbour Control on the 156.80 Mc/s Band VHF.

Boarding ground is Channel Rock Buoy where vessels embark Pilot or anchor to await Pilot. Usual safety precautions are to provide a lee and have pilot ladder with manropes on lee side.

Notice of intention to depart shall be given to the Harbour Master, not less than 6 hrs. before the time of the intended departure.

The vessel shall not depart before the time specified without the permission of the Harbour Master.

When Darwin is the first port of entry, include in message: "Wharfside Clearance Requested".

VHF: Port operations are controlled by VHF radio, call sign "Darwin Harbour", on the following frequencies:

Channel 16: 156.80 mHz: Call and safety.
Channel 12: 156.60 mHz: Working Channel with tugs.
Channel 6: 156.30 mHz: Working Channel General.

A continuous radio watch is kept from 0800 to 1200 hrs. and 1300 to 1621 hrs. Monday to Friday, except on public holidays.

Outside these hours, a watch is kept when a vessel is expected and the pilot vessel is underway.

ANCHORAGE: Within harbour, clear of charted cable and prohibited anchorage areas. Depths mostly average 10 fathoms.

RESTRICTIONS: Radio pratique may be granted on application to Department of Health. This means vessel may be berthed, Doctor and Customs then board and clearance is given alongside. Berthing may be restricted by tide conditions and draft but necessary for Master and Agents to contact Harbour Master when ETA is known; Agent then notifies vessel as to when berthing will take place.

MAX. SIZE: *Fort Hill Wharf* – length 350 ft., least depth alongside 24 ft. *Note.* The water shallows abruptly immediately inside the line of the inner piles.

Stokes Hill Wharf – outer face length 960 ft., least depth 32 ft. Will take ships up to 800 ft. Inner face length 700 ft., least depth 15 ft.

Bulk Iron Ore Wharf – length (dolphin berth) 922 ft., least depth 38 ft.

Also see "Berthing".

HEALTH: Darwin is a First Port of Entry. The Quarantine Anchorage is shown on Chart AUS 28. Vessels should avoid anchoring near the sunken wreck marked "foul", situated one cable Westward of the Quarantine Buoy. (Under the Quarantine Regulations, vessels are required to inform the Director of Health by radio of the state of health on board the vessel, and are advised to request wharf-side clearance.)

Application direct to Health Department providing vessel healthy, if granted will enable berthing on arrival and clearance alongside providing also that berth available. A vessel arriving from another Australian port with pratique granted is not required take any further action. Should vessel have suspected fever or disease on board it should be reported by radio to Health Department who take whatever action necessary. Also see "Melbourne".

Vessel carrying a qualified Medical Officer may be granted radio pratique. There is a Quarantine Station with accommodation for forty people, at East Arm, accessible by boat from the Quarantine Anchorage.

RADIO: Darwin Radio, call sign VID 6204 kc/s. 2182 kc/s. R/T 500 kc/s.

RADAR/VHF: No port radar; VHF Channel 16 contacts Harbour Master's office and pilot vessel.

TUGS: Join off berth. Charge made if tug's towing line is used.

A tug service is provided by Coastal Tug and Barge Company. This company also provides a boat for running mooring lines.

The tug is m/v *Goyder* which is 1,200 h.p.

Transport to vessels at anchor can also be arranged through this company.

BERTHING: Some tide restrictions during springs particularly Fort Hill berth.

Iron Ore Wharf: 922 ft. in length. Can accommodate vessels up to 750 ft. (228.6 m.). Depth alongside 38 ft. (11.58 m.). Height of deck above datum 34.5 ft. (10.15m.).

Travelling iron ore loader on wharf with an outreach of 46 ft. (14.02 m.). Gross loading rate 1,000 t.p.h. Length of travel 450 ft. (121.9 m.). Also used as a tanker berth, and is fitted with a 6 in. light marine diesel line, an 8-in. distillate line, a 12-in. black oil line, a 10-in. white spirit line, and a 4-in. line for discharge of LP Gas.

Grain Sorghum could be loaded at this berth utilising the iron ore loading equipment. Public and ships telephones are provided on this wharf.

Stokes Hill Wharf: General cargo: container and passenger ships

berth on outer face, small general cargo and fishing vessels berth on inner face.

Length of berth 961 ft. (291.21 m.). Height of deck above datum 34.5 ft. (10.62 m.), outer face, 31 ft. (9.45 m.) inner face. Depth on outer face 32 ft. (9.75 m.); inner face 15 ft. (4.75 m.). This wharf is connected to the North Australian railway system. The maximum axle load permitted on this wharf is 10 tons. Shore power is available from four outlets on the main face and three on the inner face. The supply is 60 amps, 3 phase, 415V 60 cycles AC.

There are two cargo handling and transit sheds on the wharf, also waterside workers' amenities, first-aid room and canteen, Harbour Master's, Customs and Stevedores' Offices.

Public telephones and direct lines to taxi-cabs are installed on this wharf and ships' telephones are available.

Fort Hill Wharf: "T" jetty, 350 ft. (106.66 m.) in length. Least depth of 24 ft. (7.32 m.). Height of deck 32.25 ft. (10.51 m.). On the inner face two berths of 160 ft. (48.77 m.) with 16 ft. (4.88 m.) of water. Mooring buoys are situated 250 ft. (76.2 m.) from each end of Fort Hill Wharf enabling vessels of up to 600 ft. (182.88 m.) to be berthed according to the draft and tide. The berth is used mainly for bulk cargoes, timber, and discharge of bulk cement by pipe-line direct to a cement storage tank near wharf approach. It is also a tanker berth having pipe-lines of 6 in. for gas oil, 8 in. white spirit and 12 in. black oil. Shore power is available as per Stokes Hill Wharf. There is a public telephone on this wharf and a ship's telephone can be connected.

Priorities:

Navy: Bunkers only.
Passenger Ships: one day.
Freezer Ships: two days.
A.N.L. Container Vessel and State Shipping Service vessels: two days.
Tankers: Priority at Fort Hill Wharf.
Tankers: Priority at Ore Berth if no Ore Ship is waiting.
Ore Carriers: Priority at Ore Berth.

Application for a berth must be made to the Harbour Master *before* the vessel's arrival.

STEVEDORES: ETA at least 24 hrs. before arrival as labour ordered before 1330 hrs. the day before required, except week-ends when labour ordered at 1330 hrs. on Friday for Saturday, Sunday, and Monday requirements.

Waterside labour for cargo operations other than iron ore loading, tanker cargoes, and certain small exempt local traders and fishing vessels, is supplied through the Australian Stevedoring Industry Authority and ordered by the various stevedoring companies. The waterside workers' hours and conditions of employment are fixed by award agreement between the Waterside Workers Federation and employees.

The main features concerning labour are: Two shifts Sunday to Friday:

Day	0800 to 1500 hrs.
Evening	1500 to 2200 hrs.
Saturday	0800 to 1200 hrs.

Labour will extend 4 hours on Saturday or 2 hours until midnight if vessel can finish and sail.

When Monday is a holiday, labour for Tuesday has to be ordered before 1300 hrs. on the previous Friday.

MEDICAL: Medical facilities and hospital available. Certificates required for smallpox vaccination and cholera if vessel from certain overseas countries.

TANKERS: Night movements subject to Harbour Master's permission. Usual to berth vessel at high water if necessary and discharge cargo to safe draft by next low water.

Oil cargoes are discharged at Fort Hill or Ore wharves. Shell Oil Company own or lease pipe-lines to handle their own cargo. Other oil companies sub-lease the lines from Shell for their cargoes.

Approximate discharging rates are:

Black Oil	400 t.p.h.
White Spirit	300 t.p.h.
Distillate	100 t.p.h.

DENSITY: Considerable variations experienced. Average 1025.

FRESH WATER: Fresh water is laid on to all berths, at a rate of 30 tons per hydrant per hour, the cost being 17c per ton and $3.00 connecting fee.

FUEL: All grades available by road tanker at all berths for small quantities. For large quantities, by pipe-line all grades are available at all berths.

Approximate bunkering rates are:

Marine Diesel	180 t.p.h.
Gas Oil	120 t.p.h.
Fuel Oil	140 t.p.h.

FIRE PRECAUTIONS: Watchman at approach to wharf. Towing-off wires on off side of vessel.

GANGWAY/DECK/WATCHMAN: Required, owing to large rise and fall of tide. Ship's crew or shore watchman.

OPENING/CLOSING HATCHES: Optional, if alongside usually done by watersiders; not alongside by crew.

CUSTOMS ALLOWANCES: 200 cigarettes. One bottle spirits (26 oz.) three bottles beer.

Regulations of the Commonwealth Department of Customs and Excise apply. The Customs Department also act for the Immigration Department.

CARGO GEAR: As required by Australian Navigation Act. See "Melbourne".

The Port Authority has available for hire:

Cranes up to 16 tons capacity.
Fork lifts up to 12,000 lb. (5443 K).
Trailers – 10 tons capacity.
Side Loader – 25 tons capacity.
Tractors.

The above equipment is available for use outside the wharf area when not required for cargo operations.

Hiring rates and conditions for all equipment are available on application to the Wharf supervisor.

There are also private cranes available with capacities up to 50 tons. All mobile equipment that is required to be used in the Port Authority area must be hired through the Port Authority plant pool.

FLOATING PLANT: 56 ft. (17.07 m.) pilot vessel *Larrakia*. Speed 12 knots. Fitted with radar, echo sounders, HF and VHF radios and fire fighting and oil dispersal equipment. Has sleeping accommodation for six and when not on pilotage duty is available for hire in Northern Territory waters to approved bodies for survey work etc. Daily rates on application to Harbour Master.

25 ft. (7.62 m.) pilot vessel *John Stokes*. Speed 9 knots. Fitted with echo sounder, HF and VHF radios. When not on pilotage duty, is available for harbour hire for approved purposes.

CLIMATE: Monsoonal in character with prevailing cool dry S.E. winds from May to September, and warm, most N.W. winds and frequent showers from November to March, while April and October are variable. Cyclones, which are common on both East and West coasts of Northern Australia, rarely affect Darwin. Rainfall averages 60 in. (152-40 cm.) per year and temperature ranges from a mean daily maximum of 91°F (32.7°C) in October and November to a mean daily minimum of 68°F (20°C) in June and July.

Average monthly rainfall to the nearest inch is: Jan. 16 in., Feb. 12 in., March 11 in., April 3 in., May 0.5 in., June nil, July nil, Aug. nil, Sept. 0.5 in., Oct. 2 in., Nov. 4 in., Dec. 9 in.

TIDES: Darwin is a standard port in the Australian National Tide Tables which are obtainable from Admiralty Chart Agents. The maximum tidal range is 26 ft. (7.93 m.), the mean tidal range is 12.2 ft. (3.72 m.).

Tidal streams have a maximum rate of 4 knots in the approach channel and 2.5 knots in the vicinity of the berths.

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: Portuguese and Indonesian.

REPAIRS: Limited small repairs. Slipway capacity 240 tons.

DIVERS: Divers are available.

SHIPPING OFFICE: Shipping Office facilities are available for engagement and discharge of British crews.

SURVEYORS: The Commonwealth Department of Transport maintains a surveyor. There is a private surveyor who is also a Lloyds surveyor.

REPATRIATION: Facilities available.

AIRPORT: International and domestic flights.

TIME: GMT plus 9.5 hours. Permanent.

HOLIDAYS: Extraordinary Holidays (closed port). Good Friday; Labour Day (1st May); Picnic Day (1st Monday in August); Christmas Day (25th December). Other Holidays: New Year's Day (1st January); Anniversary Day; Easter Saturday; Easter Monday; Anzac Day; Queen's Birthday (June); Boxing Day.

POLICE/AMBULANCE/FIRE: Tel.: Police 81-5555; Ambulance 81-2244; Fire 81-2222.

TELEPHONES: Public telephones are installed on Fort Hill and Stokes Hill Wharf. Direct lines to taxi companies on Stokes Hill Wharf. Ship's telephones connection on application to Wharf Supervisor. Connection and disconnection fee $10; $5 per day for local calls; and trunk line calls as booked.

DELAYS: Port congestion and occasional short delays for tide.

AUTHORITY: The Port Superintendent, NT Port Authority.

AGENT: Sub-agent of Patrick Agencies, Sydney, NSW.

DERBY, W.A.: 17.17 S. 123.35 E. (See Plan)

CERTIFICATES/DOCUMENTS: See "Melbourne".

PORT LIMITS: All waters to South and Eastward of a line through Valentine Island in a 053° – 233° direction to the mainland on each side.

PILOTAGE: Not compulsory but recommended. Private Pilots arranged by Agents Fremantle or Derby. Pilot boards Cockatoo Island in Yampi Sound. Two weeks advance notice required of Pilot requirement.

ANCHORAGES: N.N.W. of North Mary Ann Island with Derby front lead bearing 141° dist. 6.4. miles.

RESTRICTIONS: Numerous islands and reefs, strong tides. Navigate during day.

MAX. SIZE: 575 ft. length.

HEALTH: First port of entry. Vessel examined for pratique alongside. Also see "Melbourne".

VHF: Limited VHF, Channels 6 and 16.

BERTHING: Tide range one of biggest in the world. Berth alongside dries 2 ft. 6 in. at springs. Several patches dry, 1 – 2 ft. Ground in berth level and it is "Practice of Port" vessels stay aground if stay over tide. Important to note above for circulating water for ships auxiliaries, as vessel makes own arrangements on board.

STEVEDORES: Irregular, but usually three gangs, 0800 – 1700 hrs. with reasonable overtime.

TANKERS: Oil – discharge connection 236 ft. from Southern end of jetty.

FRESH WATER: Up to 224 tons at 15 t.p.h. Could be restricted by drought.

TIME: GMT plus 8 hrs.

CARGO GEAR: Due to extreme range of tide vessels with short derricks will have difficulty at LW. Also see "Melbourne".

AUTHORITY: Harbour and Light Dept., Fremantle.

AGENT: Sub-agent of Patrick Agencies, Fremantle.

DEVONPORT, Tasmania: 41.09 S. 146.24 E.

PORT LIMITS: Within all waters that extend 3 miles to seawards bounded on the Eastward by an imaginary line drawn 000° distance 3 miles from the coastline and intersecting the most Easterly point of Wright Island and to the Westward by another imaginary line drawn 000° distance 3 miles from the Western side of the entrance to the River Don.

DOCUMENTS: See "Melbourne".

APPROACHES: Port situated 1 mile inside Mersey River, entrance to which sheltered by Mersey Bluff on West and by breakwater on East bank. Good anchorage in vicinity boarding ground, but inadvisable remain at anchor during strong on-shore winds. Inner harbour provides all-weather shelter.

PILOTAGE: Compulsory. 24-hr. service. Pilots will board when required at a position within 400 m. of a point Mersey Bluff Lighthouse bearing 242° by 1.93 km.

Masters of vessels requiring the service of a Pilot are advised to radio the Harbour Master, Devonport, their ETA and vessel's draft 12 hours prior to arrival.

ANCHORAGE: The quarantine anchorage is defined as to the North of a line running East and West through the Mersey Bluff light. Vessels must lie clear of the fairway into the River.

RESTRICTIONS: Approach channel 26 ft. LW. Tidal range 9 ft. Enquiries should be made for vessels exceeding 29 ft. draft or 600 ft. length.

MAX. SIZE: Vessels 16,000 g.r.t., LOA 182.9 m. and draft 8.5 m. have entered safely.

VHF: 24-hour service on Channel 16, Channel 12 working.

TUGS: Modern tug 1,200 h.p. also auxiliary 250 h.p. Additional tugs available at short notice.

BERTHING:

West Wharf:

No. 1 Berth	length 167.6 m.	depth 8.5 m.
No. 2 Berth	length 189 m.	depth 8.5 m.
No. 3 Berth	length 167.6 m.	depth 7.8 m.
No. 4 Berth	length 198 m.	depth 8.5 m.
Stock Jetty	—	depth 4.27 m.

East Wharf:

No. 1 Berth. Length 122m. Ferry berth with stern loading facilities and passenger terminal. Depth alongside 7.01 m.

No. 2 Berth. Length 213 m. Roll-on/Roll-off ramp. Depth alongside 8.5 m.

TANKERS: 2 berths with 10-in. discharge lines for black and white oils.

BULK HANDLING FACILITIES:

Wheat. One berth, discharge connections to 8,000 ton capacity silo.

Cement. One berth, loading connections from 4,000 ton capacity silos.

Ores, etc. Two berths. One fitted with 16-ton grab and 40-ton capacity hopper. Ship's gear discharge on wharf apron on second berth. Conveyor available to load industrial sands.

Roll on/Roll off Container Berths. 2 berths fitted with stern loading ramps. Fully equipped to handle cellular and vehicle deck ships. 1 travelling crane 30 ton capacity. One 30-ton travelling container handling crane. 6 acres hardstanding storage area for ISO container. 60 power points for refrigerated units.

Livestock Berth. 1 jetty with loading ramp and adjacent holding area. Suitable for ships up to 250 ft. length.

Floating Crane: Capacity 35 tons available.

STEVEDORES: Agents for ships arrange stevedores.

MEDICAL: Hospital available five miles from port.

REPAIRS: Limited repairs carried out, foundry and machine shop available.

SURVEYORS: Lloyds surveyor in residence at Devonport.

CARGO GEAR: Australian Navigation (Loading and Unloading) regulations apply.

FRESH WATER: Available all wharves. 40 t.p.h.

FUEL: Road tanker delivery only.

TELEPHONES: Available each berth.

HOLIDAYS: Work all days except Christmas Day, Good Friday, Anzac Day, Labour Day, Picnic Day W.W.F.

POLICE/AMBULANCE/FIRE: Fire 24–1886 (Other than alarm, 24–1887); Police 24–1596; Ambulance 24–1551.

TIME: GMT plus 10 hrs. (Summer time GMT plus 11 hrs. mid-October to mid-March).

AIRPORT: Approximately 5 miles away. Regular service.

SERVICES: Shipwrights and carpenters available at 24 hours notice. Underwater diving services available.

DEVELOPMENT: Widening Ramp at No. 1 Berth East from its present 12 ft. to 30 ft.

Channel improvements including widening and deepening of channel.

Harbour protection rock breakwater on Western bank under construction.

Extension to wheat silos storage to increase capacity by 50%.

AUTHORITY: Marine Board of Devonport.

AGENT: Sub-agent of Patrick Agencies, Melbourne.

ESPERANCE, W.A.: 33.52 S. 121.53 E. **(See Plan)**

DOCUMENTS: The following documents should be available for inspection:

Ship's Papers, including the following certificates:

(*a*) Register.
(*b*) Load Line.
(*c*) Safety Equipment.
(*d*) Safety Radio.
(*e*) Safety Construction.
(*f*) Australian Light Dues Receipt.
(*g*) Articles of Agreement and Account of the Crew (or equivalent).
(*h*) Western Australian "Port Bill" — Tonnage Dues Receipt.

Valid Deratisation or Exemption Certificate.

Crew's Identity Documents.

International Vaccination Certificates of all persons aboard.

PILOTAGE: Pilotage is compulsory except where Exemption Certificates are held. Radio "Harbour Master – Esperance" 48 and 24 hrs. before arrival. VHF Channel 16 – pilot boat and base set. Base set not manned continuously but pilot boat may be contacted 1 hr. before arrival. Pilot boat painted white with black rubbing band and white centre house. Word "Pilot" painted on both sides of house. Pilot boards 1.5 miles N.E. of Gull Island. Pilot ladder and ancillary equipment must comply with international regulations. Lee to be provided against swell.

It is more usual for vessels to approach from the Westward. In this case use may be made of either West or Causeway Channels. Approaching from the Eastward is not recommended during the hours of darkness or in weather which is in any way restricting visibility.

ANCHORAGE: Vessels proceeding to anchorage should anchor in an E.N.E. direction from the Eastern extreme of the breakwater. Good holding is found in depths ranging from 14.5–27.5 m. However, plenty of cable should be veered and at least 6 shackles is recommended. In the most boisterous conditions vessels have held well with from 6 to 8 shackles out. However, the vessel should always be watched. A pilot ladder and not accommodation ladder is recommended for vessels at anchor due to the swell conditions which normally prevail at the anchorage.

BERTHING/RESTRICTIONS/MAX. SIZE: The port is divided into two areas, namely the Tanker Jetty and the Inner Harbour. There is a tidal range of 0.4–1.0 m.

The Tanker Jetty is situated 2 km. North of the Inner Harbour and has a depth of 10.97 m. in the approaches and 9.6 m. alongside. The Jetty is exposed to the E.S.E. Vessels are berthed "Head-in". Maximum mean draft must not exceed 9.14 m.; however, vessel may be trimmed by stern but must not exceed 9.75 m. aft. The maximum length of vessel permitted 171 m.

The Inner Harbour consists of one land-backed berth of 244 m. (No. 1). A second berth of 213 m. in length adjoining the first is to the S.E. (No. 2). The depth in the approach Channel, manoeuvring area and alongside is 11 m. Maximum draft permitted is 10.4 m. and length overall 186 m. On occasions it may be possible to exceed this draft but reference must be made to the Harbour Master before so doing, who may at his discretion permit an increase dependent on tide and prevailing weather conditions.

At all berths shore coir and/or nylon springs are used to supplement ships moorings.

24-hr. port but entry not generally carried out at night.

PRATIQUE: Vessels requiring "Free Pratique" are cleared between 0600 and 2000 hrs. daily.

Vessels may be cleared outside these hours upon request and at the discretion of the local Medical Officer.

Vessels are cleared alongside and rarely at anchor.

Please also note that a Health Message is required at the first port of entry from overseas. This is to be despatched within the period 12 and 24 hrs. prior arrival at the first port of entry, and to advise the following information:

Name of vessel, and ETA.
Last port of call.
Date of departure.
Number of crew on board.
Number of passengers on board (if any).
Confirmation that all on board have valid smallpox vaccinations and details of any sickness.

RADIO: Esperance: Radio call sign VIE (operative from 0700 to 2000 hrs.). Perth: Radio call sign VIP (continuous).

Port VHF limited to Channels 6 and 16.

TUGS: One tug with 9.5 ton bollard pull will be used.

STEVEDORES: 40 men. Working hours 0800–1700, 1800–2400, 0000–0700. No work from 1700 Saturday to 0800 Sunday. ETA to Agent by 1600 previous day for labour requirements Tuesday to Friday. For weekend requirements ETA to Agent by 1600 on Thursday. For Monday labour ETA to Agent by 1600 Friday. Notice for labour pick-up has to be posted by 1700.

OPENING/CLOSING HATCHES: Preferably handled by crew or as per charter party.

MEDICAL: Advance notice not required. Normal facilities and hospitalisation available.

DENSITY: 1026–1028.

FRESH WATER: Available at all berths; 25 t.p.h.; charge, 21 cents per kilolitre.

FUEL: Available by road tanker only. Advise Agent of grade and quantity at least one week before arrival.

GANGWAY/DECK WATCHMEN: Shore watchman is supplied at entrance to Tanker Jetty in the case of tankers only. Shore watchmen are available if requested by vessel. It is more normal for ship to provide gangway watchmen from crew. Irrespective a gangway watchman must be on duty at all times at any berth.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grammes cigars or 250 grammes tobacco. One litre of alcoholic liquor, wine or beer.

CARGO GEAR: No shore cranes and discharge effected by ship's gear. Inner Harbour berths, two link belt bulk loaders used. One loader for grain and salt at No. 1 berth. One loader for nickel

concentrates at No. 1 and No. 2. Rates achieved on various commodities — salt 850 t.p.h., grain 500 t.p.h., nickel concentrates, copper concentrates, magnesite 200 t.p.h., phosphate and sulphur 25/30 t.p.h. with conventional ship's gear in union purchase.
IDENTIFICATION CARDS: see "Melbourne".
CONSULS: Nearest at Fremantle.
REPAIRS: Welding, rewinds, under-water inspections. Large structural repairs not possible.
DRY DOCKS: Nil.
REPATRIATION: Facilities exist for repatriation of crews.
AIRPORT: Feeder airline services connect with Perth and international flights. 12 flights per week in either direction. Airport is 25 km. from harbour area. No flights Sundays.
TIME: GMT plus 8 hrs.
POLICE/AMBULANCE/FIRE: Police Esperance 711900; Ambulance Esperance 711711; Fire Esperance 712328.
TELEPHONES: Available all berths.
SHORE LEAVE: Crew allowed ashore provided Immigration Act complied with in relation to Identification Cards.
DELAYS: Not normally encountered.
AUTHORITY: Esperance Port Authority.
AGENT: Sub-agent of Patrick Agencies, Fremantle.

FREMANTLE, W.A.: 32.03 S. 115.44 E. (See Plan)

DOCUMENTS: See "Melbourne". Also Inward and Outward manifests accordance Regulations Nos. 142 and 143 and schedule. These documents supplied by ship's Agents.
APPROACHES: Channel leading from Gage Roads into Cockburn Sound presently 45 ft. (13.7 m.) deep, planned to be deepened to 55 ft. (17 m.) to take ships of 120,000 tonnes.
PILOTAGE: Pilotage is compulsory in the Port of Fremantle except for ships not exceeding 150 gross registered tons, and for coastal and inter-state ships, the Masters of which hold operative Pilot Exemption Certificates. There are 2 pilot boarding grounds: the non-compulsory ground which is situated 2 miles N.W. of the Fairway Buoy, and the compulsory pilot boarding ground in Gage Roads to the Westward of Hall Bank Buoy, which is approximately 2 miles from the entrance to the Inner Harbour. It is necessary for all vessels to give 24 hours notice by radio telegraphy of the expected time of arrival at Fairway Buoy, followed by a second notice, confirming or amending the previous notice, 2 hours ahead of the expected arrival time in that locality.

Ships requiring a Pilot at the non-compulsory ground must include this requirement in their 24 hours notice of arrival.

Two pilot vessels available, one has royal blue hull, white superstructure and the other, a fast pilot launch, is painted international orange. Pilots may be contacted by VHF Channels 16, 12 and 6.

Usually pilot ladder is required on the port side for vessels inward and starboard side for vessels outward, even when the wind is in the East, unless Easterly wind is very strong as there is nearly always a West to N.W. swell. If in doubt call Port Signal Station on VHF Channel 16.

Pilot does not board vessel at anchor.

Pilot ladder to be 4-5 ft. above sea level with manropes slightly shorter. Boat-rope not required. The ladder should be clean and conform with Regulation 17 of SOLAS. The vessel should be making 3-4 knots.

SOLAS regulations are strictly adhered to i.e. Single length of ladder, non-slip surface (Aluminium Not acceptable), 12 in. spacing between steps, no more than 2 replacement steps, all ropes on ladder and manropes to be manila and not covered (Nylon and polypropelene not acceptable), Regulation 17(a) part (VII) and (VIII) very important, a responsible officer to standby and not a sailor.

Check with Signal Station and find out if Pilots preference is ladder or mechanical hoist (if available).
ANCHORAGES: Gage Roads 44 ft. (13.4 m.) Owen Anchorage 42 ft. (12.8 m.) Cockburn Sound 50 ft. (15 m.).
RESTRICTIONS: *Inner Harbour:* Basin and entrance channel dredged to minimum of 36 ft. (11 m.) below datum.

Outer Harbour: Main approach channels dredged to minimum of 45 ft. (13.7 m.) below datum – secondary channels leading to alumina refinery jetty and steelworks jetties dredged to minimum of 38 ft. (11.6 m.) below datum.
MAX. SIZE: Limited by draft. Minimum under-keel clearance of 0.9 m. required.

Outer Harbour, up to 41 ft. 6 in. (12.6 m.) draft.

Inner Harbour, up to 32 ft. (9.7 m.) draft but with suitable tide and by special permission of Harbour Master up to 34 ft. 6 in. (10.5 m.) draft.

Tankers: The maximum ship draft acceptable at the Oil Refinery Jetty at Kwinana is 41 ft. 6 in., this being the maximum draft permitted in the approach channels.
HEALTH: No restrictions except quarantine. Doctor not normally available between 2200 and 0600 hrs. See "Melbourne".

Port Quarantine Regulations:

(a) The accommodation, galley and other areas must be free from cockroaches and rodents.

(b) Garbage cans, either belonging to the ship or to Fremantle Port Authority, when used must be at all times covered with satisfactory tops.

(c) Rat guards must be fitted to all lines and regularly checked including weekends where the Department of Health have increased their inspections.

It is also to be noted regardless of the existence of current derating or deratisation exemption certificates, all vessels are inspected for rodents.
RADIO: VIP Perth.
TUGS: *Inner Harbour:* 6 available up to 2,600 h.p. (1,940 kW), join vessel in Gage Roads – extra charge if tug's line is used.

Outer Harbour: Inner Harbour tugs proceed to Outer Harbour berths also where 2 special tugs equipped as fire tenders are also stationed. Tugs join ships approx. 2.5 miles from berths – extra charge if tug's line is used.
VHF: Port authority signal station manned 24 hours. Keeps watch principally on Channel 16. Channels 6 and 12 used for ship-tug communications. Channel 14 for B.P. Refinery use.
BERTHING: *Inner Harbour:* Victoria Quay – continuous quayage 5,359 ft. (1,633.3 m.); 8 berths.

North Quay – continuous quayage 5,877 ft.; 10 berths. Container berth (No. 11 & 12) 1,535 ft. (468 m.); 1 berth.

All berths in the Inner Harbour, including Victoria Quay, North Quay and the container berth are dredged to a minimum of 36 ft. (11 m.) below datum.

Outer Harbour: Alumina Refinery Jetty, length of berth 800 ft. (244 m.), depth 38 ft. (11.6 m.). Steelworks Jetty No. 1, length of berth 640 ft. (195 m.,) depth 36 ft. (11.0 m.). Steelworks Jetty No. 2, length of berth 880 ft. (268 m.), depth 40 ft. (12.2 m.). Oil Refinery Jetty, see "Tankers" below. Bulk Cargo Jetty, length of berth 846 ft. (259 m.), depth 44 ft. (13.4 m.). Explosives Jetty, length of berth 61 m., min. depth 5.0 m. max. depth 7.9 m.
STEVEDORES: Shipboard stevedoring by private contractor, shore side by FPA – usually arranged by ship's Agent. ETA should include particulars of cargo, showing heavy lifts, dangerous or hazardous cargoes, hatch stowage, gangs required, etc.
MEDICAL: Notice not necessary but advisable if treatment required. Full hospital facilities available. Cholera and smallpox vaccinations essential if ship comes from affected areas. International certificates must be current.
TANKERS: *Kwinana Oil Refinery Jetty:* 2 berths for tankers up to 752 ft. (229 m.) – depths 44 ft. (13.4 m.) and 45 ft. (13.7 m.) 1 berth for tankers up to 860 ft. (262 m.) – depth 45 ft. (13.7 m.). Oil separation tanks ashore serve each berth.
DENSITY: Salt 1025, generally at all tides.
FRESH WATER: Available 24 hrs. a day, delivered by hose up to 400 tonnes an hour, 31 cents per kilolitre.
FUEL: Marine fuel (2 grades); Marine diesel. Notice 14 days then 48 hrs.
FIRE PRECAUTIONS: Watchman to be on duty. Ship heading out. Fenced off on land. Buoys 50 ft. (15 m.) out from ship marking prohibited area.
DEVELOPMENTS: State Government approval has been granted in principle for the development of 3 deep-water berths at Point Peron adjacent to the causeway linking Garden Island with the mainland.

A bulk grain jetty has been constructed at Kwinana to serve Co-operative Bulk Handling Ltd's grain terminal.

The jetty will be equipped with conveyors and ship loaders capable of handling bulk grain at the rate of 5,000 t.p.h. It will eventually be able to handle vessels up to 100,000 d.w.t.

No. 12 Berth, North Quay will be fitted with a ro/ro ramp, and another Portainer Crane is to be provided for North Quay.
GANGWAY/DECK WATCHMAN: Watchman required – member of crew, or shore-based watchman available. Ordinary rate currently A$4.90 an hour.
OPENING/CLOSING HATCHES: By arrangement between ship's Agent and Stevedore.
CERTIFICATES: Health; Deratisation; Load Line; Ship's Register; Articles. Also see "Melbourne".
CUSTOMS ALLOWANCE: According to local customs dept.
CARGO GEAR: Strict surveillance of cargo handling gear by Commonwealth Government Dept. of Transport. Also see "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS:

America, United States of
Austria
Belgium
Denmark
Finland
France
Germany
Guatemala
Italy
Japan
Netherlands
Norway
Philippines
Portugal
Sweden

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: No dry docks – slipway up to 3,000 T.
REPATRIATION: Facilities exist for repatriation of crews.
AIRPORT: 17 miles (23 km.) to Perth International Airport.
TIME: GMT plus 8 hours.
HOLIDAYS: *Extraordinary Holidays – Port closed:* Labour Day (1st Monday in March); Good Friday; Anzac Day (25th April); Union Picnic Day (celebrated on the first Tuesday in November); Christmas Day (25th December).

Ordinary Holidays: New Year's Day (1st January); Australia Day (celebrated on a Monday late in January); Easter Monday; State Foundation Day (1st Monday in June); Boxing Day (26th December).

On ordinary holidays waterside labour available to work ships in following categories:

(a) Scheduled passenger ships.
(b) Marine casualties.
(c) Ships that can complete cargo handling operations prior to the next engagement of labour.

POLICE/AMBULANCE/FIRE: Victoria Quay Police Station Tel. 35.2783 or 35.5016; Ambulance 35.1601; Fire Brigade 35.6262.

TELEPHONES: Telephones can be supplied to any vessel – $60 installation time plus proportion of annual rental plus cost of calls.
SERVICES: All special services available.
REGULATIONS: Normal port regulations. Special Regulations for Tankers berthing at Oil Refinery Jetties.
AUTHORITY: Fremantle Port Authority.
AGENT: Patrick Agencies, POB 656, 10, Phillimore Street, Fremantle, W. Australia 6160. Tel. 35–6311. Telex Perth AA 92434. Cables: "Rikpat Perth WA."

GEELONG, Victoria: 38.09 S. 144.22 E. (See Plan)

PORT LIMITS: A line in a 150.5° direction from a beacon 1.5 chains West of the Little River entrance intersecting with a line in a 009° direction from the N.W. extremity of Sproat St., Portarlington. N.B. – This seaward limit passes 2 cables Eastward of No. 2 beacon Pt. Richards channel.
DOCUMENTS:
3 Crew Lists Form M & S 11.
1 Store List Form 42A.
1 Articles owned or in possession of Master, officers or crew, Form 5.
3 ports of call Form C & E 886.
1 Form QA 3 ship's cargo.
1 Form QA 4 ship's pets.
2 Form QA 5 Shipmaster's bond.
2 Form AQ 360 Health reports.
PILOTAGE: See "Melbourne". Radio ETA to "Seapilots Melbourne" 24 hours prior arrival advising deepest draft and requesting pratique. Pilot vessel equipped with radio-telephone continuous watch on 2182 kHz., and VHF Channels 16, 12, 8 and 6. Pilots carry portable sets. Deep laden tankers advised to rig pilot ladder from bridge to avoid swamping boat.
ANCHORAGES:
1. Quarantine. As directed.
2. Explosives.
   (a) Outer: 088° from Pt. Wilson Beacon 3.52 miles. Circle 0.25 miles (463 m.) radius. Depth 32 ft. (9.7m.).
   (b) Inner: 077° from Pt. Wilson Beacon 1.77 miles. Circle 0.15 miles (278 m.) radius. Depth 21 ft. (6.4 m.).
3. Vessels over 30 ft. (9.1 m.) draft: outside No. 2 Beacon Pt. Richards and South of the line of prolongation of the Pt. Richards Channel. Least depth 12.5 m.
4. Vessels over 27 ft. 6 in. (8.4 m.) draft: East of and within 1 mile of No. 18 Beacon Pt. Richards Channel. Least depth 9.1 m.
5. Inner Harbour: Reference Point B.W. Pier F.R. Triangular Light (38° 6.9′ S., 144° 21.8′ E.).
   (a) 067° 9.3 cables (1,722 m.) from the above position. Least depth 29 ft. (8.8 m.).
   (b) 092° 8.2 cables (1,520 m.) from the above position. Least depth 29 ft. (8.8 m.).
   (c) 117° 8.7 cables (1,612 m.) from the above position. Least depth 29 ft. (8.8 m.).
   (d) 133° 1.42 miles (2,613 m.) from the above position. Least depth 26 ft. (7.9 m.).
   (e) 147° 1.43 miles (2,631 m.) from the above position. Least depth 26 ft. (7.9 m.).

Masters of vessels are cautioned *(a)* that the bottom of the Inner Harbour is soft mud and is not good holding ground and *(b)* that vessels should not be immobilised unless with the express permission of the Harbour Master.
RESTRICTIONS: Vessel must have at least 2 ft. (0.6 m.) of water under the keel with a maximum of 6 in. (0.15 m.) for tide.
Night navigation is not normally permissible for any vessel over 10.4 m. draft or inward 215 m. in length.
MAX. SIZE: Tankers: 825 ft. (250 m.) length with 34 ft. 6 in. (10.5 m.) draft. Other vessels: Enquiries should be made with regard to vessels over 658 ft. (200 m.) length.
HEALTH: An overseas vessel approaching the port requiring pratique shall send a message to the Quarantine Officer not more than 24 hours and not less than 12 hours before arrival containing the following information: name of vessel, ETA, number of passengers, number of crew, number of passengers disembarking, port of departure and date, disease on board.
On arrival the health report shall be given to the Quarantine Officer, 2 copies being furnished on the prescribed form, 1 of which will be signed by the Quarantine Officer and returned to the Master.
RADIO: Coastal radio station for local messages "Radio Melbourne" VIM. The Geelong Harbor Trust Commissioners maintain a Signal Station at Point Henry at which a 24-hour watch is kept. (38° 7′ 51″ S., 144° 25′ 28″ E.). The building is a cream brick tower 11.3 m. in height to the roof, situated at the Northern end of the high land of Point Henry, and is surmounted by a white signal mast. Movement of traffic within the port is controlled through the Signal Station. Communication is affected as follows:
1. Telephone. Geelong 9-8014.
2. Radio Telephone VHF F/M (International Channel).
   (i) Channel 16. 156.8 M/cs. Calling (continuous watch).
   (ii) Channel 12. 156.6 M/cs. Working.
   (iii) Channel 8. 156.4 M/cs. Pilots and Tugs (continuous watch).
   (iv) Channel 6. 156.3 M/cs. Tugs.

These frequencies are the same as those operated by the pilot vessels, Point Lonsdale Signal Station, Melbourne Harbour Control and all Port Phillip Tugboats on commercial towage.
TUGS: Vessels normally towed from Hopetoun Channel to berth, extended towage if required. 3 large tugs available, the largest tug is licensed for ocean work. Use of tug's line optional. Tugs equipped with VHF Channels 6, 8, 12 and 16.
STEVEDORES: Labour ordering: Day labour must be ordered by 1600 hrs. the preceding day. Twilight shift labour by 1600 hrs. preceding day, and midnight shift, but these can be subject to confirmation 0800 hrs. Saturday labour must be ordered by 0900 hrs. Friday, Sunday labour by 1100 hrs. Friday (day and twilight shift), Sunday midnight before 0900 hrs., Friday. Monday labour is ordered at 1600 hrs. Sunday. Ships can order for a 1000 hrs. start, at 1600 hrs., which is subject to 0800 hrs. confirmation. Special requirements exist for labour requirements on public holidays.
BERTHS:

	No.	*Length (m)*	*Depth (m)*	*Use and facilities*
Cunningham Pier	4	328	9.7	Gen. cargo – cargo shed 137m. × 15 m. Rail access.
Bulk Wheat Pier	2	201	11.0	Bulk grain export. Gantry extends 154 m. of berth.
Corio Quay South 1	1	183	9.7	Stern loading ramp for roll-on/roll-off. Rail access
Corio Quay South 2	1	128	9.7	Reserve.
Corio Quay South 3	1	146	9.7	Reserve.
Corio Quay North 1	1	183	9.7	Steel and dry bulk cargo.
2	1	183	9.7	Rail access Four 6 t. Portal cranes. Gen. cargo shed 91 m. × 30.5 m.
Corio Quay North 3	1	161	9.7	Gen. cargo shed 97.5 m. × 27 m.
Lascelles Wharf 1	1	173	11.0	Dry bulk cargo.
2	1	173	11.0	Four 7.5 ton Portal cranes. Cargo shed 30 m. × 27 m.
Refinery Pier 1 & 2	2	213	11.0	Petroleum products.
1A	1	65	5.0	LP gas export.
3 & 4	2	275	11.0	Crude oil, chemicals.
Pt. Wilson Explosives Pier	2	168	9.1	Dangerous cargo. Commonwealth Government controlled.
Pt. Henry	1	152	9.1	Bulk alumina and allied products. Unloading gantry.

TANKERS: Refinery Pier. 4 berths, depth alongside 36 ft. (11 m.) Pumping platform 16 ft. (4.9 m.) above low water, wharf 12 ft. (3.7 m.) above low water. One-ton crane at each berth and accommodation ladder.
Nos. 1 and 2 Berths: Pier 2,909 ft (887 m.) long, direction 315° berth 700 ft. (213 m.) approx., suitable for ships up to 200 m. LOA. Ships moor to 2 spring dolphins 61 m. apart; pumping platform set back 1.7 m. from line of these dolphins. Barge platform inshore of each berth.
Nos. 3 and 4 Berths: a branch from the main pier, direction 330°, berth 275 m. approx., suitable for ships up to 260 m. LOA. Ships lie alongside a concrete sprung berthing beam 73 m. in length. No. 4 Berth equipped with capstans and 90 tonnes S.W.L. mooring hooks for berthing large vessels. Distance between backspring bollards 35 m. 8 in. hoses – reduction from 10 in. available. Shore accommodation ladder provided at all berths. Ballast and slop discharge available all berths.
MEDICAL: Comprehensive medical facilities available, including 459-bed Geelong Hospital. If vessel to be in port less than 24 hours it is advisable to radio Agent informing him of medical requirements prior to vessel's arrival.
DENSITY: Normally 1025, may decrease to 1023 after much rain, or increase to 1027 in Summer after prolonged dry spell.
FRESH WATER: Available at all berths from shore hose at 40-50 t.p.h. Water may be provided to vessels at anchor by using a tug as waterboat, delivery 25-30 t.p.h., tug hire $150 per hour. At Lascelles Wharf, special water delivery facilities available from 9 in. main at 150 t.p.h. Charge 30c per kilo.
FUEL: Marine fuel to 650 sec. and diesel fuel available Corio Quay North and Lascelles Wharf; all grades to 3,500 sec. available at Refinery Pier berth.
FIRE PRECAUTIONS: Stringent restrictions against burning or welding on vessels carrying dangerous cargoes. Standard fire precautions.
GANGWAY/WATCHMEN: Available if required by Master. Penalty rates after hours.
OPENING/CLOSING HATCHES: Crew or stevedores, to Master's requirements. It is normal to request bulk carriers to arrive at berth with hatches all open.
CERTIFICATES:
Deratisation Certificate (Health Requirement).
Ship's Articles (British) (Customs requirement).
Ship's Register (Customs requirement).
Load Line Certificate (Customs requirement).
Safety Equipment Cert. (Customs requirement).
Safety Radio Cert. (Customs requirement).
Last Port Clearance (Customs requirement).
CUSTOMS ALLOWANCE: 200 cigarettes, 8 oz. pipe tobacco, 40 cigars. Spirits: any bottle opened not to exceed 1 quart.
CARGO GEAR: Australian Navigation Act requirements. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".

CONSULS: Italian Vice-Consul in Geelong. Other Consulates in Melbourne available if required:

Austria	Germany	Peru
Belgium	Greece	Philippines
Brazil	Honduras	Portugal
Chile	Iceland	Spain
China	Japan	Sweden
Denmark	Latvia	Switzerland
Dominican	Mexico	Thailand
Ecuador	Monaco	Uruguay
Finland	Netherlands	USA
France	Norway	Venezuela
	Panama	

REPAIRS: All services available. Most Melbourne repair and service firms will also undertake work in Geelong.
DRY DOCKS: Slipways only.
REPATRIATION: Possible without difficulty.
AIRPORT: Nearest major commercial airport is Tullamarine, 50 miles distant, from which there are frequent interstate and international flights. Airport accessible by road in about 1 hour 15 minutes.
TIME: GMT plus 10 hours. Summertime, GMT plus 11 hours.
HOLIDAYS: Closed holidays: Christmas Day; Waterside Workers' Picnic Day; Labour Day; Good Friday; Anzac Day (Tanker operations excepted). Other holidays: Australia Day; Queen's Birthday; Geelong Cup Day.
TELEPHONE: Always placed aboard on arrival; ship charged for trunk line calls, etc.
SERVICES: Cleaning, painting, fitting out, etc., fumigation. Good fresh stores available.
POLICE/AMBULANCE/FIRE: Police 21 6111; Ambulance 21 2655; Fire 21 2755.
SHORE LEAVE: No restrictions. Seamen aboard vessels berthed at Refinery Pier sign book on leaving pier and again on re-entering; this is in lieu of any form of dock pass.
AUTHORITY: The Geelong Harbor Trust Commissioners.
AGENT: Sub-agent of Patrick Agencies, Melbourne.

GERALDTON, W.A.: 28.46 S. 114.36 E.

PORT LIMITS: Inner Harbour includes all that area of water in Champion Bay bounded by a line drawn from Gregory Street, Geraldton, along the foreshore to a point due South of the Western extremity of the breakwater; thence along the breakwater to the Western extremity of the Eastern breakwater; thence S.E. to the foot of the said Gregory Street, and also including the Entrance Channel thereto.

Outer Harbour includes all that area of water in Champion Bay bounded by an imaginary line between Point Moore Lighthouse to a point 2.5 miles true North; thence true East of the shore to the mainland, but excluding the waters of Geraldton Inner Harbour and the Entrance Channel thereto.
ETA: "Shipserve Harbour Master Geraldton" requires 48 and 24 hrs. notice prior arrival. The 24 hrs. message should be timed to be delivered before 1630 hrs. local time on the day before arrival so that arrangements can be finalised, when possible, in working hours. Please also indicate maximum draft in the 48 hrs. notice.
DOCUMENTS: Quarantine notice and declaration QA3 Form A, Quarantine Notice QA 4 Form E2, Shipmaster's Bond QA 5, Departure Notice, 2 Crew Lists. Also see "Melbourne".
PILOTAGE: Compulsory. Pilot boards in position with Point Moore Lighthouse 2 miles, bearing 135° if conditions abnormal pilot launch may not be able to reach this position then Port Authority would advise boarding point. Usually off Inner Knoll Buoy.
ANCHORAGE: Point Moore Lighthouse bearing 195° distance 2.2. miles in 6 fathoms. Good holding.
MAX. SIZE: 700 ft. Length; 28 ft. 6 in. max. loaded draft. Max. draft is expected to be 30 ft. 6 in. by July 1976 when dredging is completed.
RESTRICTIONS: Swells up to 14 ft. in outer approaches. Loaded ships advised not to enter when swell excessive.

Bluff Point leads or Outer Channel. Depth of water 34 ft., minimum LWIS width of channel 500 ft.

Turning Area (Inner Knoll Buoy to Inner Harbour Channel). Depth of water 31 to 36 ft. ILWS.

Inner Harbour Channel. Depth of water 30 ft. LWIS, width of Channel 300 ft.

Dredging work in operation to increase depth to minimum of 32 ft.
HEALTH: First port of entry, radio Port Authority not less than 12 hours prior to arrival advising state of health. Also see "Melbourne".
TUGS: One – 13 tons bollard pull. Compulsory.
RADIO: VHF available for communications with Pilot. Channels 6, 9, 12 and 16.
BERTHING: The wharf is divided into 4 berths numbered 1, 2, 3 and 4 from East end, 3, 548 ft. in length and the fourth 594 ft.

No. 1. Berth has a transit shed with a 1,000 ton capacity, and an old shed which has been used for bulk storage of wheat and salt. The berth is used as a general purpose berth.

No. 2. Used as the tanker berth, and also for the discharge of bulk phosphate, sulphur and allied cargoes. Also for loading bulk cargo other than wheat. General cargo can also be handled and facilities are available for the holding and loading of sheep. Has an unobstructed apron of 90 ft. for almost the full length of berth.

No. 3. Berth mainly for loading of bulk grain. There are 2 loading gantries on the wharf each capable of loading wheat at the rate of 400 t.p.h.

No. 4. It will be possible to use No. 4 for general purposes, but an ore-loading gantry and conveyor system has been erected and iron ore loading will have priority.
CARGO GEAR: See "Melbourne".
STEVEDORES: 90 men working hours 0800–1700 hrs. Monday – Friday. Extended shifts Monday – Thursday. Evening shifts all days except Saturday.
FRESH WATER: At each berth 10 – 15 t.p.h.
FUEL: Light diesel, heavy fuel oil 80 t.p.h.
REPAIRS: Engine repairs available.
CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 40 cigars or 8 oz. tobacco and limited amounts spirits per man.
TIME: GMT plus 8 hrs.
TELEPHONES: Available at each berth (ordered through Agent).
DEVELOPMENTS: Work has commenced in support of the planned growth of mineral sand shipments. Dredging for a new No. 5 berth involving the removal of approximately 200,000 cu.m. of mud has begun. The dredging is part of a $A2.7 million development programme spread over two years in preparation for mineral sands exports which are expected to peak in late 1977.
AUTHORITY: Geraldton Port Authority.
AGENTS: Sub-agent of Patrick Agencies, Fremantle.

GLADSTONE, Queensland (including Barney Point): 23.50 S. 151.15 E. **(See Plan)**

PORT LIMITS: Inside a line commencing at a point 1.5 miles North of East Point, Facing Island; thence to the outer extremity of Jenny Lind Bank, and thence by a line to Tiber Point.
DOCUMENTS: See "Melbourne".
PILOTAGE: ETA's may be sent through Brisbane or Rockhampton Radio Stations, not less than 24 hours before arrival, followed by amended advices where necessary as takes pilot launch 2 hours to reach Pilot boarding Ground from town. Pilotage compulsory all merchant ships. Pilot boards at Pilot boarding Ground situated approx. 1 mile off the Entrance Beacons. VHF Channel 16 may be used to contact Pilot station, call sign "Gladstone Harbour Control"; 24 hour watch maintained. Pilot boat also has VHF. Pilot boat orange launch and displays usual signals.
ANCHORAGE: Good anchorage inside Gatcombe Head about 7 cables South of Bushy Islet in 8 to 10 fathoms, sand and mud, North of Facing Island leads.
RESTRICTIONS: The port is served by an entrance channel, some 6 miles long, with a bottom width of 182.87 m. (600 ft.), dredged to 10.3 m. (34 ft.) at low water.

The allowable draft of a vessel passing through the channel is determined by the following formula:

Allowable draft in metres = 10.3 m. + tide height –1.5 m.

The 1.5 m. is deducted to allow for keel clearance.

The max. daily tide height is 4.7 m.

The min. daily tide height is 2.6 m.

Tankers carrying petroleum products may enter during hours of darkness only at Harbour Master's discretion.
MAX. SIZE: Max. draft for entrance channels varies from 11.58 m. (38 ft.) to 12.80 m. (42 ft.), depending upon tidal conditions. Length and breadth dependent upon wharf to which vessel is to proceed. Principal wharves are:

Auckland Wharf	No. 1	Depth	11.3 m. (37 ft.)	at LW
,, ,,	No. 2	,,	10.0 m. (33 ft.)	,,
,, ,,	No. 3	,,	10.0 m. (33 ft.)	,,
Barney Point		,,	12.2 m. (40 ft.)	,,
South Trees	East	,,	12.8 m. (42 ft.)	,,
,, ,,	West	,,	12.8 m. (42 ft.)	,,

HEALTH: Pratique granted when alongside wharf, unless proceeding anchorage inside port, which case quarantine officials board anchorage. Agents should be advised in advance in event any suspected fever or disease on board. Pratique granted in Australian ports normally covers vessel for any subsequent ports. Also see "Melbourne".
RADIO: Radio messages passed to Agents via any coastal radio station. All shipping cables to Agents, etc., should be prefixed "Shipserv" to enable delivery destination outside ordinary postal hours if necessary.
TUGS: 4 tugs in service. Tugs normally join vessel in vicinity of South Trees Point. Tug's lines always used when vessels are piloted. There is no extra charge for use of tug's lines.
BERTHING: Large vessels requiring load coal either Auckland Point Wharf or Barney Point Wharf normally swing and berth starboard side to, head to sea, on flood tide. Smaller vessels using these berths either port or starboard side to, depending upon tide. Vessels requiring discharge bauxite South Trees Island Wharf berth at periods of slack water (high or low) only. Vessels loading alumina this wharf berth either on flood tide or slack water – *never* on ebb tide.

Auckland Wharf: 3 berths owned by Gladstone Harbour Board, total length of wharf 575 m. with dolphins at either end. Cargo handled: coal, wheat, sorghum, petroleum products, general and heavy lifts.

Barney Point: 1 berth owned by Theiss Peabody Mitsui Coal Pty Ltd., total length of berth 205 m. with dolphins. Cargo handled: coal.

South Trees Wharf: 2 berths owned by Queensland Aluminia Ltd., total length of wharf 480 m. with dolphins at either end. Cargo handled: alumina, caustic soda, bauxite and fuel oil.

BULK HANDLING FACILITIES: *See Table below.*
STEVEDORES: Special ETA advices necessary if week-end labour required and must be ordered by 1400 hrs. on previous Friday. Monday Labour for vessels arriving after Friday must be ordered by 1500 hrs. on Friday. The only commodities requiring shore labour are bulk grain and general cargo.
MEDICAL: Dependent duration stay in port, prior notice for medical attention not required (other than notice of infectious diseases). Hospital facilities available. Current vaccination certificate for each member of crew required.
TANKERS: Diameters of discharge lines 12 in., (0.305 m.) and 8 in. (0.203 m.) for white oils and 6 in. (0.152 m.) black oils. No slop discharge facilities. Main tanker berth at Auckland Point Wharf min. depth alongside 33 ft. (10.06 m.) LWOST. Black oil also discharged South Trees Island Wharf for use in alumina plant only.
DENSITY: Average density 1024–1028.
FRESH WATER: Available all wharves. Fresh water hydrants placed at intervals along wharves.
FUEL: Available ex-wharf at Auckland Point for quantities up to 1500 tons. Diesel and distillate available all wharves ex-road only. Coal also available.
FIRE PRECAUTIONS: Where petroleum and goods of dangerous inflammable character are being unloaded, watchman shall be employed to collect matches from all persons in vicinity and to patrol wharf within the limits in which petroleum cargo is being handled. Every vessel carrying inflammable liquids when in any Queensland port shall display red flag, not less than 1 m. (3 ft.) square with white circular centre 15 cms. (6 in.) in diameter.
OPENING/CLOSING HATCHES: Either by ship's crew or shore labour.
GANGWAY/DECK WATCHMEN: Services of watchmen is not recommended except in the case of petroleum tankers previously mentioned.
SHIP CERTIFICATES: List of certificates usual for Australian Ports. See "Melbourne".
CARGO GEAR: To be in accordance with Commonwealth Navigation (Loading and Unloading Safety Measures) Regulations. See "Melbourne".
CUSTOMS ALLOWANCES: 0.5 lb. of tobacco or 200 cigarettes, to be opened. 1 only 26 ounce bottle, to be opened.
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None.
REPAIRS: Minor engine and deck repairs are undertaken.
DRY DOCKS: None available. Slipway capable of lifting vessels up to 125 tons displacement with max. beam 23 ft. and max. draft forward of 6 ft.
REPATRIATION: Facilities for effecting crew changes and necessary repatriations can be arranged. Prior notice required.
AIRPORT: Airport approximately 5 miles from port and is regularly served by 2 internal airlines. 4 daily flights to Brisbane where connections with overseas airlines.
TIME: GMT plus 10 hours.
HOLIDAYS: Only 5 official holidays in year when it is *not* possible to arrange cargo work: Christmas Day; Anzac Day (25th April); Labour Day (1st Monday in May); Good Friday; Picnic Day (2nd Friday in July).
POLICE/AMBULANCE/FIRE: Telephone number of these services in cases of emergency only is "000" and ask to be connected to the required service. Emergency call to Hospital is 72.1033.
TELEPHONES: Public phones available on wharf.
DEVELOPMENTS: The channels to the port were deepened in 1974. The changes are as follows: Entrance Beacons to South Trees, to 10.3 m. (34 ft.) LWOST. South Trees to Barney Point 9.5 m. (31 ft.) LWOST.
GENERAL: No cranes on wharves. Mobile cranes available for hire. No lighterage facilities. Electricity available to ships. Passengers not normally embarked or disembarked this port, as no facilities for them.
SERVICES: No tank cleaning facilities. No slop facilities.
SHORE LEAVE: Crew members allowed ashore provided vaccination certificates in order.
DELAYS: No unusual delays other than berth availability or unusual tidal conditions.
AUTHORITY:
1. The Harbour Master, Department of Harbours & Marine.
2. Gladstone Harbour Board.

AGENT: Patrick Agencies, POB 374, 59 Gondoon Street, Gladstone, Queensland 4680. Tel. 72-2511. Cables: "Rikpat Gladstone". Telex: AA 49459.

GOVE, N.T.: 12.12 S. 136.40 E. (See Plan)

DOCUMENTS:
2 Crew Lists Form M. & S. 11 (3 at outports).
5 Passenger Lists, Forms M. 308 and 309.
1 Port of Call List.
3 Barber's stocks and stock in ship's shops and canteens (Form 5) continuation of the back Form 5 AA.
1 List of Customable Articles, Form 5 (crew).
3 Return of Goods of Barber's stock, etc., Form 5 AA.
3 Stores List Form 42 A.
1 Clearance from Last Port.
Ship's Log.
1 Derat. Certificate.
1 Light Dues if paid previously.

PILOTAGE: Compulsory for vessels proceeding to Nabalco facilities. The Pilot will board at the anchorage position.
ANCHORAGE: Melville Bay affords good holding ground, the bottom being either sand or mud and the depths ranging up to 48 ft. (14.64 m.) West of Dundas Point. Vessels awaiting a berth should anchor approximately 1.25 miles (2.41 km) Westward of West Woody Island close by the fairway buoy. The Quarantine Officer and Customs Officer normally clear vessels alongside the berth, but may on occasions board at the anchorage.
RESTRICTIONS: Approach Channel to bulk cargo and tanker jetties has min. depth 13.8 m.
Approach Channel to general cargo jetty has min. depth 30 ft.
PRATIQUE: The port of Gove has not yet been declared a port of first entry for health clearance of vessels arriving from overseas. However, arrangements have been made with the Health Department for overseas vessels arriving direct from an overseas port to be cleared on arrival at Gove.
The Commonwealth quarantine regulations provide for health clearance of a vessel between sunrise and sunset. However, the Quarantine Officer has direction to clear ships up to 2200 hrs. local time. Arrangements can be made for vessels to depart on a 24-hr. basis, as health clearance is not necessary for outgoing ships. Vessels will usually be cleared alongside the berth.
If pratique is required, vessel must provide:
(a) Primary Health Report;
(b) A Vaccination Register proving that all persons have been currently vaccinated against smallpox;
(c) Usual valid Cholera Certificate if the vessel is less than 5 days from a cholera-infected area.
Vessels should note that berthing cannot be effected between 2200 hrs. local time and sunrise unless quarantine clearance has been received.
RADIO: *Notice of Arrival:* Prior to arrival, vessels are requested to radio the following information:
(i) For all vessels:
(a) ETA Gove – 72 hours out
– 48 hours out
– 24 hours out
(b) Anticipated draft forward and aft.
(ii) For bulk carriers, anticipated hatch loading plan, loading sequence and quantity required in each pour.
(c) For petroleum tankers, approximate quantities to be discharged and grade of product desired for first discharge, and order of unloading various grades if more than one grade is carried.
Radio messages should be addressed to "GOBAUX", Darwin. The call sign of the Radio Station at Darwin is VID. Radio messages will be passed by teleprinter to Gove.
Cable messages for Nabalco should be addressed to "SHIPSERV", Gove.
Vessels should note that berthing cannot be effected between 22.00 hrs. local time and sunrise unless quarantine clearance has been received.
VHF: The Nabalco Harbour Master's Office maintains a listening watch on Channel 16 during office hours. VHF frequencies used are 16, 12 and 6. Call sign "Gove Harbour".
TUGS: There are three work boats available for hire in the port, max. h.p. 2000. Tug's lines are used in most instances, but no extra charge is made.
BERTHING: *Bulk Cargo Wharf:* The bulk cargo wharf runs in a N.W./S.E. direction and bears 189° true 2,440 m. (8,000 ft.) from West Woody Island triangulation point. The wharf has a 'T' head which is connected to the shore by an access bridge 946 m. (3,120 ft.) long and 3.05 m. (10 ft.) wide.

Location	Auckland Point No. 1	Auckland Point No. 2	Barney Point	South Trees East	South Trees West
Number of Units	2	1	1	1	2
Type of Unit	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Grab Unloader
Length of Travel (metres)	145 (Combined)	121	146.3	167.6	198.1
Max. Outreach from Wharf (metres)	15.2	28.3	16.2	25.6	26.7
Throw of Trimmer (metres)	15.2	N/A	11.0	N/A	N/A
Max. Beam of Vessel (metres)	32	30.5	35.4	35.4	35.4
Capacity (t.p.h.)	1,600	400	2,000	1,000	2,000
Commodity Handled	Coal	Grains	Coal	Alumina	Bauxite
Storage (Tons)	300,000	32,000	400,000	238,000	1,000,000

The northern branch of the wharf head constitutes the bauxite/alumina berth and the southern branch the bulk liquids berth.

The bauxite/alumina berth is mounted with a travelling, luffing shiploader with telescopic trimming spout having an outreach of 31 m. (101 ft. 6 in.) from the fender line. The distance of travel along the berth is 164.2 m. (540 ft.). The clearance beneath the spout at maximum elevation for loading is 16.7 m. (55 ft.) above chart datum (low water ordinary Spring tide) at berth side.

The shiploader has a designed capacity of 2,000 metric t.p.h. for bauxite and for alumina.

The shiploader is connected by a belt conveyor system to the bauxite stockpiles and to the alumina silos, 3,202 m. (10,500 ft.) and 2,592 m. (8,500 ft.) distant respectively from the wharf head.

The bulk liquids berth consists basically of mooring dolphins and fenders associated with a pipe bridge support. Three pipe-lines are provided namely:

(1) 46 cm. (18 in.) diameter for bunker fuel oil.
(2) 30 cm. (12 in.) diameter for caustic soda.
(3) 25.4 cm. (10 in.) diameter for diesoleum, petroleum and aviation kerosene.

During the tanker discharging operations, connection between ship and shore is provided by 20.3 cm. (8 in.) diameter flexible hoses with BS Table "F" 8-hole fittings at each end. BAS reducers from 30.5 cm. (12 in.) to 20.3 cm. (8 in.) are available.

If other types of fittings are required to effect discharge, arrangements should be made by the tanker vessel to provide such items.

The length of each pipe-line is approximately 1,982 m. (6,500 ft.) covering the distance from bulk liquids berth to shore tank farm.

A depth of water of 13.9 m. (45 ft. 08 in.) below chart datum (at low water ordinary spring tide) is available at both the alumina/bauxite and bulk liquid berths.

This will allow simultaneous occupancy by a tanker and bulk carrier, each of up to approximately 60,000 d.w.t., under ordinary conditions. A minimum clearance under the keel of 10% of the draft is required for berthing and unberthing.

General Cargo Wharf: This wharf extends in a S.E. direction from the Eastern side of the land strip leading to Dundas Point. The wharf bears 315° (T) × 1,342 m. (4,400 ft.) from Half Tide Rock and is a substantial structure 94 m. (310 ft.) long by 27.89 m. (91 ft. 6 in.) wide connected to the shore by an access jetty 287.2 m. (950 ft.) long and 5.49 m. (18 ft.) wide.

The wharf has been designed for vessels of max. length of 182.8 m. (600 ft.) and of up to 20,000 d.w.t. to berth at each side under normal conditions. Vessels of up to 30,000 tons can be accommodated under suitable tidal conditions.

The depth of water alongside is 11.59 m. (38 ft.) below chart datum (low water ordinary spring tide) on both sides of the wharf head.

Jetty: A wooden jetty with a depth alongside of 4.27 m. (14 ft.) below chart datum (low water ordinary spring tide) is located at the head of Melville Bay. Use of this jetty is generally reserved for vessels of the landing barge type.

STEVEDORES: No local stevedoring companies.

TANKERS: See "Berthing".

FRESH WATER: Available at all berths.

FUEL: Not available, however distillate can be supplied ex-road tanker in cases of emergency at the general cargo wharf.

MEDICAL: Medical services and a large modern hospital with comprehensive theatre, medical and surgical facilities, at Nhulunbuy, 9 miles from the port.

AIRPORT: Gove is served by commercial flights to and from Darwin on 7 days a week and by commercial flights several times a week from Brisbane and Sydney via Cairns and Mount Isa. Services to other parts of Australia and the rest of the world are frequent from Darwin.

TIME: The time used is Zone −9.5, and all reference to time should be given in Local Time.

REPAIRS: No facilities for repairs.

DENSITY: 1025.

SURVEYORS: Lloyds Surveyors available from Darwin.

HATCHES: Opening and closing carried out by ship's crew.

REPATRIATION: Facilities exist for effecting crew changes and repatriation.

MARINE SERVICE: A privately operated service provides marine advisory assistance to ships bound for Northern Territory and Gulf of Carpentaria ports, mainly *Gove* and *Groote Eylandt*, and details may be obtained from Carpentaria Marine Services, 94 Pie Street, Aspley, Brisbane, Queensland 4034. Tel.: Brisbane 595977. Cables: "Carpenserv Brisbane", or Gove Office: POB 469, Nhulunbuy, NT 5797.

REGULATIONS: It is forbidden to take firearms and alcoholic beverages ashore.

AUTHORITY: Nabalco Pty Limited.

AGENT: Agency undertaken by Nabalco Pty Limited.

GROOTE EYLANDT (Milner Bay), N.T.: 13.52 S. 136.25 E. (See Plan)

LOCATION: Milner Bay is situated on the Northwestern corner of Groote Eylandt which is itself situated in the Southwestern area of the Gulf of Carpentaria.

It is a "Port of First Entry" to Australia. Customs, Quarantine Doctor, Police, are in residence on the Eylandt.

DOCUMENTS:
3 Crew Lists.
5 Passenger Lists.
1 Port of Call List.
3 Stores Lists.
1 Crew's Personal Effects List.
Derat. Certificate.
Clearance from Last Port.

PORT LIMITS: The waters in Milner Bay bounded by a line commencing at the HW mark on the N.W. coast of Groote Eylandt in position Lat. 13° 50′ 05″ S. Long. 136° 24′ 29″ E. and proceeding in a 260° 44′ 10″ direction to a point in Lat. 13° 50′ 28″ S. Long. 136° 22′ 03″ E. at the high-water mark on the East coast of Connexion Islet; thence by a line following the contour of the coast of Connexion Islet at the HW mark to "Boulder" in position Lat. 13° 50′ 46″ S., Long. 136° 20′ 14″ E.; thence by a line bearing 151° 30′ to a position Lat. 13° 53′ 34″ S. Long. 136° 21′ 47″ E.; thence by a line bearing 80° 44′ 10″ to a point being Lat. 13° 52′ 54″ S. Long. 136° 25′ 58″ E. thence by a line following the contour of the coast at high-water mark to the point of commencement.

PILOTAGE: There is a Port Officer at Milner Bay who will assist Masters in berthing and departing from the jetty. Approaching Groote Eylandt from the Northwards, vessels should steer to a position 10 miles North of the Northeast Islet, which is rocky on the Northern coast and rises to grassy hills. From the above position, steer to pass about 3 miles North of Chasm Islet until the recommended track on chart Aus. 14 is reached. This track 221° passes about 1 mile East of Brady Rock (light GP. FL. (3) ev. 12 secs.) and continues on this course until Bickerton Island Light (FL. 5 secs.) bears 250° when the course should be altered to steer for Hand Islet on the recommended track (250°) until reaching the position to alter course to 195° to pass down the middle of Warwick Channel. It is recommended to remain on this course until reaching the patch South of Connexion Island.

If vessels enter via the Connexion passage, care must be taken to avoid the 3 fathom patch off N.W. Bluff and keep clear of the 27-ft. patch about 3.5 miles N.E. of Connexion Islet.

ANCHORAGE: Good holding ground is found 1 mile West of the jetty where there is a good sand bottom free of obstructions with about 40 ft. of water. Quarantine is granted at this anchorage.

MAX. SIZE: The max. LOA is 700 ft. and max. breadth 96 ft. The max. draft is 35 ft.

RADIO: The Port is able to communicate with vessels which are fitted with VHF radio through normal international Maritime Channels and the call sign is "Groote Eylandt". However, the shore station is only open during office hours unless prior telegraphic arrangement is made. Office hours are 0800 to 1645 hrs. Monday to Friday and 0800 to 1230 hrs. Saturday.

It is requested that vessels arriving at any hour of the day should monitor VHF Channel 16 as sometimes attempts are made to contact vessels outside of office hours.

ETA's are required at least 72 hrs. 48 hrs. and 24 hrs. prior to arrival. Telegraphic address is: Manager, GEMCO, C/-Hematite, Darwin. Telex AA70858. Or Manager, GEMCO, Alyangula, N.T. 5798. Radio telephone: Darwin 81-6589, or Cairns 3547.

PRATIQUE: 24 hrs. before arrival at Milner Bay, vessel's Masters are requested to cable "QUARANTINE GOVE" stating their last port of call, date sailed, number of crew and nationality, any sickness on board and whether all smallpox and cholera vaccinations are current and valid.

BERTHING: The ore-loading jetty is situated in approximately 13° 56.5′ S. 136° 25′ E., with a depth of water alongside of 35 ft. MLWOST with a tide range of 6 ft. A small tug is available to assist in berthing vessels and a launch is provided for running lines. The jetty consists of a central landing 324 ft. long and 36 ft. wide, with two breasting dolphins on the North and South ends of the central landing. A roadway extends from the shore to the central landing, virtually parallel to and on the North side of the loading conveyor belt. As there is no tidal information for this area, the tidal direction should be checked with the shore prior to berthing, as the tidal stream is sometimes different half a mile from the jetty.

The line of dolphins is offset 8° from the jetty stem which runs out 1,350 ft. from the shore in a 249° 45′ direction so that care must be exercised in placing the vessel for loading. All breasting dolphins are fendered with vertical timbering. When berthing, vessels should keep well clear of the loading head in the centre of the jetty, as it is possible that a vessel on a too fine approach could cause damage to the loading boom with the flare of the bow.

Vessel must have rat guards in position at all times (except while shifting ship), otherwise they will be liable to a fine. As Groote Eylandt is a reserve this requirement is rigidly enforced.

Loading rate is 900-1,100 tons t.p.h. and the vessel is required to shift ship to load each hatch as the loading boom is fixed. Shore labour is available to shift lines, etc., as required. Shore labour will not trim manganese ore, which is dump loaded from the conveyor.

This is a seasonal tropical loading zone from 1st April to 30th November.

FRESH WATER: Not available.

STORES: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: 200 cigarettes, one bottle spirits, three bottles of beer per man.

MEDICAL: There is a Medical Centre and medical staff available if necessary. Valid vaccination certificates are required, covering the requirements of the Australian Government Department of Health.

FIRE PRECAUTION: A permanent fire-fighting facility is installed on the ore-loading jetty. It is an automatic system which starts as

soon as a fire hydrant is turned on, and delivers a 140 p.s.i. through a 2.5 in. hydrant with a 5 TPI V Thread connection.

All shore hoses are 2.5 in. and are equipped with fog nozzles. Foam equipment is also available on the jetty with an output of approximately 1,000 gallons per minute. Fire-fighting lines on the jetty deliver salt water only. International shore connection available.

TIME: Time kept is Northern Territory "Standard Time" GMT plus 9 hr. 30 min.

WEATHER/WIND/TIDE: Tides cause some eddying in both the Connexion and Warwick Channels, but these cause no concern provided normal care is exercised.

Prevailing winds from May to October are S.E. and blow strongly at times during the day but ease off considerably after sunset.

There are occasional heavy fogs in the area in June and July in the early morning and these sometimes persist until 1000 or 1100 hrs.

From November to May the wet season prevails with winds blowing mainly from the S.W. with heavy rains and occasionally, more than moderate seas.

REPATRIATION: Can be effected to most countries from Groote Eylandt via Darwin which is serviced by Qantas and British airways. Due to the remoteness of Groote Eylandt, repatriation of crew members should only be considered in a 'Force Majeure' circumstance. All necessary bookings and reservations are made through the local airline office and Seamens' Discount Fares, where applicable, are utilised.

AIRPORT: MacRobertson Miller Airlines operate a daily jet service to Darwin, Monday, Wednesday, Thursday, Saturday and Sunday, flying time is approximately one hour.

Bush Pilot Airways operate two flights per week on Mondays and Fridays to Cairns, Queensland. Flying time is approximately four hours, in twin engined light aircraft.

ACCOMMODATION: Visitors accommodation in the GEMCO township of Alyangula, is severely limited and shipowners who are arranging for a change of personnel at Groote Eylandt are requested to ensure that the arrival of crew members at Groote coincides as closely as possible with the arrival of the vessel.

NOTARY PUBLIC: The Mission Superintendent at Angurugu is a Notary Public.

HOLIDAYS: Cargo worked on most holidays by arrangement.

SHORE LEAVE: The area is an Aboriginal reserve and *shore leave is allowed in the town area only* provided the vessel has a permit which is supplied by the Agent on berthing.

AUTHORITY/AGENT: The Groote Eylandt Mining Company Pty. Ltd. act as ships' Agents in all cases.

Mail for steamers to be addressed to: "Vessel", Groote Eylandt Mining Co. Pty. Ltd., Groote Eylandt, N.T. 5798.

HAY POINT, Queensland: 21.16 S. 149.19 E.

(See Plan)

LOCATION: Hay Point lies 19 km. South of Mackay in Lat. 21° 16′ S. Long. 149° 19′ E. The port is managed by Hay Point Services Pty. Limited. The loading wharf is at the end of a pier, 6,750 ft. long, extending from the shore.

DOCUMENTS, and all general information refer to "Melbourne".

PILOTAGE: Pilotage is compulsory on all vessels except in the cases where the Master holds an exemption certificate for the port.

The area for boarding will be determined by the Pilot but will generally be at a point within an area 1.5 miles East of the port.

ANCHORAGE: Off Hay Point anchor 2 miles East of wharf in depths of 13.7 m.

Off Mackay Harbour anchor 1.5 miles S.E. of Slade Island in depths of 11.0 m.

Vessels berth on flood stream. Least water in approaches 13.4 m. Night berthing restricted to vessels under 40,000 d.w.t. but this restriction is under constant review.

MAX. SIZE: Max. length 950 ft. (not including bulbous bow). Max. draft dependent on tide height. A 5 ft. (1.6 m.) under keel clearance is recommended in the berth, which has a depth of 55 ft. (16.7 m.). Under keel clearance required at departure is 10% of max. draft, plus 2 ft. (0.6 m.). Least water on departure is 44 ft. (13.4 m.).

PRATIQUE: Pratique is available on a 24 hour basis, 7 days per week in the berth.

Pratique can also be given by radio to vessels which have a Medical Officer aboard as a Crew member. The radio message must contain details of the ship and personnel and making formal request for radio pratique.

Whilst in the vicinity of the port, vessels are required to store garbage aboard in containers approved by the Quarantine Inspector.

RADIO: *Arrival Advice:* Vessels shall communicate with the Terminal via the Shipping Agents.

It is required that the Master of an incoming vessel notify by radio of the ETA at the port, 7 days, 48 hours and 24 hours prior to expected arrival. Local time should be used in all communications. The loading plan should be provided 48 hours prior to expected arrival time.

The Postmaster-General's Dept. has a facility, known as "Shipserv" which will expedite the handling of ship's radio-telegrams requiring special treatment after normal Post Office hours. This facility has been introduced to obviate likely delays affecting business communications between vessels and their Port Agents.

To ensure that shipping messages will continue to receive "after hours" service, the sender should include the service routing indicator "Shipserv" as the first word in the address of all telegrams requiring special treatment. Action will then be taken to telephone the message to the addressee, who will be required to pay the relevant trunk call charge only.

VHF: There are VHF Marine Radios installed at the Berths, and on the tugs and lineboats, for communications during berthing and unberthing operations.

The call sign for the port is – "Hay Point".

The following Channels are available:

Channel 12 – 156.60 mHz – Operations.
Channel 13 – 156.65 mHz – Operations.
Channel 14 – 156.70 mHz – Operations.
Channel 16 – 156.80 mHz – Calling.

TUGS: The port is serviced by tugs and lineboats owned and operated by J. Fenwick and Co. Pty. Ltd. – Sydney. It is required that the Master of a vessel entering or departing from the Terminal engage the services of the port tugs through the Shipping Agents.

BERTHING: *Berth No. 1:*

(Note: All levels refer to chart datum.)

Berth Alignment	350° True
Design ship size	14,500 to 100,000 d.w.t.
Dredged depth	−55 ft. (−16.76 m.)
Dredged width	200 ft. (60.96 m.)
Dredged length	1,125 ft. (342.90 m.)
Depth outside dredged area	−43 ft. (−13.11 m.)
HHWS	+23 ft. (+7.01 m.)
MHWS	+18 ft. (+5.49 m.)
MLWS	+2 ft. (+0.61 m.)

Shiploader

Nominal loading rate	4,000 t.p.h.
Longitudinal travel distance	620 ft. (188.98 m.)
Longitudinal travel speed	100 f.p.m. (30.48 m.p.m.)
Maximum outreach of telechute	87 ft. (26.52 m.) from fender face

Shiploader has pivoted boom.

Mooring Details: (See Plan)

(a) Mooring Dolphins

1MD1 – 4×100T sliphooks with capstan
1MD2 – 3×100T sliphooks with capstan
1MD3 – 3×100T sliphooks with capstan
1MD4 – 3×100T sliphooks with capstan

(b) Breasting Dolphins

1BD1 – 2×100T sliphooks with capstan
1BD2 to 5 – 1×150T sliphooks with capstan
1BD6 – 2×100T sliphooks with capstan

S.A.M.I. (Speed of Approach Measuring Instrument)

The Berth is fitted with instruments to measure the speed of approach of vessels as an aid to berthing.

Berth No. 2:

(Note: All levels refer to chart datum).

Berth Details:

Berth Alignment	330° True
Design ship size	25,000 to 100,000 d.w.t.
Dredged depth	−56 ft. (−17.07 m.)
Dredged width	200 ft. (60.96 m.)
Dredged length	1,200 ft. (365.76 m.)
Depth outside dredged area	−43 ft. (−13.11 m.)
HHWS	+23 ft. (+7.01 m.)
MHWS	+18 ft. (+5.49 m.)
MLWS	+2 ft. (+0.61 m.)

Shiploader

Nominal loading rate	6,000 t.p.h.
Maximum longitudinal travel distance	628 ft. (191.41 m.)
Normal longitudinal travel distance (between limit switches)	595 ft. (181.36 m.)
Telechute travel height	60 ft. (18.29 m.)
Maximum outreach of telechute	95 ft. (28.96 m.) from fender face
Intermediate outreach of inner shuttle	12 ft. (3.66 m.) inside fender face
Outreach of telechute corresponding with intermediate position of inner shuttle	70 ft. (21.34 m.) from fender face.
Elevation of telechute fully extended	+18.5 ft. (+5.64 m.)

Mooring Details (See Plan)

(a) Mooring Dolphins

2MD1 – 4×100T sliphooks with capstan
2MD2 – 3×100T sliphooks with capstan
2MD3 – 3×100T sliphooks with capstan
2MD4 – 3×100T sliphooks with capstan

(b) Breasting Dolphins

2BD1 – 3×100T sliphooks
2BD2 to 5 – 1×100T sliphooks on each
2BD6 – 2×100T sliphooks

S.A.M.I. (Speed of Approach Measuring Instrument).

The berth is also fitted with instruments to measure the speed of approach of vessels as an aid to berthing.

LOADING: Vessels will be generally loaded in turn, in the order of arrival provided that:

(i) The vessel is ready in all respects to receive cargo.
(ii) All the cargo is available at the Terminal.
(iii) It is in accordance with the instructions of the Charterer or his Agent.

Vessel shall present a detailed loading plan immediately on arrival including hatch quantities with loading sequence and quantity of coal to be reserved for fore and aft trimming by hatches.

The weight of each shipment shall be determined by an independent Marine Surveyor. The time used for all surveys shall be to the vessel's account unless alternative arrangements have been made.

BULK HANDLING FACILITIES: The Shiploader on Berth No. 1 has a Luffing Boom with a travelling telescopic chute and mechanical trimmer. The Shiploader has a nominal loading rate of 4,000 t.p.h. On Berth No. 2 the Shiploader has rail mounted shuttles, both Inner Shuttle and Outer Shuttle. The Telescopic chute with Trimmer is mounted on the Outer Shuttle with a nominal fast rate of 6,000 t.p.h. and a trimming rate of 2,000 t.p.h.

STEVEDORES: No notice required. Loading facilities working three shifts of 8 hours each.

MEDICAL: Hospital and doctors at Mackay, 23 miles away by road.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: No facilities are available for providing bunker or diesel fuel. It is strictly forbidden for drums of oil or fuel to be loaded at the Terminal.

IDENTIFICATION CARDS: See "Melbourne".

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Crew operate hatches.

CONSULS: No local representatives.

REPAIRS: Only light repairs may be effected.

REPATRIATION: Can be arranged.

AIRPORT: Regular services to Northern and Southern ports are available from Mackay Airport.

TIME: GMT plus 10 hours (Eastern Australian Standard Time).

POLICE/FIRE/AMBULANCE: Police, Mackay 2468; Ambulance, Mackay 2222; Fire, Mackay 2244; Police Sarina 20; Ambulance, Sarina 1; Fire, Sarina 100.

TELEPHONES: Placed on board whilst alongside. Hay Point 56–31–52, at berth No. 1 and Hay Point 56–31–06 at berth No. 2.

DELAYS: Berth is exposed and delays occur when wind speeds exceed 25 knots.

SHORE LEAVE: Allowed, taxis may be called from Mackay but are expensive, about A$9 each way. Crew members not allowed along pier on foot.

POLLUTION: Government Authorities demand that no person using the port shall discharge any garbage, refuse, vegetable or food matter, deck cleanings, polluted bilge water, oil or rubbish of any description in the vicinity of the port or within 50 miles of the Great Barrier Reef. Heavy penalties will be imposed for breaches of the relevant regulations.

It is a requirement of the Dept. of Harbours and Marine that before the Pilot may proceed with the berthing of a ship likely to deballast at the Port, the Pilot must receive a certificate from the Master stating that the ballast on board is clean.

STORES: Limited ship's stores and provisions may be loaded at the port and would be available from Mackay chandlers and providors.

GENERAL: *Firearms, Explosives, Inflammables:* No person shall discharge any firearm or explode any detonator or any other signal except as a distress signal, or use any explosive upon any vessel or otherwise within the Terminal.

Explosives or highly inflammable goods shall not be loaded or unloaded at the port except with the expressed written permission of the Port Manager.

Repairs in Port: The Owner, Master or Agent shall notify and obtain written approval from the Port Manager prior to undertaking any repairs to engines or any part of the mechanism of the vessel which would prevent sailing at short notice. The vessel shall not be immobilised at the wharf.

Tides and Currents: In the absence of formal tide tables for the port of Hay Point, it is recommended by the Dept. of Harbours and Marine that the tidal predictions for Mackay should also suffice. From the Department's records, it appears that the time difference of high and low water is only of the order of 5 to 10 minutes after Mackay.

From studies carried out in the Hay Point area by hydrographic investigators there is an indication that the tidal currents flood in a direction between 145° to 170° True and the ebb current flows in a direction of 330° to 360°, with a maximum speed (in knots) approximating one-tenth of the predicted tidal range (in feet) at that time. A maximum current speed occurs in a direction of 340° True with an ebbing tide. The change of direction in the current occurs about half an hour before the tidal extremes.

AUTHORITY: Department of Harbours and Marine, Brisbane. Hay Point Services Pty. Ltd., Mackay.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

HOBART, Tasmania (including Risdon, Electrona and Port Huon): 42.53 S. 147.20 E. **(See Plan)**

PORT LIMITS: Seaward boundaries (Hobart, Risdon, Electrona and Port Huon for vessels bound from the East); the mouth of the River Derwent, an imaginary line from Iron Pot to Kelly Pt. On Bruny Is. (Port Huon, Electrona for vessels bound from the West); the Southern end of the D'Entrecasteaux Channel, an imaginary line from the Southern end of Partridge Is. to Southport Is. Vessels are considered "arrived" after clearing doctor and a notice of readiness presented to Agent.

DOCUMENTS: See "Melbourne".

PILOTAGE: Pilotage compulsory for all vessels exceeding 200 tons gross not under the command of a duly exempted Master or without special permission of Harbour Master. ETA usually sent vessel's Agent at least 24 hours prior to arrival Pilot (advisable also to send ETA to Harbour Master) through Hobart Radio (VIH) between 0730–1730 hrs. Monday–Saturday, 0800–1600 hrs. Sunday, after hours through Melbourne Radio (VIM). Continuous watch kept on VHF Channel 16, call sign "Hobart Harbour" (Pilot launches also maintain watch on Channel 16); Channel 12 reserved ship to shore; Channel 8 and 6 ship to ship.

Three launches used for pilotage work. Usual vessel 41 ft. steel-built launch painted dark blue with "Pilot" painted in white on hull on both sides. Superstructure painted white. No specific sound signals. For pilotage purposes Hobart is divided into three zones namely "A" (Hobart), "B" (Risdon, Self's Pt.), and "C" (Port Huon, Electrona and Channel Ports). For zones "A" and "B" Pilot boards all vessels in excess of 500 tons gross, on an imaginary line joining White Rock and Crayfish Pt. Vessels under 500 tons gross are boarded on a line East from John Garrow Beacon. Pilots disembark from all vessels outward on a line East from John Garrow Beacon unless requested to proceed to White Rock. For zone "C", for vessels from Eastwards, Pilots embark on an imaginary line joining Piersons Pt. and Kelly Pt., or from Westwards on an imaginary line joining Southern end of Partridge Is. and Southport Is. No alternative Pilot grounds. Vessels inward to zones "A" and "B" wishing to anchor prior to embarking Pilot should do so off White Rock, whether to proceed to berth or quarantine anchorage.

Specific requirements for embarking Pilots are those in force in most ports, namely provide a good lee, a pilot ladder fitted with spreaders and manropes and adequately lit at night, preferably from aft of the ladder.

Also see "Bridges".

ANCHORAGES: Anchorages with excellent holding can be found everywhere in estuaries of Derwent and Huon Rivers. Quarantine anchorage situated off Kangaroo Bluff where excellent holding obtained in 10 to 13 fathoms.

RESTRICTIONS: No restrictions in force, except very deep draft at night at Risdon.

MAX. SIZE: Risdon to 35 ft.; Self's Pt. Oil Wharf, Macquarie No. 2 and No. 3 General Cargo Wharf dredged to 36 ft. (10.97 m.). Max. beam practicable at Risdon 24.384 m. (80 ft.).

HEALTH: Vessels requiring pratique anchor in quarantine anchorage and there boarded by doctor, immigration and customs officials. Full crew muster required. Quarantine authorities must be informed of suspected disease or fever at least 18 hours prior arrival. Pratique automatic if granted at previous port. Also see "Melbourne".

RADIO: Hobart Radio, call sign VIH. Hours of duty Eastern Standard Time (add 1 hour for Summer Time) Monday to Saturday inc. 0730–1730 hrs., Sunday 0800–1600 hrs. After hours messages through Melbourne Radio VIM.

TUGS: Normally join vessels approximately one mile from berth. Usual to use tug's line for which additional charge of $2.50 is made, but ship's line may be used.

BERTHING: Port operates on a 24-hour per day basis. No restrictions on tanker movement.

Berths available Hobart, Risdon, to 35 ft. (10.67 m.)
Berths available Self's Pt. (Oil) to 36 ft. (10.97 m.)
(Dredging in progress) 8 general berths to 36 ft. (10.97 m.)
Berth available Channel Ports
(General) Port Huon 2, to 32 ft. (9.75 m.)
Explosives Jetty to 30 ft. (9.14 m.)

SPECIALISED CARGO-HANDLING FACILITIES: Bulk wheat is discharged at Princes Wharf. Liquid caustic soda and feedstock for the gas company are discharged at Macquarie Wharf No. 2. Risdon Wharf, owned by the Electrolytic Zinc Company of Australasia Ltd., handles bulk cargo consisting of phosphate rock, zinc concentrates and potash. The wharf also has facilities for loading bulk sulphuric acid. Australian Paper Manufacturers Pty Ltd. own a wharf at Hospital Bay, Port Huon, which is used for loading wood pulp in bulk. Roll-on/roll-off traffic accommodated at Princes Wharf No. 1, Macquarie Wharf No. 4, and at Princes Wharf No. 4, which is also equipped with a 22-ton crane for handling containers.

Roll-on/roll-off facilities at new berths Macquarie No. 5 and No. 6 now available. Live load of ramps 210 tonnes. Ramp beam 10.97 m.

The port is equipped with a Coles "Colossus" 254 tonne capacity fully mobile crane. This high capacity crane is used both for heavy lift requirements and container handling. For container work 30 tonnes can be handled at 33 m. outreach.

BRIDGES: Only one bridge, the Tasman Bridge, required to be navigated and this only when berthing at Self's Pt. Oil Wharf or the Electrolytic Zinc Company's Wharf at Risdon. Clearance 155 ft. (47.24 m.) at HWS and 240 ft. (73.14 m.) wide. Pilotage under bridge is compulsory for all vessels of length 100 m. and over.

STEVEDORES: Gangs ordered by 1600 hrs. on previous day, or 1400 hrs. on Fridays.

MEDICAL: Advance notice of required medical attention necessary including if possible, symptoms of complaint. As much notice as reasonably possible is required. Vaccination for smallpox compulsory. Inoculation against yellow fever or cholera necessary if vessel has visited a port where either disease proclaimed.

TANKERS: Tankers when sending their ETA must state whether or not there are any leaks in hull. All oil discharge lines 8 in. diameter. One oil berth, max. draft alongside 36 ft. (10.97 m.).

Self's Pt. Oil Wharf is used for discharge of bulk petroleum products and has facilities for the discharge of liquid petroleum gas.

DENSITY: Variable.

FRESH WATER: No restriction on availability. Rate of delivery approximately 30 tons p.h./per hose. Water available all berths. No water boats. Cost per 1,000 gallons 45 cents or part thereof.

FUEL: The following grades of fuel are kept in stock: marine fuel oil, light diesel and gas oil. Twenty-four hours notice required for bunkering.
FIRE PRECAUTIONS: No special fire precautions other than non-smoking or lighting of fires or use of naked lights.
DRY DOCK (SLIP): Dimensions of cradle 180 ft. (54.86 m.)
Clear width 40 ft. (12.2 m.)
Minimum depth over blocks when slipping F 5.6 ft. (1.71 m.)
A 13.1 ft. (3.99 m.)
Range of tide 4.7 ft. (1.43 m.)
Available for vessels up to 1,200 tons displacement.
SURVEYORS: Agents and Surveyors for Lloyds Register of Shipping, American Bureau of Shipping, Bureau Veritas: Mr. R. B. Thompson, Mr. W. F. Wells, 5 Gladstone St., Hobart. Tel 237328. Also appointed Surveyors for Norske Veritas.
GANGWAY/DECK WATCHMAN: Gangway watchmen are recommended. Watchmen work 12-hour shift. On Saturday, Sundays and holidays, twice normal rate.
OPENING/CLOSING HATCHES: Normally by stevedores.
CERTIFICATES: Register, Load-line Certificate, Deratisation Certificate, Light Dues, Articles of Agreement, Clearance from previous port.
CUSTOMS ALLOWANCES: If vessel arrives at first port, allowance of tobacco for crew is 200 cigarettes in opened carton or equivalent in tobacco or cigars. Allowance of wines or spirits is any opened bottle, but not exceeding 26 fluid ounces.
CARGO GEAR: No additional requirements. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS:

Belgium	Netherlands
China (Republic)	Norway
France	Denmark
Greece	Sweden
Italy	Germany

REPAIRS: No facilities for major repairs, but a number of engineering works which can perform small repairs.
REPATRIATION: Facilities available.
AIRPORT: Situated 11 miles from Hobart, and is served by regular airlines connecting with Melbourne from where services operate world wide.
TIME: Local time (Eastern Standard Time) 10 hours ahead of GMT. Summer time in force from last week-end in October to first week-end in March, when clocks advanced one hour.
HOLIDAYS: Official Holidays observed in Hobart. New Year's Day; Australia Day (late January); Regatta Day (mid February); *Labour Day (early March); *Good Friday; Easter Saturday; Easter Sunday; Easter Monday; Easter Tuesday (Bank holiday); *Anzac Day (April 25th); Queen's Birthday (mid June); Show Day (third Thursday in October); *Christmas Day; Boxing Day.
*Days on which no work is performed.
POLICE/AMBULANCE/FIRE: Police 38 1101; Ambulance 343131; Fire 345655. In emergency dial "000".
TELEPHONES: Arrangements exist for placing telephones aboard vessels at all berths.
DEVELOPMENTS: Two new roll-on/roll-off berths, an 800 ft. general purpose berth with minimum depth of 44 ft. alongside and 20 acres of cargo marshalling area. The undertaking is being done in two stages.
Stage I. A 470 ft. and 650 ft. roll-on/roll-of berth with 11 acres of cargo marshalling area. These berths completed late 1974, early 1975 respectively. Two large cargo transit sheds to be incorporated in the area.
Stage II. An 800 ft. deep water general purpose berth with axle loadings of 70 tons. Nine acres of marshalling area to be provided in the area. Completion 1977.
DELAYS: Not usual for any delays to occur in berthing. Occasionally a deep-loaded bulk carrier has to wait for high water at Risdon.
AUTHORITY: Marine Board of Hobart.
AGENT: Sub-agent of Patrick Agencies, Melbourne.

INNISFAIL/MOURILYAN, Queensland: 17. 32 S. 146.02 E. **(See Plan)**

PORT LIMITS: Mourilyan Harbour, the area to the West of a line joining Hall Point and the outer extremity of the North Head.
ARRIVAL: Requirement for vessels in ballast; min. forward draft to be 2 per cent of overall length, min. after draft – propellor immersed. Draft to be notified to Agent in arrival telegram.
CERTIFICATES/DOCUMENTS/CUSTOMS ALLOWANCES: See "Melbourne".
PILOTAGE: Order Pilot through Agent, as early as possible. Confirm through Agent or direct to Harbour Master, Innisfail. Pilot vessel, located in Mourilyan Harbour, watches on VHF 16 when vessel expected to berth. Pilot vessel white with yellow cabin tops and blue trim. Pilot boards 1.5–3 miles East of harbour entrance. Approved pilot ladder and good lee required, *not* accommodation ladder. Vessels awaiting Pilot anchor in boarding position above, good holding. Leading beacons – in line 270° T, showing fixed red neon. Entrance beacons flashing – red port, green starboard.
RESTRICTIONS: No night-time arrival pilotage. On spring tides, entry restricted to at or near slack water. No turbine-powered vessels accepted. Berthing daylight only. Night-time sailings permitted. Vessels entering or leaving – Forward draft not to be less than 2% of overall length and propellor to be immersed.
MAX. SIZE: 600 ft. LOA. Beam unrestricted. Draft, arrival or departure 25 ft. plus rise of tide (up to 9ft. on springs, 5 ft. at neaps).
HEALTH: See "Pilotage". Also see "Melbourne".
RADIO: VIT Townsville (MF) VIK Cairns, has been discontinued.
TUGS: Tug stationed at Mourilyan. Second tug comes from Cairns or Townsville when required, e.g. when vessel over 580 ft. LOA or beam over 75 ft. Tug usually required for unberthing. Tug normally pushing or using tug's lines, no extra charge.
BERTHING: Ships always berth port side to at Mourilyan. One sugar and molasses berth, length 633 ft. depth 34 ft. LWOST.
STEVEDORES: No waterside workers employed. Normal ETA advices to Agents for arrangement of bulk-loading staff.
DENSITY: Usually 1024-1027 irrespective of tide. After heavy rains, particularly January-April, considerable freshening occurs to 1008.
FRESH WATER: Good water readily available, shore hoses from wharf face. Approx. 25 t.p.h. capacity. 55c. per 1,000 gals.
FUEL: Limited quantities of fuel oil and diesel oil available by road-tanker.
GANGWAY WATCHMEN: Not normally required.
HATCHES: Worked by crew.
CARGO GEAR: See "Melbourne".
CREW I.D. CARDS: See "Melbourne".
CONSULS: Nil.
REPAIRS: No major facilities available. Most types of welding, light machinery, and pipe-fitting can be arranged. Technicians can usually be obtained for radar, etc., with advance notice by radio to Agents.
TIME: GMT plus 10 hours.
HOLIDAYS: Various national, state and local holidays. Cargo usually worked on all holidays except Christmas Day.
POLICE/FIRE/AMBULANCE: Ring 000 on shore public telephone or ship's telephone if fitted.
TELEPHONE: No telephone aboard.
GENERAL: Port normally used only for export of sugar and molasses. Deadweight (cargo on board on arrival) restrictions may apply to certain classes of vessel. Agents will advise details if applicable.
SHORE LEAVE: Not normally restricted. Distance to nearest township (Mourilyan) 6 miles, to Innisfail 10 miles. No public transport services from harbour.
DELAYS: Awaiting daylight or tide or, exceptionally, awaiting vacancy of berth or moderation of weather. No delays usually in loading.
AUTHORITY: Dept. Harbours and Marine.
AGENTS: Sub-agent of Patrick Agencies, Brisbane.

LAUNCESTON, Tasmania (including Beauty Point, Bell Bay, Inspection Head): 41.27 S. 147.07 E. **(See Plan)**

PORT LIMITS: A vessel is considered to have arrived when at the pilot boarding ground.
DOCUMENTS: Agents prepare Bills of Lading and Shipping Documents. Only documents required Crew List and Passenger List. Light Dues receipt is necessary if payment is made before arrival.
PILOTAGE: Compulsory for vessels over 50 tons d.w.t. Pilot boards off Low Head lighthouse, slightly to East of leads in line.
Contact Pilot by radio giving ETA 24 hours before arrival. Telegraphic address "Portlaun". Pilots equipped with VHF Channels 16 and 12. "G" Flag to be flown on arrival.
Instructions for boarding given by Pilot over radio-telephone.
ANCHORAGE:
Position *(a)* Low Head 41° 03′ 32″ S., 146° 47′ 18″ E.
(b) 1.15 miles 280° from *(a)*
(c) 0.9 miles 308° from *(b)*
(d) 0.85 miles 038° from *(c)*
(e) 0.9 miles 128° from *(d)*
thence 0.85 miles 218° to *(b)*
RESTRICTIONS: Night navigation undertaken (tankers now operate at night). Over 168 m. at Pilot's discretion.
MAX. SIZE: Max. permissible draft 9.0 m. at zero water. 11.10 m. at high water. Length restricted to approx. 229 m. Vessels over 168 m. length cannot work Channel during ebb tide. Under keel clearance to be 1.3 m.
HEALTH: Organised by ship's Agent. Notify Agent prior to arrival. Pratique automatic if vessel visits other ports in Australia prior calling Launceston. Also see "Melbourne".
RADIO: Melbourne VIM or Hobart VIH.
TUGS: Three tugs – one of 2,000 h.p., available at Launceston. Tugs normally join at Point Effingham.
VHF: Pilot station, pilot launch, and the two Launceston tugs are fitted with VHF Channels 6, 12 and 16 operating on frequencies 156.6 and 156.8 respectively.
BERTHING:
Bell Bay: On the Eastern shore within 11 km. of the entrance.
Bell Bay Wharf: Length 152 m. Depth alongside 11.29 m. at LWST. The wharf is able to handle loads of 140 tonnes on suitable transporters. General and bulk cargoes handled. Quay equipped with a 12.5-tonne grab able to handle 450 t.p.h.
Comalco Berth (Private): Length 152 m. Depth alongside 10.97 m. at LWST. Quay equipped with two 12.5-ton grabbing cranes, each with a rated capacity of 300 t.p.h.
Roll on/Roll off and Container Berth: A specially designed terminal for the Bass Strait and Sydney vehicular deck ships

equipped with stern loading facilities, capable of carrying wheeled and mobile cargo in excess of 120 tons gross weight. Also a 25-ton capacity wharf crane for handling containers and unit loads. Depth alongside 8.23 m. at LW.

No. 5 Common User Berth: Length 174 m., depth alongside 12.19 m. to 9.14 m. at LW. The berth is designed for container, Ro/Ro, conventional and bulk cargoes. The berth is equipped with a 50-ton travelling crane, and a 8.2 m. wide stern loading ramp with a capacity in excess of 180 tonnes.

Long Reach: On the Eastern shore within 16 km. of the entrance.

Thermal Station Berth: Length 30.5 m., fender dolphins 61 m. apart. Depth alongside 12.34 m. at LW.

No. 1 Chip Berth (Northern): Length 229 m., depth alongside 11.58 m. at LW. Operators, North Woodchips Pty Ltd. The berthing face consists of 5-fender dolphins and 4 mooring dolphins.

No. 2 Chip Berth (Southern): Length 229 m., depth alongside 11.28 m. at LW. Operators, Associated Pulp and Paper Mills Ltd. The berthing face is the same as No. 1 berth.

Inspection Head and Beauty Point: On the Western shore within 11 km. of the entrance.

Inspection Head Wharf: Length 335 m., depth alongside 10.06 m. at LW. The wharf provides two overseas berths with 4,645 sq. m. of shed space, including cool storage and low temperature storage of 966 sq. m., capacity 1,200 tons.

Bulk tallow storage of 1,400 tons and 200 t.p.h. loading rate. Swing room of 198 m. available off the berth.

Beauty Point Wharf: Length 154 m., depth alongside 9.91 m. at LW. Withdrawn from regular service and used only as a plant berth.

Hillwood: On the Eastern shore 32 km. from the entrance.

Explosives Jetty: Length 18 m. × 24 m., depth alongside 4.27 m. at LW.

Launceston:

King's Wharf: Total berthing length 293 m., depth alongside 5.00 m. at LW. There is provision for the discharge of bulk wheat. There are facilities for Ro/Ro vessels and a 17.5-ton cargo handling crane.

BRIDGES: No bridges for large overseas shipping. Some inter-state vessels proceeding to Launceston will pass under Batman Bridge – 27 m. mast clearance HW allows 0.91 m. clearance.

STEVEDORES: Agent for ship arranges stevedores. No ETA required.

MEDICAL: Agents should be notified to prepare for medical attention or hospitalisation. Hospitals Launceston, Beaconsfield, and George Town.

TANKERS: One oil berth at Bell Bay suitable for tankers up to 189 m. length. Vessel berths alongside loading platform and dolphins. Length between mooring dolphins 262 m. Depth alongside berth 11.28 m. LW.

Also one private tanker berth (HEC) with depth 12.0 m., alongside.

BULK HANDLING FACILITIES: One 450 t.p.h. bulk handling crane at Bell Bay Wharf. Two 300 t.p.h. bulk handling cranes at Comalco Private wharf. One 25 ton luffing crane at Ro/Ro Berth.

DENSITY: 1025 to 1028.

FRESH WATER: Fresh water available at all berths. Delivery 30 t.p.h. by hose. Cost 25c to 40c 1,000 gallons plus $4 service charge.

FUEL: Bunkers are available from Mobil and B.P. installations at Bell Bay by wharf line at the oil berth or by road tankers at other berths.

GANGWAY/DECK WATCHMEN. Most vessels supply their own. May be supplied if required. Tidal port makes this requirement necessary.

OPENING/CLOSING HATCHES: Usually by Stevedores.

CUSTOMS ALLOWANCES: Allowance 40 cigarettes per day per man. Stores sealed on arrival; allowance per day per man 2 bottles beer, 1 wine; spirits 1 bottle per 10 days.

CARGO GEAR: Certificates of loading gear and derrick tests to be produced. Also see "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: Nil.

REPAIRS: All repairs possible.

DRY DOCKS: Steel and concrete graving dock located Launceston. Will accommodate ships up to 62.5 m. length and 3.66 m. draft. Clear width of entrance 12.80 m.

REPATRIATION: Arranged through ship's Agents.

AIRPORT: Approx. 64 km. to airport, regular services.

TIME: EST; clocks advanced by 1 hour October-March.

HOLIDAYS: Good Friday, Christmas Day and New Year's Day close holidays. Work on other holidays may be arranged through Agents.

POLICE/AMBULANCE/FIRE: Beauty Point and Inspection Head 83 1141; 83 1204; 83 1109 (fire calls only), Bell Bay 82 1566; 82 1680; 82 1717 (fire calls only).

TELEPHONES: Ship-to-shore phones available.

AUTHORITY: Port of Launceston Authority.

AGENT: Sub-agent of Patrick Agencies, Melbourne.

MACKAY, Queensland: 21.06 S. 149.14 E. (See Plan)

CERTIFICATES/DOCUMENTS/CUSTOMS ALLOWANCES: See "Melbourne".

PORT LIMITS: As for anchorage.

PILOTAGE: Compulsory, service obtained by radio to Agents at least 24 hours before ETA. Pilots will board either at the anchorage (E.S.E. of the Harbour) or 1 mile South of Slade Island heading North. To allow time for manoeuvring, vessels should be under weigh at the Pilot boarding time. Masters are advised not to manoeuvre West of a line between Slade Island and Flat Top Island.

ANCHORAGES: To South of the line of sea leads, with Slade Island summit bearing 351° (343° Mag.), and green light on Southern side of breakwater entrance bearing 294° (286° Mag.), good anchorage with not less than 30 ft. (9.1 m.) LWOS. Bottom sand and good holding ground.

RESTRICTIONS: None. Day or night access.

MAX. SIZE: Up to 620 ft. (189 m.). Largest vessels load at bulk sugar berth, max. length governed by length of traverse of loading appliance winch 445 ft. 8 in. (136 m.) between hatches.

HEALTH: See "Melbourne". Inspection at anchorage or at berth.

TUGS: Five tugs available, 1×10 tons, 1×12 tons and 3×30 tons bollard pull. Latter available when not engaged at Hay Point.

RADIO: See "Brisbane". A VHF Port Radio Station has been established at Mackay Harbour. Frequency: Channels 6, 12, 16, Hours: every hour on the hour and monitoring will commence five minutes before the hour and five minutes after the hour.

BERTHING:

Berth No.	*Length (Metres)*	*Depth (Metres)*
1.	198.12	10.4
2.	198.12	10.4
3.	198.12	10.4
4.	182.88	10.4

Slack water entry. Swinging basin 28 ft. (8.5 m.) LWOST. Mean high neap tide rise 13 ft. 4 in. (4.1 m.). Mean high spring tide rise 18 ft. 1 in. (5.5 m.). Depth at berths 33–35 ft. (10.1-10.4 m.).

SPECIALISED CARGO HANDLING FACILITIES:

Sugar Loading Gantry

(a) Loader Height: Clear height of loader in horizontal position from top of the pier, 26 ft. (7.9 m.). Height of pier, 26 ft. Height of pier above low water, 34 ft. (10.4 m.). Can be used in lifting slope "V" position up to 14° above horizontal. Max. vessel's hatch height above sea surface with which vessel may start loading even at high water, 35 ft. (10.7 m.).

(b) Outreach: Max. outreach of loader from side of pier, 40 ft. (12.2 m.). Breadth of permanent fender from side of pier, 2 ft. 6 in. (0.8 m.). The chute can be traversed along the boom for a max. distance of 20 ft. (6.1 m.).

(c) Movable Range. Length of movable range along pier, 445 ft. 8 in. (135.8 m.).

(d) Capacity: Average loading rate 1,250 tons (1,270 tonnes) per hour: best rate over one ship 1,350 tons (1,372 tonnes) per hour.

Container/Unit Load Facilities

Wharf: length 600 ft. (183 m.); depth 34 ft. (10.4 m.); width 100 ft. (30.5 m.). Wharf deck: 126 ft.×60 ft. plus 2 ft. 6 in. breadth of permanent fender (38 m.×18 m. plus 8 m.); height above low water 28 ft. (8.5 m.) Crane: 25 tons (25.4 tonnes) capacity at 110 ft. (33.5 m.) radius.

STEVEDORES: As much notice as possible.

TANKERS: Berth at Breast Wharf. Load rate for bulk molasses 300 t.p.h. through 10 in. (25.4 cm.) dockline. 8 in. (20.3 cm.) (Caltex) dockline for white petroleum. 10 in. (25.4 cm) dockline (Mobil) for black petroleum products. 8 in. (20.3 cm.) dockline (CSR) for export of industrial alcohol.

DENSITY: Sea water.

FRESH WATER: Available all berths, rate of load 45 tons (45.7 tonnes) per hour.

FUEL: Available at Breast Wharf and North Pier Berth.

FIRE PRECAUTIONS: Normal requirements.

DEVELOPMENTS: Extension of breakwater planned adjacent to industrial land development to give more facilities.

WATCHMEN: Not obligatory.

OPENING/CLOSING HATCHES: Normally by crew, but can be done by stevedores if required.

CARGO GEAR: See "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

REPAIRS: Small repairs can be carried out. Oxy-welding and electric welding plants, compressors and air tools available. Salvage divers available.

REPATRIATION: Facilities available.

AIRPORT: Daily service to Brisbane and thence to world-wide destinations.

TIME: GMT plus 10 hours.

HOLIDAYS: Bank holidays as for Brisbane, plus Waterside Workers' Picnic Day.

TELEPHONES: Ships' extension telephones may be connected at all berths.

SERVICES: Compass adjusting.

AUTHORITY: Mackay Harbour Board.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

MARYBOROUGH, Queensland (incl. Urangan): 25.18 S. 152.54 E. (See Plan)

PORT LIMITS: The area between the mainland and Great Sandy Island from a line joining Hook Point and the Eastern extremity of Inskip Point to the parallel of 25 deg. 7 min. S. latitude, including all rivers, creeks and navigable waters in the above named area.

APPROACHES: Via Hervey Bay and the Pearl Channel.

The width of the Channel to Urangan is 500 ft. (152.4m.) and the Mary River 100 ft. (30.48 m.).

The depths of water at LWOST in this port and approaches are:

	Feet	*Metres*
Urangan Channel	17.0	5.18
Mary River	4.0	1.22
Sandy Straits	3.0	0.91

The swinging basin at Urangan has a width of 1,800 ft. (548.64 m.) and a depth of 27 ft. (8.23 m.).

The swinging basin in the Mary River at Maryborough has a width of 400 ft. (122 m.) and a depth of water of 30 ft. (9.14 m.).

DOCUMENTS: See "Melbourne".

PILOTAGE: Vessels requiring the services of a Pilot should advise the Harbour Master at least 24 hours before their expected time of arrival at the Fairway Buoy and also advise vessels draft.

Note: Pilots for the Sandy Straits are not available on Saturdays, Sundays or holidays unless the vessel is bound for Maryborough.

Pilots Boarding Ground is located off the Fairway Buoy, Hervey Bay and the distance therefrom to Urangan Jetty is 13 miles, and upriver to Maryborough 45 miles.

RESTRICTIONS: Tankers with highly inflammable liquids are not allowed to berth at Urangan in the hours of darkness.

MAX. SIZE: Max. draft of vessels that may enter the port are:

Urangan: HWOST 24 ft. (7.3 m.) and at LWOST 14 ft. (4.27 m.) allowing 3 ft. (1 m.) under keel.

Maryborough: HWOST 12 ft. 6 in. (3.8 m.) allowing 2 ft. (0.6 m.).

HEALTH: Pratique available 24 hours a day, 7 days a week.

TIDES: The mean spring rise is 10 ft. (3.048 m.) at both Urangan and Maryborough, while the mean neap rise is 8 ft. (2.438 m.) at Urangan.

BERTHING: The berths in the port number 2 in all, one (1) at Urangan and one (1) at Maryborough.

The jetty at Urangan is 26 miles by road from Maryborough.

The length of each berth and respective depth of water at LWOST are:

Urangan

(i) 1 Berth 390 ft. (118.87 m.) in length; depth of water 29 ft. (8.84 m.). Max. length of vessel which can be accommodated is 560 ft. (170.69 m.).

Maryborough

(ii) 1 Berth – 120 ft. (36.576 m.) in length; depth of water 20 ft. (6.096 m.); Max. length of vessel which can be accommodated is 150 ft. (45.7 m.) approximately.

Wharf Use

(i) The wharf at Urangan is a dual-purpose berth used as an oil tanker berth and general cargo berth. The oil tanker berth is used by Caltex Oil (Australia) Pty Limited.

(ii) Berth at Maryborough is a mineral sand berth.

Shed Accommodation

(i) Urangan Wharf Shed – 7,000 sq. ft. (650.3 sq. m.) approx.

(ii) Maryborough Wharf Shed – 4,000 sq. ft. (371.6 sq. m.) approx.

Wharf Cranes at Maryborough.

A 40-ton Sheerlegs at 27 ft. 6 in. (8.54 m.) radius at Walkers Shipyard Wharf.

Mobile Equipment

Urangan: Electric capstans are available to move rail trucks.

Maryborough: Mobile cranes are available for hire.

TUGS: Towage is not available at this port. Arrangements for tugs would need to be made in advance to allow steaming time from Bundaberg, the next nearest port.

REPAIRS: Available.

FUEL: Oil bunkering is available at both Urangan and Maryborough.

FRESH WATER: Water is available at the Urangan Jetty and the Maryborough wharves at the rate of $0.75 per 1,000 gallons ($0.17 cents per 1,000 litres) (minimum charge $0.75).

CONSULS: None.

MEDICAL: The Hospital, situated at 185 Walker Street, Maryborough may be contacted on telephone number 21.2222.

POLICE/AMBULANCE/FIRE:

Fire Services

For emergency calls, dial "000" and ask the operator for the Fire Brigade. General enquiries should be directed to telephone number 21.2535. The Brigade Station is situated at 98 Lennox Street, Maryborough.

Police Services

For emergency calls, dial "000" and ask the operator for the Police. General enquiries should be directed to telephone number 21.2211. The Police Station is situated in Lennox Street, Maryborough.

Ambulance Services

For emergency services, dial "000" and ask the operator for the Ambulance. General enquiries should be directed to telephone number 21.2244. The Brigade is situated at 155 Neptune Street, Maryborough.

AUTHORITY: Dept. of Harbours & Marine, Brisbane.

AGENT: See "Brisbane".

MELBOURNE (including Coode Island, Holden Oil Dock, Port Melbourne, Williamstown, Yarraville): 37.50 S. 144.58 E. **(See Plan)**

PORT LIMITS: Vessels at anchor off Gellibrand Lighthouse are considered "arrived" for the purposes of priority of berthing.

DOCUMENTS:

	No. of copies required
Form M & S 11 (List of crew)	2
Form 42A (Store List)	1
Form 5 (Articles owned or in possession of Master, Officers or crew)	1
Form C & E 886 (Ports of call)	3
Form QA3 (Declaration of animals carried as cargo)	1
Form QA4 (Declaration of ship's pets)	1
Form QA5 (Shipmaster's Bond to cover ship's pets)	1
Form A Q360 (Health Report)	2

Of the above, Forms 42A and 5 need only be compiled at first port of call in Australia. Passenger — individual Passenger Cards are utilised therefore no list of passengers required. Agents require 7 copies of Manifest of cargo on board and at least 1 set copies Bills of Lading. These normally received by airfreight or airmail direct from Agents at loading port outside Australia therefore not necessary for Masters to be in possession of either Manifest of cargo on board or appropriate copies of Bills of Lading.

PILOTAGE: 2 vessels, *Wyuna* and *Akuna,* 1 of which kept on station outside Port Phillip Heads, within limits of cruising station, except for short periods when making shore contacts and from 0900 to 1100 hrs. local time each Monday. *Wyuna* has 2 masts, buff coloured hull and funnel with white painted superstructure.

The *Akuna* relief pilot vessel, steamship, 1 mast, buff coloured hull, funnel and white painted superstructure. Pilot vessel on station exhibits by day from foreyard mast, horizontal striped flag, upper half white and lower half red. At night lights as prescribed in International Collision Regulations for a pilot vessel over 65 ft. in length.

Cruising Station: Cruising station extends seaward to 15 miles 221° from centre of fairway between Port Phillip Heads, from which position the Western boundary extends in 334° direction towards coast at Zealey Point, and Southern boundary in 092° direction towards Cape Schank until Arthur's Seat bears 050°, which line towards coast forms Eastern boundary of station. Generally, pilot vessel cruises from 2 to 5 miles 225° from Point Lonsdale Lighthouse in order keep Westward of confused seas caused by tide race through entrance.

Radio message sent direct to pilot vessel 24 hours prior to arrival advising ship's deepest draft and estimated time of arrival at Port Phillip Heads, subject to confirmation pilot vessel. If not in sight, vessels stand off at least 5 miles from Point Lonsdale and make enquiries addressed by visual signals or VHF radio telephone to Point Lonsdale Signal Station.

In the entrance the tidal stream runs at its strongest at times of High and Low water and the ebb stream may at times exceed 9 knots. Care must be exercised to keep Westward of the tidal stream in the Fairway whilst awaiting or embarking a Pilot.

Low-powered vessels and vessels over 34 ft. draft are requested to contact pilot vessel or pilot office as to a suitable time to arrive at Pilot Boarding Ground as their passage through the Port Phillip Entrance is governed by the tidal stream.

Deep-laden tankers in heavy weather are advised to rig pilot ladder from Bridge to avoid swamping boat.

ANCHORAGE: Quarantine Anchorage: if, from Quarantine Regulations, Southerly gales, or other causes, it is necessary to anchor off Quarantine Station, a vessel drawing more than 20 ft. should anchor to Northward, with jetty bearing 195°, in depths of from 48 to 54 ft., from 3 to 6 cables off-shore; and at night in white sector of jetty light, visible from 126° through South to 195°, preferably with that light bearing 180°, and Point Lonsdale light bearing 280°.

Symonds Channel Anchorage: good anchorage clear of all fairways, in red sector of Low light, and well to windward of Southern shore in Northerlies, is to be had in the middle of Symonds Channel close to its Southern end. A good berth is in a depth of about 40 ft. with Queenscliff High Light bearing 286°, and No. 3 (Tuckey) West Channel in transit with Coles Channel Light. Queenscliff Anchorage: in anchoring off Queenscliff, care should be taken to keep clear of West Channel fairway by bringing up as near as possible to N.W. side of channel. A good berth in a depth of 38 ft. and in red sector of Low light, may be obtained with High Lighthouse bearing 284° distant half a mile, and fixed green light at Queenscliff South pier head bearing 336°.

Vessels awaiting berths in the Port of Melbourne are normally directed to anchor at pilot's discretion South of Gellibrand light and clear of the Melbourne ship channel.

RESTRICTIONS: Mean Tidal Range is 0.50 m. and mean of all High Waters for 1972 was 0.76 m. Tide is used for the navigation of vessels having drafts in excess of those given in Column 4 of "Max. Size". For the navigation of channels, a minimum under keel clearance of 0.6 m. is required for vessels drawing up to and including 10.9 m. and a clearance of 0.9 m. for vessels having a draft between 10.9 m. and 12.2 m. Vessels over 183 m. in length. Pilots require 10% of maximum draft under keel clearance to navigate River Channel at all times, subject to draft restriction in Column 5 "Max. Size".

Tankers which are not gas-free or with cargoes which have a flashpoint of less than 150°F will not be navigated to or from river berths at night.

MAX. SIZE: In the Port of Melbourne, draft and length limitations for navigation of vessels are determined by the Port Phillip Sea Pilots, and these divisions are outside the jurisdiction of the Port Authority, the Melbourne Harbour Trust Commissioners.

1	2	3	4	5	6
Berth	Max. Length Day (m).	Max. Length Night (m.)	Draft Day (m.)	Max. Draft LW Night (m.)	Remarks
Breakwater	213	178	10.6	9.7	225 m. at 7.6 m. Draft
Gellibrand	290	207	11.3	11.3	
Holden Dock	183	137	9.4	7.9	Maximum beam 26.1 m.
1 Maribyrnong	178	145	9.1	9.1	Over 91.4 m. head in
Tankers which are not gas free or with cargoes which have a flashpoint of less than 150°F, will not be navigated to or from river berths at night.					
6 Yarraville	252	213	9.4	9.1	Upstream 6 Yarr. over 91.4 m. head in.
Swanson Dock	261	230	10.2	10.2	
Swinging by Day:	Vessels 230 m. to 253 m.—32 South Clear.				
	Vessels 253 m. to 261 m.—31 & 32 South Clear.				
Swinging by Night:					
Vessels 213 m to 230 m. Arrival to 1/West—31 & 32 South Clear.					
Vessels 213 m. 230 m. Arrival to 1/East—31 & 32 South Clear—1/West Clear.					
Vessels 213 m. to 230 m. Arrival to 2/East—31 & 32 South Clear—1/West Clear 1/East Clear.					
Departure—31 & 32 South Clear.					
River Berths below					
24/VD	213	213	9.7	9.7	
22, 23, 24/VD	213	213	8.8	8.8	
Victoria Dock	178	137	8.8	7.9	
Vessels of 152 m. will be berthed head in only at night.					
Vessels of 152 m. will be sailed at night only if head out and 21/VD or 2/VD are Clear.					
Vessels of 167 m. will be sailed from 2/VD or 21/VD on 8.8 m. Draft if head out.					
Upstream of VDk.	183	137	7.9	7.9	
Station Pier:					
Outer Berths	305	305	10.3	10.3	
Inner Berths	305	305	9.7	9.7	
Princes Pier:					
East Berths	259	259	10.3	10.3	
West Berths	259	259	9.7	9.7	
Webb Dock 1	135	135	6.4	6.4	
2	140	140	6.4	6.4	
3	223	223	8.8	8.8	
4	223	223	10.2	10.2	

All vessels over 183 m. navigating the River and Webb Dock must have 10% of Draft under keel clearance. (Pilots' Requirement). Trust requires 0.6 m. under keel clearance at all times. Tidal readings may be applied to drafts shown in Column 4.
All movements must be considered subject to weather conditions.

Shipping Channels

Channel	*Depth m.*
Fawkner Beacon to No. 7 Beacon	11.2
No. 7 Beacon to Port Melbourne	10.6
No. 7 Beacon to No. 16 Beacon	11.2
No. 16 Beacon to River Entrance	11.2
No. 18 Beacon to Webb Dock	11.2
River Entrance to Swanson Dock	11.2
Swanson Dock Entrance to 24 V.D.	10.3
24 Victoria Dock to V.D. Entrance	9.4
Victoria Dock Entrance to and including 21 S.W.	9.4
21 South Wharf to 10 South Wharf	8.5
Holden Basin to 1 Maribyrnong	10.3 to 10.0

Swinging Basins	*Diameter* (m.)	*Depth* (m.)
Victoria Dock	274	9.7
Appleton Dock	366	10.3
Swanson Dock	329	10.3
Holden	274	10.0
Port Melbourne	518	10.9
Webb Dock	305	9.4
Gellibrand	396	11.2

BRIDGE: Clearance under Westgate Bridge is 53.6 m. at LW. Johnson Street Bridge under construction.

PRATIQUE: All overseas vessels at first port of entry to Australia or at any subsequent ports, subject to quarantine until pratique granted or until vessel released from quarantine. If examinations and inspections satisfactory vessel granted pratique for all Australian ports, provided all on board have satisfactorily completed Certificate of Vaccination within last 3 years, or if vessel is 14 days or more from date of departure from last overseas port. A list of names and addresses of passengers also required at first port of entry. 24 hours quarantine clearance of overseas vessels available. Treatment of Crew members for illnesses other than quarantinable diseases arranged by private practitioners through ship's Agent.

Radio Pratique: Concession of radio pratique is to all vessels carrying surgeons, provided these officers medical graduates of a university. Following requirements to be met in the case of a vessel requiring radio pratique.

(a) (1) ETA.

(2) that individual inspection of all persons on board has been made by ship's surgeon within 24 hours of expected time of arrival and no cases of quarantinable diseases or varicella in an adult or coloured person, not associated with cases in children, then existed on board or had occurred or had been on board within previous 14 days: and

(3) that all members of crew currently satisfactorily vaccinated against smallpox (i.e. not less than 8 days nor more than 3 years previously in the case of revaccination) and a satisfactory Vaccination Register is kept on board;

(4) that all passengers over age of 12 months have been satisfactorily vaccinated against smallpox before embarkation and are in possession of current valid International Certificate of Vaccination against smallpox (i.e. all certificates duly authenticated, show that vaccination has taken place not less than 8 days nor more than 3 years previously in the case of primary vaccination and not more than 3 years previously in the case of revaccination) except those who before embarkation submitted a medical certificate stating that they have a medical disability which would make vaccination inadvisable and except those who before embarkation signed a statutory declaration stating that they object to vaccination on religious grounds.

(b) Commonwealth Director of Health will advise Master by wireless whether radio pratique is granted or not.

(c) A vessel granted radio pratique will fly "Q" flag by day and Quarantine signal by night and will on arrival at quarantine anchorage be boarded by Quarantine Officer with Immigration and Customs Officers. Quarantine Officer will inspect crew Vaccination Register and passenger manifest on which must be stated full name, address in Australia and vaccinal status of each passenger and will see cases of illness brought to notice by ship's surgeon, including all cases infectious disease and will receive Primary Health Report. If no cases of illness as referred in sub-paragraph *(a)* (2), Quarantine Officer will confirm radio pratique and issue Pratique Certificate for all ports. Master will not be required to submit Supplementary Health Report at subsequent ports. When pratique confirmed, "Q" flag may be lowered.

(d) Notwithstanding that pratique for all ports may have been granted, Master will still be responsible for reporting any case of infectious diseases which may subsequently occur whilst vessel in Australian waters.

Should a case of infectious disease (not being a quarantinable disease or varicella in an adult or coloured person not associated with cases in children) occur on board whilst vessel at sea in Australian waters Master will be required to advise by radio Commonwealth Director of Health for State in which next port situated, who will arrange for a Quarantine Officer to see case on arrival, Master will not be required to fill in a Supplementary Health Form and vessel will be permitted to proceed direct to berth without flying "Q" flag.

Should a case of suspected quarantinable disease or a case of varicella in an adult or coloured person occur on board whilst at sea in Australian waters, Master required radio details to Commonwealth Director of Health for State in which next port situated and await instructions. Commonwealth Director of Health will decide according to circumstances whether inspect vessel outside Quarantine Line or permit it to proceed to berth and will advise Master.

(e) Should it come to notice in any particular case that radio pratique has been granted as a result of a wireless message sent in accordance with sub-paragraph *(a)* whereas in fact wireless message contains false information, matter will be investigated thoroughly and reported to the Director General of Health who will decide whether radio pratique will be denied in future to vessels on which Master and the ship's surgeon hold responsibility.

RADIO: Melbourne Radio VIM.

A Shipping Control Centre referred to as "Harbour Control" is established on the southern side of Victoria Dock entrance. It is a two storied structure supported on a rectangular tower with an overall height of 39.6 m. Traffic signals are exhibited at a height of 36.6 m.

Movement of traffic within the Port of Melbourne is controlled by the Harbour Master through Control Officers operating from this Centre who direct all shipping movements in and out of the port, and co-ordinate all ancillary services connected with shipping movements on a 24 hour basis.

The radio call sign is "Harbour Control", and the following frequencies and channels are available—

156.3 mHz Channel 6 used generally for Interstate Shipping.
156.4 mHz Channel 8 pilots and tugs (continuous watch).
156.6 mHz Channel 12 working.
156.8 mHz Channel 16 calling (continuous watch).

When approaching the Port of Melbourne radio communication is made with "Harbour Control" initially on Channel 16 and then on a channel as directed for berthing instructions and information regarding the movement of other vessels. The Master of a vessel proceeding inwards shall not pass Gellibrand Pile Light until permission has been granted by Harbour Control. Breakwater Signal Station may be used as an alternative to communicating with "Harbour Control".

TUGS: Tugs attend for inward-bound vessels at or in vicinity of Gellibrand Light for vessels proceeding either up river or to Port Melbourne berths. On departure and should vessels require attendance down river, service terminated in vicinity of river entrance. Tugs present for service at any point required by Owner or Agent. Ships lines, or tug lines at charge of A$10.00. Crews of tugs will not accept wire tow line. Wire tow line with rope end of 5 or 6 fathoms acceptable, rope section being available for tugs towing hook.

BERTHING:
Yarra River North Bank

Berth No.	Locality	Depth of Water m.	Length of Berth m.	Miscellaneous Information
7	North Wharf	8.5	70	Berths Nos. 10–17 enclosed inc security compounds.
8	North Wharf		114	
10	North Wharf		118	
11	North Wharf		136	
12	North Wharf		182	
13	North Wharf		135	
14	North Wharf		135	
15	North Wharf		201	
17	North Wharf		156	
Appleton dock				
B	Appleton Dock	10.3	192	Three sets of rail tracks on 20.7 m. wide apron 5/3 tonne level luffing wharf cranes available. all berths.
C	Appleton Dock		192	
D	Appleton Dock		192	
Yarra River South Bank				
14	South Wharf	4.6	176	Livestock, Roll-on/Roll-off Container, Unit Load and Conventional Cargo Handling.
15	South Wharf	8.5	171	Enclosed in security compound.
16	South Wharf		159	Seven acre stacking area behind berths Nos. 16–17 mainly for timber imports.
17	South Wharf		159	
18	South Wharf		159	
19	South Wharf		159	
21	South Wharf	9.4	244	Steel. 6/6 tonne overhead shed cranes, and 4/6 tonne wharf cranes.
23	South Wharf	8.5	72	
26	South Wharf			
27	South Wharf	9.4	158	Berths Nos. 27–32 enclosed in security compound.
			146	
28	South Wharf		146	
29	South Wharf		146	
30	South Wharf		183	
31	South Wharf		183	5/3 tonne level luffing travelling electric wharf cranes.
32	South Wharf		253	
Port Melbourne Area				
O.E.	Princes Pier	11.0	196	Pier enclosed in security compound. Oil bunkering facilities all berths. Four sets of rail tracks on wharf aprons.
O.W.	Princes Pier	10.3	196	
I.E.	Princes Pier	11.0	196	
I.W.	Princes Pier	10.3	196	
Victoria Dock				Entire Dock System enclosed in Security Compound.
1	Victoria Dock	9.4	58	
2	Victoria Dock		171	3 sets of rail tracks on the wharf.
3	Victoria Dock		158	
4	Victoria Dock		199	
5	Victoria Dock	9.4	179	Roll-on/Roll-off Lift-on/Lift-off
6	Victoria Dock	9.4	169	Container and Unit Load Cargo.
8	Victoria Dock	8.5	186	
9	Victoria Dock	9.4	164	
10	Victoria Dock		161	
11	Victoria Dock		168	
12	Victoria Dock		168	Out of Commission.
13	Victoria Dock		161	
14	Victoria Dock		174	1/3 tonne level luffing travelling electric wharf cranes.
15	Victoria Dock	8.5	165	Berths Nos. 16–24 have 3 sets of rail tracks on apron.
16	Victoria Dock	9.4	160	10/3 tonne level luffing, travelling electric wharf cranes.
17	Victoria Dock		157	
18	Victoria Dock		167	
19	Victoria Dock		145	
20	Victoria Dock		146	
21	Victoria Dock		165	
22	Victoria Dock		174	Groat Silos.
23	Victoria Dock		174	3/3 tonne level luffing, travelling electric wharf cranes
24	Victoria Dock		174	

SPECIALISED CARGO HANDLING FACILITIES:
Port Melbourne Area

Berth	Locality	Depth of Water m.	Length of Berth m.	Miscellaneous Information
O.E.	Station Pier	11.0	221	Principal Overseas Passenger Terminal F Four sets of rail tracks on aprons for Rail Cargo and Passenger Trains. Snack Bar and Souvenir Kiosk. Information Service run by multi-lingual Port Hostesses. 8/3 tonne level luffing, travelling, electric wharf cranes.
O.W.	Station Pier	11.0	257	
I.E.	Station Pier	10.3	218	
I.W.	Station Pier	10.3	218	

Webb Dock

Berth	Locality	Depth of Water m.	Length of Berth m.	Miscellaneous Information
No. 1	A.N.L. Terminal	7.0	122	Roll-on/Roll-off Loading facilities. Container, Unit Cargo and passenger handling facilities for Northern Tasmanian ports. 1/25 tonne Derrick crane. 1/15 tonne Derrick crane.
No. 2	A.N.L. Terminal	7.0	152	
No. 3	A.N.L. Terminal	9.4	183	1/25 tonne travelling electric crane.
No. 4	A.N.L. Terminal	11.3	220	1 single lift container crane
Swanson Dock				
No. 1 W.	Swanson Dock	11.3	244	Overseas Container Cargo.
No. 2 W.	Swanson Dock		306	3 Container Crane Twin Lift.
No. 1 E.	Swanson Dock		244	Overseas Container Cargo
No. 2 E.	Swanson Dock		259	Common User Berth. 2 Container Crane Twin Lift.
Yarra River South Bank				
No. 25	South Wharf	8.5	158	Bulk Gypsum. 2/7.5 tonne grabbing crane conveyor system.
Yarra River North Bank				
No. 9	North Wharf	8.5	114	Bulk Cement.
Lower River Area				
No. 1	Yarraville Wharf	7.9	106	Anhydrous Ammonia.
No. 2	Yarraville Wharf	7.9	167	Sulphuric Acid.
No. 5	Yarraville Wharf	8.5	146	Bulk Raw Sugar.
No. 6	Yarraville Wharf	9.7	256	Bulk Chemicals.
Holden	Dock Yarraville	10.0	213	Bulk Oil.
No. 1	Maribyrnong	9.8	170	Bulk Petrochemicals, Molasses and Lub. Oil.
Williamstown Area				
West Side Breakwater Pier		11.8	222	Bulk Crude Oil.
East Side Gellibrand Pier		11.8	274	
Appleton Dock				
E	Appleton Dock	10.3	207	Bulk Phosphatic Rock and Coal, Scrap Metal. 4/7.5 tonne 2 1/6t electric grabbing cranes. Available at the two berths.
F	Appleton Dock		192	

See also "Tankers".

CRANE: Self-propelled floating crane with 250 tonne capacity available.

STEVEDORES: ETA Advices: Firm ETA, if possible, before noon on previous day to arrival. If not possible no later than 1500 hrs. on day previous to arrival.

MEDICAL: No advance notice necessary for medical attention required on vessel's arrival. All hospital facilities available. No inoculations required for vessels coming to Australia but Master

should possess International Health Cards for each member of crew.

TANKERS: Holden Oil Dock at Yarraville suitable for tankers up to 183 m. length, draft 9.4 m.

Williamstown: Gellibrand Pier, depth alongside 39 ft. can accommodate tankers up to 290 m. length. Discharge via Chiksan arms.

Breakwater Pier, depth alongside 39 ft. accepting tankers up to 740 ft. length.

Maribyrnong: No. 1 berth, depth 9.1 m. can accommodate tankers up to 178 m. length. Petrochemical and molasses berth, depth alongside 9.1 m.

Ballast: Slop facilities only at Holden Oil Dock.

DENSITY: 1,000.

FRESH WATER: Water available at wharf face at 100 ft. intervals. Rate 50–100 t.p.h.

FUEL: 24 hours notice required. All grades 1–1500 secs. RI. Marine Diesel. Light Marine Diesel. Gas Oil 34 sec. Red No. 100F. Bunker Fuel 600 sec. Red No. 100F. Light Diesel 37 sec. Red No. 100F.

At Gellibrand and Breakwater Piers. Min. notice 48 hours; prefer notice 4–5 days.

Tanker fuel oil 450 SSF at 122° F. Volume – unlimited if 4 to 5 days notice given.

FIRE PRECAUTIONS: Copy of Handbook "Emergency Action" is handed to Master of tankers together with booklet "Advice to Masters" printed in eleven languages.

DEVELOPMENTS: Lower Yarra Crossing: New bridge with clearance of 170 ft. under construction, on completion vessels with a draft of 11.2 m. and length of 230 m. will be able to navigate the river 24 hours a day.

A fourth Roll-on/Roll-off berth is operational at Webb Dock.

GANGWAY WATCHMEN: Shore Watchmen not usually employed and this service left to discretion of Master.

OPENING/CLOSING HATCHES: Normally carried out by Stevedores. Ship's crew may if required by vessel to do so. Crew may close hatches prior to sailing; but if Stevedores instructed to do so, they then claim right to finish, unless ship sails before completion of work.

SHIP CERTIFICATES: Register – showing vessel's name, port of registry, gross and nett tonnages and Owner. Loadline Certificate which must be current. Safety Radio Certificate. Safety Equipment Certificate. Light dues receipt, ship's Articles (British), Clearance from previous port.

CUSTOMS ALLOWANCES: 200 cigarettes in an opened carton *or* 0.5 lb. cigars *or* 0.5 lb. tobacco. 1 bottle spirits (opened).

CARGO GEAR: This must comply with Australian Regulations, as issued by the Ministry of Shipping and Transport.

When working cargo with ship's gear, certificates should be available to attest to identification and good condition of all such gear. If vessel on first visit to Australia and certificates not available, a declaration by Master will be accepted provided gear in order. On subsequent visits certificates and identification of each item of gear must be readily produced.

IDENTITY CARDS: Not required to be carried by crew going ashore in Australia. However, Section 23 of the Migration Act 1958/1964 provides that Masters of vessels entering Australia from overseas shall have in their possession an identity card in an approved form for each member of crew. These provisions included in the Act to ensure positive identification available to departmental officers should any Seaman, not being an Australian citizen, desert vessel. Should vessel arrive Australia without required Seamen's identification cards. Seamen unable to go ashore until photographer called to vessel order photograph each crew member, and identification cards completed.

Following nationalities need not complete identification card required under Migration Act provided Crew members in possession of relevant Seamens Identity certificates/discharge book; Canada, Denmark, Fiji, Ghana, Hong Kong, India, Israel, Italy, Japan, Malayasia, Norway, South Africa, South Korea, Pakistan, United Kingdom.

Masters of vessels, Australians and New Zealanders are not required to have such an Identification Card.

Masters are reminded that Crew members' travel documents and Commonwealth of Australian Forms M.315, where applicable, are to be retained in the custody of the Master at all times, and are to be produced to Customs Boarding Officers upon demand.

CONSULS: The following countries are represented by consuls at Melbourne:

Belgium	Greece	Philippines
Brazil	Honduras	Portugal
Chile	Iceland	Spain
China	Italy	Sweden
Denmark	Japan	Switzerland
Dominican Rep.	Mexico	Thailand
Ecuador	Netherlands	U.S.A.
Finland	Norway	Uruguay
France	Panama	Venezuela
Germany	Peru	

REPAIRS: All major repairs possible.

DRYDOCKS: Three. Largest Dock is a floating dock 156 m. × 24 m.

REPATRIATION: All facilities available for effecting crew changes and repatriation – namely sea, air and rail.

HOLIDAYS: Sunday, Christmas Day, Good Friday, Labour Day, Picnic Day, Anzac Day: with exception of Sunday are regarded as "close holidays" and waterside workers cannot be required to work on these days. Only work of special nature performed on these days by agreement.

Following ordinary holidays observed: Boxing Day, New Year's Day, Australia Day, Easter Monday, Queen's Birthday, Melbourne Cup Day.

On Boxing Day and New Year's Day, waterside workers will work on following classes of vessels only, namely:

(a) Passenger ships to sail on schedule.
(b) Ships to finish and sail before next pick-up of labour.
(c) Ships which in opinion of local Board of Reference, should be declared "Urgent Vessels".
(d) Marine casualties.

On remaining ordinary holidays work performed if required by an employer. Work performed on holidays subject premium rates of pay.

POLICE/AMBULANCE/FIRE: Fire, Ambulance, Security – Port Emergency Service. Tel. 61-2861 or, by VHF Radio Channel 16 "Melbourne Port Emergency".

TELEPHONES: Telephone can be placed aboard at all berths. Charge 90 cents per quarter day includes service charge and local calls. Trunk calls cannot be made from shipboard phones.

SERVICES: Tank cleaning. Compass adjusters available.

SHORE LEAVE: Crew allowed ashore. Visitors to ship after dark require permit issued by Master. No passport required while ashore.

PORT AUTHORITY: Melbourne Harbour Trust Commissioners.

AGENTS: Patrick Agencies, Box 4329 GPO, 8/12 Market Street, Melbourne, Victoria, 3001. Cables: "Rikpat". Tel. 61–2941. Telex. AA. 30456. After hours Tel. 61–2941.

NEWCASTLE, N.S.W.: 32.56 S. 151.47 E.

(See Plan)

PORT LIMITS: The port limits are at the entrance between the end of the breakwater. New charter parties accept vessel off the port.

DOCUMENTS: See "Melbourne".

PILOTAGE: As much notice as possible through Maritime Radio, Sydney (VIS), amending 2 hours prior arrival. Amendment through Channel 16 VHF, to Harbour Control. Telegraphic address "Marboard". Pilot vessel painted high-visibility orange, "Pilots" on deck-house in black paint. Boarding ground on side East of entrance. A good lee, speed 3-5 knots, no boatrope, ladder 8 ft. above water with manropes.

ANCHORAGE: No good anchorages off port. A restricted anchorage exists immediately off entrance. No anchorages within the port.

RESTRICTIONS: Entrance channel dredged to 11 m. ISLW. – a minimum keel clearance of 10% draft required. Certain berths within port may only be worked during slack water or early ebb tide.

MAX SIZE: Max. d.w.t. for bulk cargo vessels 65,000. Max. length of 800 ft., no beam restriction, draft up to 38 ft. ISLW. Vessels over 700 ft. navigated in daylight only (inward).

HEALTH: Refer to "Melbourne".

RADIO: All radio messages through Sydney (VIS).

TUGS: Tugs usually come alongside shortly after entering breakwater. Ship's lines for towing lines, tug's lines for tugs alongside.

BERTHING: See Restrictions.

Thirty berths with lengths from 500 ft. to 2,025 ft. Depths alongside up to 38 ft.

New Cargo Berth suitable for unit and limited container traffic, depth alongside 36 ft. ISLW.

New grain berth with four loading heads can accommodate vessels up to 800 ft. length. Depth alongside 38 ft.

RADAR/VHF: No port radar. VHF Channels 16, 13, 12, 4. Pilot has own set. Also see "Sydney-VHF".

MEDICAL: All hospital facilities available.

TANKERS: One tanker berth – 33 ft. depth water alongside, 600 ft. in length.

DENSITY: Density varies considerably throughout port, with particular reference to upstream rains.

FRESH WATER: Available all berths, 4–15 t.p.h. delivery, dependent on other demands.

FUEL: Normal bunkering available by either road or barge, or pipeline at inflammable liquids wharf.

FIRE PRECAUTIONS: Written notice to Fire Brigade for tankers.

BULK HANDLING FACILITIES: Coal Basin berth numbers 1 and 2 loading capacity 2,000 t.p.h.

Dyke Coal Loader: loading capacity 600 t.p.h.

Western Basin: Berth number 3, bulk wheat loading.

Kooragang Island Bulk berth: two gantry cranes each of 10 tons capacity. Grab unloading 650 t.p.h.

Grain – No. 3 Western Basin – four 1,000 t.p.h. loading heads.

Coal – No. 1 Basin Coal Loader – two 1,000 t.p.h. heads and Dyke Coal Loader, one 600 t.p.h. head.

Iron and Limestone – BHP No. 5 berth – three ore bridges with 10 to 20 ton grabs.

Bulk Berth – two 650 t.p.h. bulk unloaders used for phosphate, sulphur, alumina, petroleum coke and cement clinker.

Containers – one general cargo berth, No. 1 Throsby, fitted with 26-ton luffing crane. 30 ton Portainer at West Basin.

Liquid Chemicals and LPG – now use Bulk Berth, Kooragang. Will use new Bulk Liquid Berth, Kooragang which is under construction.

DEVELOPMENTS: New coal loader with a capacity of 10,000,000 tons annually under construction. The existing coal loader will continue operation.

Two new deep-water tie-up berths at Dyke Wharf.

New bulk liquids berth to be built at Kooragang Island.

Steelworks planned.

GANGWAY/DECK WATCHMEN: Services of watchmen available and recommended ($1.50 hourly average).
OPENING/CLOSING HATCHES: Dependent on type of cargo and hatch (coal, wheat, ship's crews closing hatches).
CERTIFICATES AND CUSTOMS ALLOWANCES: See "Melbourne".
CARGO GEAR: No additional other than wire preventers to derrick heads if rope guys used. Also see "Melbourne".
CREW I.D. CARDS: See "Melbourne".
CONSULS: The following countries are represented at Newcastle: Belgium, France, Netherlands, Norway and Sweden.
REPAIRS: Most deck and engine repairs.
DRY DOCK: One floating dock, Government managed, 630 ft. length and 82 ft. beam. Capacity about 9,000 tons.
REPATRIATION: Normal facilities available.
AIRPORTS: Two, roughly 7 miles from city. Several flights daily to Sydney.
TIME: GMT plus 10 hours. Clocks advanced 1 hour between October and February.
HOLIDAYS: Christmas Day: Good Friday; Labour Day; Picnic Day; Anzac Day are regarded as close holidays and waterside workers cannot be required to be worked on these days. On Boxing Day, New Year's Day, waterside workers will work on following classes of vessel only;

(a) Passenger ships to sail on schedule; *(b)* ships to finish and sail before next pick-up of labour; *(c)* marine casualties; *(d)* other vessels which are agreed between employer and WWF branch officials in the port concerned; if there is no agreement on a port basis, agreement as to any such ships, to be reached at Federal level.

On remaining ordinary holidays, work performed as required by an employer. Work performed on holidays subject to premium rates of pay. No Saturday afternoon work unless vessel is proceeding to sea.
POLICE/AMBULANCE/FIRE: dial "000" for Emergency.
TELEPHONES: 'Phones available at all working berths. Costs 50 cents daily plus cost of calls plus 30 cents booking fee.
SERVICES: Compass adjusters and surveyors available.
DELAYS: Waiting for coal berths occasionally, usually no wait for general cargo wharves.
AUTHORITY: Maritime Services Board of New South Wales.
AGENT: Patrick Agencies, Box 447 PO, 10/12 Telford Street, Newcastle, NSW 2300. Cables "Rikpat". Tel. 2–2353. Telex AA 28192.

PORT AUGUSTA, S.A.: 32.29 S. 137.46 E.

CERTIFICATE/DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: One mile N.W. of Eastern Shoal North Beacon. The regulation pilot ladder secured four steps up from water and manropes are required. Boat ropes not required.
RESTRICTIONS: 16 ft. low water. Min. 2 ft. under keel. No navigation at night. Max. length 450 ft. overall. Tug required for vessels 410 ft. and over.
TUGS: From Port Pirie or Whyalla.
BERTHING:

No. 1	South	370 ft.	Depth	20 ft.
No. 2	Centre	400 ft.	,,	20 ft.
No. 3	North	420 ft.	,,	18 ft.

Total length of wharf 1,190 ft.

FRESH WATER: 10 t.p.h.
REPAIRS: Minor repairs only.
TIME: GMT plus 9.5 hours.
TELEPHONE: Police 42–3000; Fire Brigade 42–2000; Hospital 42–2011.
AGENT: See "Adelaide".

PORT GILES, S.A.: 35.02 S. 137.46 E.

On Western shore of Gulf of St. Vincent, 36 miles S.W. direction from Port Adelaide. For entry formalities not listed below, see "Adelaide".
PILOTAGE: Compulsory. If vessel on first entry to Australia, pratique and surveys are carried out at Semaphore anchorage, Port Adelaide, where Pilot will board.

If proceeding direct to Port Giles, 12 hours' notice required to Dept. of Marine and Harbours, Port Adelaide. Pilot boarding station is at Northern end of Troubridge shoal, about 1 mile West of MacDonnell Sound Light Beacon.
ANCHORAGE: MacDonnell Sound, 7 miles from berth. Also see "Pilotage".
MAX. SIZE: Vessels up to 40,000 d.w.t. able to load fully and depart at lowest tide. Normal limit to length of vessel 675 ft. (206 m.), beam 130 ft. (40 m.).
BERTHING: The new jetty, about 1.5 miles North of Giles Point, reaches out from the shore some 2,000 ft. (610 m.) to the seaward end dolphin. The ship's berth has a depth of 38 ft. (11.6 m.) below low water over a length of 840 ft. (260 m.). Grain transported from Silos to ship's side by conventional belt conveyor capable of handling 800 tonnes an hour. Alongside ship, elevated gallery with five swivelling and telescopic booms feeds grain into any hold without movement of ship along berth. Each boom has a max. load rate of 400 tonnes an hour so that at least two must be used to achieve full ship loading rate.
TUGS: None. Mooring launch available, but if tugs required, must be obtained from Port Adelaide.
FRESH WATER: Available.
TELEPHONES: Available on berth.
FUEL/REPAIRS: None.
TIDES: Mean high water springs 6.6 ft. (2 m.), mean high water neaps 4.0 ft. (1.2 m.) (Edithburgh).
VHF: VHF radio telephone.
AUTHORITY: Department of Marine and Harbours, Adelaide.
AGENT: Sub-agent of Patrick Agencies, Adelaide.

PORT HEDLAND, W.A.: 20.18 S. 118.35 E.

PORT LIMITS: An arc of a circle of 10 miles radius with centre at Hunt Point Beacon.
APPROACHES: Port Hedland, entered between Airey Point (Lat. 20° 18′ S. Long. 118° 35′ E.) and Hunt Point, about 3.25 cables N.N.W., is a secure harbour with dredged Channel giving a depth of 12.8 m. below datum, a turning basin with a depth of 8.84 m. below datum, and a small craft anchorage with depths of 5.18 m. The Channel extends some 7.75 miles seaward from the turning basin and is defined by beacons, buoys and leading marks.

The most conspicuous object in daylight is the Crushing Plant owned by the Mt. Newman Mining Company. This plant is 47.24 m. above sea level, and is of oblong shape, situated 095° (T) by 1,383.74 m. from the Shipping Control Tower at Lat. 20° 19′ S. Long. 118° 34′ 50″ E. Cooke Point, which terminates in black, steep-faced rock, is sharply defined. Finucane Island water tank, 5 cables W.N.W. of Hunt Point, is also conspicuous.
Shipmaster's Report: Proceeding from Kobe, the vessel passed 10 miles East of Imperieuse Reef L.H. thence to position 7 miles North of Bedout Island L.H. From there the track printed on the Australian charts was followed until the Sea buoys were picked up. From Bedout Is. the Decca was found to be fairly reliable improving as we neared the land.
The buoyage system is as follows:

Name or No. of Buoy	*Position*	*Type*	*Inwards Pass*
Cornelisse Shoal Buoy	20° 02′ 10″ S 118° 22′ 51″ E	Conical GP.Fl.(3) 9 sec.	Stbd. Hand
C.1	19° 59′ 58″ S 118° 25′ 45″ E	Conical Fl.3 sec.	Stbd. Hand
C.2	20° 02′ 24″ S 118° 25′ 07″ E	Can Fl.R.ev. 5 sec.	Port Hand
C.3	20° 04′ 36″ S 118° 25′ 32″ E	Can Gp.Fl.R (4) ev. 12 sec.	Port Hand
C.4	20° 06′ 33″ S 118° 28′ 02″ E	Conical Fl.2.5 sec.	Stbd. Hand
C.5	20° 10′ 29″ S 118° 30′ 36″ E	Can Fl.R.5 sec.	Port Hand
C.6	20° 11′ 32″ S 118° 31′ 11″ E	Sarus Tower Fl.R. 10 sec.	Port Hand

Charts L (D4) Aus. 53 and L (D4) Aus. 739 are Decca lattice charts.

The most conspicuous land object, by daylight, ashore is the Crushing Plant of Mt. Newman Mining Co. This plant is an oblong shape, about 47.24 m. high (above sea level) situated 095° True × 1,383 m. from the Shipping Control Tower in Lat. 20° 19′ S., Long. 118° 34′ 05″ E.

Cooke Pt. Lt. is exhibited from position Lat. 20° 18′ 16″ S., Long. 118° 37′ 52″ E., Gp.Fl.(3) ev. 15 sec. 37 m. high. Visible for 17 miles.

Port Hedland is entered between Airey Pt. (Lat. 20° 18′ S., Long. 118° 35′ E.) and Hunt Pt. 3.25 cables N.N.W. It has a dredged channel with a depth of 12.8 m. below datum, a turning basin with a depth of 8.8 m. below datum. The channel extends for 7.75 miles to seaward from the turning basin and is well marked by buoys. The limits of the port are defined as: "all that piece of water within a radius of 10 miles off Hunt Pt. Beacon (No. 29)". Numerous shoals exist either side of the approach channel.

At the entrance to Newman Channel is No. 8 buoy, (No. 7 buoy is now non-existent). A pair of Beacons No. 9 and No. 10 showing red and green lights respectively also mark the entrance to the channel. The Pilot boards in this vicinity.

Cornelisse Buoy is fitted with a radar reflector and marks. "Cornelisse Shoal", has been known to shift from its position and should be passed well to the Eastward.

The buoy known as "Spoil Ground Buoy" is in a position 357° True, 5.4 miles from Finucane Is. Water Tower and in conjunction with No. 6 buoy marks the Southern end of the anchorage. Vessels should anchor North of the line joining these two buoys. The bottom is sandy, but the holding ground reported good.

Vessels should call Broome Radio for emergency Notices to Mariners affecting Port Hedland approaches.

Vessels inward bound may encounter vessels outward bound displaying signals for deep drafted vessels, showing that they must keep to the buoyed tracks.
DOCUMENTS:

2 Copies Health Report Q360 for Quarantine Office to be accompanied by Crew List showing Vaccination dates.
1 Copy Store List Form 42A. All narcotics and restricted drugs to be identified by type, size and quantity. Report is to include lifeboat kits.
1 List Crew Possessions. Form 5 including Declaration Sheet. In declaring goods, quantity, description and value to be stated. In the case of all watches, radios, cameras, binoculars and the like, maker's name or brand and serial numbers must be shown.

1 Crew List. Form M & S 11. Comprised White Cover Sheet, 2 copies plus Green Listing Sheet, 2 copies.
1 List Ship's Pets. QA4. If any pets, including any animal, bird or fish on board to be accompanied by 1 pink QA5.
5 Copies Crew List. Company type. (Customs 3, G.M.L. 1 and Agent 1).

Identification Card. Form M315. One per crew member, except as detailed below.

With reference to Seamen's Identification Cards, a Passport size photograph of the seamen is sufficient. A side-face photograph is not required. Seamen in possession of the following National travel documents are no longer required to have an Identification Card in Commonwealth of Australia Form M315.

Canada	Passport or Seaman's Identity Certificate
Chile	Passport or Seaman's Book
Denmark	Seaman's Book
Fiji	Passport or Seaman's Certificate of Nationality and Identity
Ghana	Passport or Seaman's Certificate of Nationality and Identity
Hong Kong	Seaman's Identity Book
India	Seaman's Identity Book
Iran	Passport or Seaman's Identity Card.
Israel	Seaman's Book
Italy	Libretto de Navigaziona
Japan	Mariners Pocket Ledger
Kenya	Passport or Seaman's Identification Certificate
Lebanon	Passport or Seaman's Identification Certificate
Malaysia	Passport or Seaman's Identity Card
Malta	Discharge Book
Nauru	Seaman's Document of Identity
New Zealand	Identity Book
Norway	Seaman's Document of Identity
Pakistan	Seaman's Identity Card or Continuous Discharge Certificate
South Africa	Seaman's Record Book and Certificate of Discharge or Seaman's Identity Certificate or Certificate of Naturalization or Identity
South Korea	Seaman's Certificate Book
Taiwan	Passport or Seaman's Book
Tanzania	Passport or Seaman's Book
United Arab Republic	Passport or Seaman's Book
United Kingdom*	Passport or Seaman's Record Book and Certificate of Discharge

*United Kingdom Passports may be held for surrender only if grantee is agreeable, otherwise an Australian Identification Card must be available.

Masters are reminded that crew members' travel documents and Commonwealth of Australia Forms M315, where applicable, are to be retained in the custody of the Master at all times and are to be produced to Customs Boarding Officers upon demand.

PILOTAGE: Pilotage is under the control of the Harbour Master and is compulsory for all overseas vessels and for Australian vessels over 6,500 g.r.t. Pilots will board vessels either by helicopter or pilot boat.

Boarding by helicopter – requirements for night operations:

(a) Within the hatchtop area there shall be a termination area consisting of a square having sides with a minimum length of 38 ft. 6 in.

(b) Surrounding the termination area there shall be an area not less than 35 ft. in width in which there shall be no obstructions likely to hazard the rotor-systems.

(c) The combined termination area and obstruction free area shall constitute the helipad area.

(d) Within the termination area there shall be no obstructions likely to hazard the flotation systems.

(e) The touchdown area shall be so situated witnin the termination area that when the floats are positioned within the touchdown area, the main rotor shall be contained within the termination area.

(f) The perimeters of the termination area shall be masked with white reflective tape having a min. width of 5 in. (under review). This tape is made by the 3M Company and is designated Scotch Lane Brand Pavement Marking Stripe No. 5620 and comes in 150 ft. rolls. A primer No. 4448 will be required to give suitable adhesion.

(g) Any minor obstruction on the hatchtop shall be marked in a distinctive colour.

(h) The approach paths to the helipad and across both sides of the ship shall be free of obstructions above hatchtop level.

(i) The helipad shall be illuminated with floodlights positioned at both wings of the ship's bridge with the beams crossing over the helipad.

All crew members should be kept clear of the landing area and should not attempt to approach the helicopter unless requested to do so. When the pilot has disembarked an officer should be available to guide the pilot to the bridge.

Vessels which are selected for night operations will be visited by the helicopter pilot who will indicate the precise markings required and will advise Masters with regard to any questions that they might have. The helicopter to be used is a Bell 471-2A weighing 2,200 lb.

Requirements for day operations:

These are similar to night operation requirements and at the discretion of the helicopter pilot.

Boarding by Pilot vessel:

It is most important that a lee be given to allow the Pilot to board, whether the vessel be under way or at anchor. In the latter case with the anchor still down, a steady ahead movement on the engines with the helm hard over usually affords the necessary lee. Failure by the Master to afford a lee may result in the Pilot being unable to board, with consequent delay.

Vessels will be advised of Pilot Boarding and in the interest of expediency whenever required, vessels should be under way before the Pilot boards. Pilot ladders should be clean and properly constructed, fitted with spreaders to prevent turning and spacing pieces to maintain treads in a horizontal position. Manropes of 3 in. Manila should be rigged on each side of ladder and the full length thereof.

Where pilot ladders are led over bulwarks, suitable stanchions should be rigged and steps provided inboard. In addition to cleanliness of the pilot ladder on arrival, *the gangway or accommodation ladder must be washed down after completion of loading,* before the Pilot boards for departure.

Unless the ladder is satisfactorily washed down and free of ore dust, Pilot may refuse to board with resultant loss of time and expense until ladder is washed down to Pilot's satisfaction. Failure by Masters to comply with these requirements in the past in Australian ports has resulted in delays and off-hire situations in the case of time chartered vessels, heavy fines for the Master plus court costs and substantial compensation for the injured against the owners.

A boat rope is not required at this port.

Shipmaster's Report: There are well defined instructions for ships embarking Pilots by helicopter by day or night, however, the Pilot said that our ship was unsuitable for this operation owing to our corrugated hatch tops.

Boarding by boat, the Pilot requires a good lee at all times. Anchored vessels taking a Pilot should get underway before the Pilot boards. Pilot ladders should be clean and properly constructed, fitted with spreaders to prevent turning and spacing pieces to maintain treads in a horizontal position. Manropes of 3 in. manilla should be rigged each side of the ladder and the full length thereof.

In addition to the cleanliness of the pilot ladder on arrival, the gangway or accommodation ladder must be washed down after completion of loading, before the Pilot boards for departure.

Unless the ladder is satisfactorily washed down and free of ore dust, Pilot may refuse to board with resulting loss of time and expense until the ladder is washed down to Pilot's satisfaction. Failure by Masters to comply with these requirements in the past in Australian ports has resulted in delays and off-hire situations in the case of time-chartered vessels, heavy fines for the Master plus court costs and substantial compensation for the injured against the owners.

ANCHORAGE: Vessels should anchor North of a line between Spoil Ground Buoy (flash red every 20 seconds) and No. C 6, as the area immediately North of this line is the Pilot boarding area. The bottom is sandy but the holding ground reported to be good.

A prohibited anchorage exists, bounded as follows: From No. 15 buoy (20° 14′ 46″ S. 118° 34′ 00″ E.) 309° 1.63 miles, thence 046° 2.00 miles, thence 180° 2.31 miles to No. 16 Beacon (Lat. 20° 14′ 4″ S. Long. 118° 34′ 00″ E.).

RESTRICTIONS: All Channels from seaward as far as the Swinging Basin are dredged to 12.8 m. below datum, and 183 m. wide in the straight sections, widening to 244 m. on curves. The N.W. section of Swinging Basin is dredged to 8.84 m. below datum. Total width of Basin is 600 m.

MAX. SIZE: Max. size vessels entered: Length 1030 ft. d.w. 167,000 LT. Draft 55 ft. Vessels over 925 ft. are normally not handled at night.

The official scale of keel clearances required for Port Hedland is as follows:

Draft of vessel	*Clearance inside harbour*	*Clearance outside harbour*
Up to 12.3 metres	1.0 metre	1.2 metres
12.3 to 12.5 metres	1.2 metres	1.5 metres
12.5 to 13.1 metres	1.2 metres	1.8 metres
13.1 metres and over	1.2 metres	2.1 metres

Arrival Draft: The Harbour Master has instructed that vessels arriving at Port Hedland should trim to 17 ft. forward, and 21 ft. aft for 50,000 tonners, increasing to 24 ft. forward and 26 ft. aft for 100,000 tonners. Other vessels should retain max. ballast and advise their draft to the Harbour Master, 24 hrs. prior to arrival.

PRATIQUE: The Quarantine Officer will board by the gangway which should be turned out and rigged ready for lowering prior to entering the harbour. Vessels should show the appropriate pratique signals whether by day or night. Only in exceptional cases at the convenience of the Health Department will vessels be boarded by the Quarantine Officer to seaward of Hunt Point. The Quarantine Officer will inspect the crew on arrival at the berth.

Vessels may be cleared at any time during the day or night subject to the Quarantine Officer being available and willing to do the clearance, and providing the Master forwards a radio message not more than 24 hrs. before arrival giving following details.

(a) The expected hour and date of arrival of the vessel.

(b) Confirmation that the Master has individually inspected all on board within 24 hours of arrival and that there are no cases of febrile illness (high temperature or fever) or skin rashes on board.

(c) Particulars of any cases of illness on board.

(d) Confirmation that all persons on board are satisfactorily vaccinated against smallpox (i.e. vaccinated not less than eight days and not more than three years previously in the case of primary vaccination and not more than three years previously in the case of revaccination). A vaccination register, signed by the Master

or individual international certificates for all crew members, must be retained on board, and all passengers should have International Certificates of Vaccination.

Vessels may proceed direct to the berth to await clearance there, subject to the requirements specified above, and providing that adequate security is provided to ensure that there is no contact between ship and shore prior to the granting of pratique. Under no circumstances must anybody be permitted to leave the vessel and have contact with shore until the vessel has been granted pratique. This also includes the Pilot. There is no objection to the Pilot, Customs and Immigration Officers boarding the vessel before the Quarantine Officer, providing they remain on board until pratique is granted.

If the Quarantine Officer is not available because of medical emergencies ashore, the vessel may be permitted to go alongside and commence loading, providing there is no physical contact between any person on the ship with the shore, until pratique is granted, excepting the special provisions made in the preceding paragraph. Rat guards are required on all mooring lines.

RADIO/VHF: Vessels trading Japan to Port Hedland use Sydney, Darwin and Broome Radio Stations. There is no Radio Station in Port Hedland. Broome Radio transmits navigation warnings including alterations to buoy positions in the approach to Port Hedland.

Vessels bound for Port Hedland should advise the Harbour Master 48 hours and 24 hours before their arrival, indicating their draft, fore and aft, and last port. A continuous watch is kept in the Port Shipping Control Tower, which is fitted with VHF, and vessels should call "Port Hedland Harbour" on Channel 16, 2 hours before arrival at anchorage to confirm their ETA and in order that they may be kept acquainted with berthing instructions and the movement of other vessels. The Tower will also assist ships by giving them their bearing and distance by radar from the Tower. No ship may enter the dredged channel or depart from any berth without permission from Port Control. Signals will be exhibited from the Tower at night to indicate if the port is closed and the state of the tide. The height of tide is no longer indicated, but such information is available and will be transmitted to vessels by VHF or Aldis upon request.

Vessels equipped with VHF should guard Channel 16 (156.8 Mc/s) when in range of Port Hedland, and also whilst at anchor. This channel is in direct communication 24 hours a day with Port Control (call sign "Port Hedland Harbour") and will avoid superfluous launch trips to advise Masters of changing conditions. Visual signals may be used in addition to a constant VHF watch. Should the Master of a vessel at anchor wish to communicate by VHF with another vessel, then he must first advise "Port Hedland Harbour" who will allot him a working channel.

TUGS: Five tugs, each of 2,400 h.p., are available. A sixth anticipated. Line-running launches and ferries are also available. Two small tugs of about 350 h.p. are also available.

BERTHING: Due to the tidal range and strength of current, ships over 10,000 d.w.t. do not sail on the ebb tide. When the tidal range is more than 19 ft. no ships sail on the ebb. Vessels usually berth close to low or high slack water.

Goldsworthy Pier: This is situated on the Western side of the Harbour on Finucane Island, and lies S.W. of Hunt Point Beacon (No. 29). The face of the jetty extends over a distance of 177 m. and lies in the line 017–197° (T) and consists of six breasting dolphins, each of which has a floating fender unit. There are two dolphins ahead and astern of the jetty to facilitate the mooring of vessels. These dolphins are set back from the line of the berth face and have no fenders.

The distance from the No. 1 or North Dolphin to the No. 10 or South Dolphin is a total of 378 m. and the dredged mooring basin 366 m. long, 61 m. wide, has a depth of 15.85 m. below datum. The shiploader has an overall length of travel of 180 m. and a max. capacity of 4,500 t.p.h.

Fresh water and fuel are not available at this berth.

Vessels will normally berth port side to, heading out to sea. Ship's gangways should be rigged prior to berthing on the off-side as gangways are not acceptable on the jetty. A launch service is available to ferry personnel to the town. Ship's personnel are not allowed on the loading facility. Provision for a future second loading berth ahead of the existing jetty has been made.

The height of the shiploader underside in the raised portion above chart datum is 23.1 m. The loader is not completely retractable behind the berth face but retracts to a position 0.84 m. behind the fender line.

No. 1 Berth. This landbacked berth lies in a 350°–170° direction and has a length of 213 m., with a mooring dolphin 58 m. from the Northern end. Depth alongside is 12.2 m. A dry cargo storage shed adjacent to the berth has a floor area of 5,300 sq. ft. and general cargo will be handled by fork lift vehicles to and from the vessel. Provision for tanker berthing. Provision for heavy lift crane/and/or bulk handling installation in the future.

Stack load on berth 3,418 kg/m^2. Fork lift capacity 27.2 m/t. Max. axle loading 8 tonnes on dual axle. Raykin fender system.

Oil fuel, fresh water and telephone are available at the berth.

No. 2 Berth: A wooden jetty at Mangrove Point forms No. 2 Berth. The jetty runs in a direction 345°–165° (T) for a distance of 121 m. Depth alongside is 6.7 m. below datum, but siltation does occur and this may, at times, be reduced.

Cargo is handled by fork lifts and/or road trucks to a cargo receival shed a short distance away. The berth is equipped to receive bulk fuel. Limited grades of bunkers and fresh water are available. Fresh water can be supplied at the rate of 35 t.p.h., and bunkers at 80 t.p.h. Amounts of 200 tons of water are always available, and vessels requiring more than this are requested to give at least 48 hours prior notice, through their Agents.

The No. 2 Berth is also used for the loading of manganese by means of a bulk loader giving a loading rate of approximately 200 t.p.h. The loader has a small range of travel and it is usual for the ship to warp itself up and down the wharf as required. On the ebb tide, strong currents run through the Southern end of this berth at approximately 45° to the line of the wharf. Masters must ensure that mooring lines are properly tended at all times as, in addition to the strong currents, large iron ore carriers of up to 160,000 d.w.t. pass this berth. A pipe-line for loading bulk drilled mud is fitted and is operated by a private company.

No. 3 Berth: No. 3 Berth is situated to the South of Mangrove Point and runs in a 117°–297° (T) direction for a distance of 183 m., with dolphins 46 m. ahead and astern to facilitate the mooring of vessels. There is a mooring basin 274 m. in length dredged to 12.20 m. below datum alongside the berth and dolphins.

Cargo is handled by form truck into the sheds or storage area at the rear of the shed, or loading direct into road truck. The full length of the wharf is protected by a fender system.

A mechanical bulk-loading facility is operated by the Leslie Salt Company on this wharf. The loader has a capacity of 1,500 t.p.h.

Fresh water is available at normal rates of 35 t.p.h. Bunkers can be obtained at rate of 100 t.p.h. Provisions for tanker berth.

Mount Newman Piers A and B: These two berths form a continuous line running in a 117°–297° (T) direction from a position immediately South of No. 3 Berth towards Nelson Point. Pier A is the Northward berth and extends for a distance of 305 m., the depth alongside being 18.29 m. Pier B, the Southward berth, has a length of 353 m. and is dredged to a depth of 17.07 m. below datum.

The two shiploaders are fully retractable and have an average capacity of 6,000 t.p.h. each. No. 1 loader, at "B" Berth, has a boom reach of 28 m. from the wharf face, and the height of the underside of the loader is 23.5 m. above datum. Loader No. 2, "A" Berth, has a boom reach of 29.6 m. and a height above datum of 26.5 m. Vessels will normally swing on entry and berth starboard side to on these berths. Starboard gangways should be rigged prior to arrival so that no delay is incurred in the boarding of Quarantine and Customs Officials on berthing.

Bunkers are not available on these berths.

MEDICAL: Medical attention may be arranged through the Agent. No person will be attended unless he is provided with a letter from the Master authorising such treatment. All charges incurred will be charged to the vessel.

DENSITY: Average 1026.

REPAIRS: Minor repairs only can be effected. Radio and radar technicians, electricians, plumbers, welders and divers are available. There are a number of machine shops and a foundry is being constructed. Sand-blasting equipment and fumigation facilities are available.

AIRPORT: Daily jet flights to Perth and regular services to Darwin are available. In addition, there are several small charter planes available. Airport 7 miles from port.

CONSULS: At present, there is no Consular representation at Port Hedland.

TIME: GMT plus 8 hours.

SURVEYORS: Department of Transport Surveyor, Captain J. Cook. Tel. 732598 (also acts as Shipping Master). Classification societies situated in Perth.

POLICE/AMBULANCE/FIRE: Police 731444; Ambulance 731800; Fire 731222; Hospital 732144.

CARGO GEAR: Ship's gear used. Mobile cranes up to 31 tons capacity may be hired. Crane of 120 tons capacity owned by Mount Newman Co. Fork lifts of 4,000 lb., 8,000 lb. and 10,000 lb. available.

TANKERS: *Connections:* Ten-inch lines with 8 in. flexible hoses. Discharge rates depend on grade and consignee.

Local Installations: Mobil, Shell, B.P., Caltex and Ampol.

CERTIFICATES: The following documents should be available for inspection:

Ship's papers, including the following certificates:

(a) Register.
(b) Load Line.
(c) Safety Equipment.
(d) Safety Radio.
(e) Safety Construction.
(f) Australian Light Dues Receipt.
(g) Articles of Agreement and Account of the Crew (or equivalent).
(h) Oil Record Book.
(i) Register of Cargo Gear.
(j) Gas Free Certificates for Obo's.
(k) Western Australian Conservancy Dues Receipt (Port Bill).

Valid Deratisation or Exemption Certificate.

Crew's Identity Documents.

International Vaccination Certificates of all persons aboard as well as crew list giving vaccination dates.

STOWAGE FACTORS: Basis most recent experience, stowage factors of iron ore cargoes loaded at Port Hedland have been approximately as follows, per ton of 2,240 pounds: Lump ore approx. 15 cu. ft. Fines approx. 13 cu. ft.

However, as these factors sometimes vary from cargo to cargo, it is recommended that Masters check with loading Agents for each shipment before finalising stowage plans,

GENERAL: If the Master wishes to anchor outside prior to proceeding to sea, he must advise the Pilot when leaving the berth, and the Pilot will advise suitable anchorage. The Master will advise the Pilot of estimated time of departure in order that this may be reported to the Port Control.

DELAYS: Delays of port operations, including delays of other

vessels waiting for berth, caused by a vessel which for any reason is not prepared and able to move from the berth when so ordered, are chargeable to the vessel which causes such delays.
STORES: Ship Providores, Elder Smith Goldsborough Mort Ltd. of Port Hedland, were able to provide a varied and comprehensive service, particularly in catering stores. Despite the fact that most foodstuffs have to come 1,000 miles from Perth, this firm have large storage and refrigeration facilities in Port Hedland and have no difficulty in satisfying most ships' requirements, particularly dry stores and refrigerated meats and fish. The only difficulty is with Muslim killed meats, in order to fulfil any orders for this commodity they require seven day's notice, as the meat has to be ordered from Perth. All other stores can be ordered after berthing.
AUTHORITY: Port Hedland Port Authority.
AGENT: Sub-agents of Patrick Agencies, Fremantle.

PORT KEMBLA, N.S.W.: 34.28 S. 150.54 E.
(See Plan)

PORT LIMITS: In the absence of any specific clause in the Charter Party, the local custom is that a vessel, having obtained pratique, is considered to be an "arrived ship" when it is anchored off the port.
CERTFICATES/DOCUMENTS/HEALTH/CUSTOMS ALLOWANCES/CARGO GEAR: See "Melbourne".
PILOTAGE: Pilotage is compulsory for all foreign vessels and Australian Masters without an exemption; this service operates 24 hours per day. When entering or leaving the Inner Harbour, the Pilot requires 3 ft. clearance under the keel. Pilots equipped with VHF.
The pilot boarding station is at the Wollongong Head Light House, bearing 310° – distance 1.25 miles from Harbour entrance.
RESTRICTIONS: An artificial harbour, formed by two breakwaters with an entrance of 1,000 ft. and a depth of 50 ft. ISLW at the entrance. Leading from the Outer Harbour there is an inner harbour basin, which is entered through a 370 ft. wide Channel, having a depth of 36 ft. ISLW. The port consists of two harbours, locally referred to as the Outer Harbour and the Inner Harbour. In the Outer Harbour the swinging basin is approximately 1,500 ft. with a min. depth of 35 ft., and in the Inner harbour the swinging basin is approximately 1,200 ft. with a min. depth of 36 ft. Major deepening has already commenced at the Inner Harbour. It is intended to deepen the entrance Channel from the Outer Basin to the Inner Basin to 50 ft. and the Inner Harbour Discharge Berths to the same depth. The Coal Berth and the Multi-purpose Berth to be dredged to 43 ft. This work is anticipated to be completed by the end of 1975.
MAX. SIZE: The $A18 million deepening project at Port Kembla has been completed and the Port can now handle vessels in the 100,000 d.w.t. range for ore discharge. The depths are now as follows:
Entrance Channel 50 ft. ISLW.
Iron ore discharge berths:
No. 1 Depth alongside 43 ft. ISLW.
No. 2 Depth alongside 52 ft. ISLW.
The Harbour Master has advised that vessels should be able to operate with a maximum load draft of 48 ft.
PRATIQUE: Quarantine service is available 24 hours a day with all vessels being granted pratique alongside the berth.
RADIO: A continuously manned communication centre maintains constant contact with the Pilot, pilot tender, tugs and launches. In addition, a VHF radio-telephone system (operated by the Central Control Point in Sydney) provides communication for vessels at sea or under the control of a Pilot.
Whilst anchored off the port of Port Kembla, it is necessary to maintain radio watches, as officially a vessel is at sea until entering the breakwaters into the port.
TUGS: At the present time three tugs are available, 24 hours per day, provided previous notification is given.
The tugs have bollard pulls ranging from 42 to 17.5 tons.
BERTHING: Outer Harbour:
No. 2 Jetty – South side: bulk discharging berth for Australian Iron and Steel Pty Limited, exclusively for ironstone, limestone and other raw materials used in the manufacture of steel. Depth of water alongside, 32 ft.
No. 3 Jetty – General Cargo Berth: depth of water ranging from 33 ft. seaward end to 13 ft. shore end.
No. 4 Jetty – General Cargo Berth: depth of water ranging from 36 ft. seaward end to 16 ft. shore end.
No. 5 Jetty – Used exclusively for the discharge of bulk petroleum products. It is situated on the southernside of the breakwater, and can accommodate vessels up to 600 ft. length, depth alongside 35 ft. This berth is also used for bunkering however, no priority is given for bunkering ships over tankers.
No. 6 Jetty – General Cargo Berth: depth of water ranging from 33 ft. seaward end to 24 ft. shore end.
Inner Harbour: Four of the six wharves in the Inner Harbour are privately owned, three by the Australian Iron & Steel Pty Limited and one by Australian National Line.
AIS No. 1 Loading Berth – depth 36 ft.
AIS Discharge Berth – this berth is serviced by two 15-ton capacity grabs capable of 500 t.p.h. each, and has both road and rail transport. It is actually a continuation of the loading berth and also has one coal/coke loader, capable of a loading rate of 600 t.p.h.
AIS No. 2 Loading Berth – depth alongside 40 ft.
Roll-on/roll-off Berth – depth alongside 27 ft.
Coal Berth – length of berth 704 ft. The coal or coke is loaded by means of a travelling gantry, with trimmer. The unit has been designed for a loading rate of 2,000 tons of coal or 800 tons of coke per hour, and the trimmer for loading vessels to 110 ft. beam. The average rate is approximately 1,250 tons coal and 550 tons coke per hour. The loading boom (in the horizontal position) and loading chutes will clear the hatch coaming at 57 ft. above ISLW. Also see "Developments".
Multi-purpose Berth – can accommodate vessels up to 700 ft. length, depth alongside is 38 ft.
TANKERS: Max. size of vessel 600 ft. length, 32 ft. draft.
BULK CARRIERS: Due to the length of large bulk carriers, Pilots require additional under-keel clearances which will limit departure drafts at the port to the following:
32 ft. 9 in. plus tide for vessels 750-800 ft. LOA.
32 ft. 6 in. plus tide for vessels 801-850 ft. LOA.
32 ft. 3 in. plus tide for vessels 851-900 ft. LOA.
The above figures are based on a Channel depth of 36 ft. ISLW.
DENSITY: Average 1025.
STEVEDORES: The Australian Stevedoring Authority controls labour in the port, the present total strength being 483 men.
Working times:
1st shift: 0730 to 1430 hrs. – Monday to Friday, Sunday
2nd shift: 1500 to 2200 hrs. – Monday to Friday, Sunday
3rd shift: 2300 to 0600 hrs. – Monday to Friday, Sunday
1st shift: 0730 to 1130 hrs. – Saturday only
or: 0730 to 1430 hrs. – Saturday only.
There are sufficient forklifts, tractors, bulldozers, etc., available to handle all general and bulk cargoes as necessary.
FRESH WATER: Fresh water is available at all berths.
FUEL: Furnace and diesel oil is obtainable by pipe-line at the inflammable liquid berth and No. 6 Jetty and also at the AIS discharge berth and AIS No. 1 loading berth. Limited quantities are available by road tanker at No. 3 jetty, the coal loading berth and the multi purpose berth. No bunkering barges are available.
Delivery capacity by pipe-line is approx. 120 t.p.h. Delivery capacity by road tanker is approximately 20 t.p.h.
MEDICAL: There are sufficient doctors, dentists, etc., to handle all eventualities; also two well equipped modern hospitals.
REPAIRS: There are no drydocking facilities, but several marine engineering companies operate here, who can handle most types of repairs.
HOLIDAYS: See "Sydney".
GANGWAY/DECK WATCHMEN: Carried out by crew.
OPENING/CLOSING HATCHES: Crew/stevedores.
CREW IDENTIFICATION: See "Melbourne".
TIME: GMT plus 10 hours.
AIRPORT: Kingsford Smith International Airport, Sydney.
DEVELOPMENTS: The Minister for Public Works has announced a plan for an offshore coal loader at Port Kembla to accommodate 250,000 tonne vessels.
Meantime, coal loaders will benefit from the increased depth in the entrance channel as although the depth alongside the coal berth remains at 38 ft., by working on the rising tide, sailing drafts of 41 ft. or more will be possible.
TELEPHONES: Pilot station 40761; Signal station 41089. Telephones available.
AUTHORITY: Maritime Services Board of NSW.
AGENT: Patrick Agencies, Foreshore Road, P.O. Box 83, Port Kembla, N.S.W. 2505. Cables "Rikpat". Tel. 74–2267 and 74–1637. Telex AA 29025.

PORT LATTA, Tasmania: 40.51 S. 145.23 E.
DOCUMENTS:
4 Crew Lists, Commonwealth No. MSL.
1 Customs Store List, Commonwealth No. 42A.
1 Personnel Effects, Commonwealth No. 5.
1 Quarantine/Animals, Commonwealth No. QA4 and QA5.
1 Smallpox Vaccination Register.
PILOTAGE: Compulsory pilotage from anchorage to berth. Pilot remains on board throughout loading. Pilot station equipped VHF radio Channels 16, 12 and 6. Pilots and line boats stationed at small boat harbour, Port Latta. Pilot boards at anchorage. Vessels communicate with Port Latta Marine Department on normal ship-shore frequencies, through Australian coastal stations, addressing message to "Pickands Burnie" prefixed "Shipserv". ETA required 10 days, 2 days, 1 day prior. Accommodation ladder to be rigged and ready on port side.
ANCHORAGE: 1 mile radius from point with Rocky Cape Light. Bearing 130° (T) × 5 miles (16 fthms).
RESTRICTIONS: Vessels berth on arrival day or night, weather permitting. Approach channel and depth alongside berth 50 ft.
MAX. SIZE: Length, 900 ft. LOA; beam 130 ft.; draft 50 ft.; 9 ft. range of tide.
HEALTH: Commonwealth appointed health doctor will board on arrival, weather permitting, for crew inspection. Doctor requires 1 copy Crew List and 1 copy Smallpox Vaccination Register. Doctor boards only when Port Latta first port of call.
RADIO: Radio messages addressed to "Shipserv. Pickands, Burnie" and Agent.
TUG: Will join vessel at anchorage. Tug stationed at Port of Stanley and will stay with vessel throughout loading. The use of tug or ship line is at discretion of Pilot. No extra charge made for use of tug lines.
BERTHING: Vessels berth port side alongside using starboard anchor. Lines required: Six 120 fathom lines and one wire backspring at each end of vessel. 1 berth where vessel moors to

buoys and alongside 2 dolphins. A 6,000 ft. long steel structure carries ore conveyor to 2 ship loaders each protected by a dolphin.

Minimum depth of water in berth and approaches 56 ft.

MEDICAL: Minimum of 24 hours notice required by Agent to arrange doctor. Hospitals situated at Smithton, 19 miles; Wynyard, 25 miles.

TANKERS: Berth at anytime. Hose 10 in. diameter, discharge line only, no facilities for receiving ballast or slops. Maximum permitted draft 45 ft.

DENSITY: 1025.

FRESH WATER: Limited quantity from tug – 40 tons.

FUEL: Not available.

FIRE REGULATIONS: Standard Mines Department fire regulations.

OPENING/CLOSING HATCHES: Ship's responsibility.

CERTIFICATES: Required: De-rat., Safety Equipment, Load Line, Registered Tonnage.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 8 ozs. tobacco per man. Wine/Spirit, 1 quart per man, bottle/bottles must be unsealed.

CARGO GEAR: None required.

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: No consulates.

REPAIRS: Minor repairs can be carried out by local contractors.

REPATRIATION: Agents can arrange repatriation and crew changes.

AIRPORT: Nearest airport 25 miles at Wynyard with daily domestic flights to mainland for international flight connections.

TIME: Local time on Eastern Australian Standard. GMT plus 10 hours. Tasmanian Summer exists between October and March, GMT plus 11 hours.

HOLIDAYS: Cargo loading continuous throughout public holidays.

POLICE/AMBULANCE/FIRE: Police, Stanley 40; Ambulance, Smithton 2-1221; Fire, Forest 58-3123.

TELEPHONES: No arrangements available for placing phone on board ship. Use of company phone can be arranged for business matters.

SHORE LEAVE: Shore leave is allowed provided sufficient crew remain on board to handle vessel for clearing berth.

AUTHORITY: Port Latta Marine Department.

AGENT: Sub-agent of Patrick Agencies, Melbourne.

PORT LINCOLN, S.A.: 34.47 S. 135.54 E. (See Plan)

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory. Pilot boards 1.5 miles South-east or East-south-east of Boston Point.

APPROACHES: Depth in approach Channel 30 ft.

BERTHING: Kirton Point Jetty oil tanker berth at "T" head, berthing space 900 f. (275 m.), depth 32 ft. (9.75 m.). Shipping pier depth 27 ft. (8.2 m.) and 28 ft. (8.5 m.). Bulk grain loading berth 670 ft. (204 m.) long, depth 32 ft. (9.75 m.). Max. beam permissible 80 ft. (24.4 m.). Broken Hill Jetty (Proper Bay) jetty and berth with mooring dolphins. Distance between outer dolphins 882 ft. (270 m.). Depth 34 ft. (10.4 m.) MLWS. Loading rate 1,900/2,000 t.p.h. Max. beam permissible 80 ft. (24 m.).

FUEL: Not available.

FRESH WATER: Available at jetty and shipping pier. Not available at Broken Hill (Proper Bay) berth,

TUGS! 1 tug available.

VHF: Radio telephone in operation.

DEVELOPMENTS: Two new berths are being constructed as a 600 m. extension of the Shipping Pier. The outer berth will accommodate bulk grain vessels up to 70,000 d.w.t. and the loading rate will be 2,000 tonnes per hour. The inner berth will accommodate vessels up to 35,000 d.w.t. discharging phosphate rock imports. The grain berth is expected to be completed late 1976.

The initial depth of water at the two berths will be 15.0 m. low water. Depth of approach channel 14.4 m. The berths will be able to accommodate any length of ship commensurate with the available draft. So far as beam limitation is concerned the loading booms are being designed to accommodate vessels of 100,000 d.w.t.

AUTHORITY: Department of Marine and Harbours, Adelaide. For Proper Bay: Broken Hill Proprietary Co. Ltd.

AGENT: See "Adelaide".

PORT PIRIE, S.A.: 33.10 S. 138.02 E. (See Plan)

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: Pilot boarding station is one mile N.W. of Eastern Shoal North Beacon. Regulation pilot ladder secured four steps up from water and manropes required. Boat ropes not required.

The port serviced by VHF in the following ways: Port Pirie Harbour Master in office hours or Watchman outside office hours, all have Channels 6, 12 and 16. Pilot Launch *Matthew Flinders* Mooring Launch *Tarparrie*; Motor tug *Tenacious* (11 ton pull); Motor Tug *Ungara* (11 ton pull).

The Pilot will board at any time, but the Channel is only navigated inward bound during daylight hours.

RESTRICTIONS:

1. Departure during darkness:—
   (a) Conventional Vessels (Bridge amidships) maximum 550 ft. LOA 80 ft. Beam.
   (b) Bulk carriers (bridge aft) maximum 530 ft. LOA 80 ft. Beam.
2. *Beam*
   (a) Up to 70 ft. Beam – 2 ft. under keel leaving berth on rising tide.
   (b) Over 70 ft. Beam – 3 ft. under keel leaving berth on rising tide.
3. *Tankers*
   (a) Are not permitted to enter or depart during hours of darkness.
   (b) Required to stop pumping when other vessels passing.
   (c) Tug required on standby whilst white spirit tanker or non gas-free tankers in port.

River channel has a maximum width of 200 ft., dredged to a depth of 21 ft. L.W.O.S.T. Vessels drawing up to 27 ft. 6 ins. on maximum spring tides can navigate the channel safely.

MAX. SIZE: LOA 580 ft. (176 m.) BP 550 ft. (167 m.) Draft 21 ft. (6.4 m.) plus height of tide less keel clearance.

RADIO: VHF (see Pilotage).

TUGS: Tug will be required for vessels of 410 ft. (125 m.) and over.

BERTHING: Swing basin approx. 1,000 ft. long 880 ft. wide. Wharfage accommodation 9 ships.

The following accommodation is available.

No. 1	Berth	533 ft.	L.W.O.S.T.	24 ft.	
2	"	600 ft.	"	27 ft.	(Grain shipments only)
3	"	650 ft.	"	24 ft.	
4	"	350 ft.	"	19 ft.	
5	"	640 ft.	"	27 ft.	
6	"	600 ft.	"	27 ft.	
7	"	475 ft.	"	27 ft.	(Interstate ships only)
8	,,	590 ft.	,,	27 ft.	
9	,,	590 ft.	,,	27 ft.	
10	,,	520 ft	,,	27 ft.	

Maximum length of vessels using No. 1 berth is 500 ft.

No. 3 Berth is a "T" head wharf and is used by tankers and if not required can be used as a standby berth.

No. 4 Berth is used as a tie up berth for tugs and S.A. Harbours Board craft.

CRANES: Eight 7.5 ton electric cranes are available as under:—

No. 7 Berth – 2 for concentrate loading (Interstate only).

Nos. 8 and 9 and 10 berths – 6 plus the 2 from No. 7 if not required at that berth.

Two 7.5 ton cranes situated at No. 7 Berth are the property of E.Z. Company and the balance of the 7.5 ton cranes are the property of B.H. Associated Smelters and can only be procured when they are not required by the Company or when it is stipulated in contract, agreement or Charter, that cranes to be supplied.

BULK HANDLING FACILITIES: The boom of the shiploader is 70 ft. (21.3 m.) in length and when lowered to the horizontal position for pouring should plumb the midship line of most ships loading from this machine. The "jet-trimming slinger" at the lower end of the loading chute is capable of throwing a stream of ore some 60 ft. (18.3 m.) through 360 degrees and can be directed to any position within the vessel's hold.

Bulk wheat and barley can be delivered ex-silo on a conveyor belt which is capable of delivery at the rate of 400 t.p.h. Five outlets are available but the maximum is 400 t.p.h.

	Max Draft	Max. Length	Max. Breadth	Handled by
Grain	27 ft. 6 in.	580 ft. OAL 550 ft. BPL	80 ft.	Silo Spouts
Ore	27 ft. 6 in.	580 ft. OAL 550 ft. BPL	80 ft.	Link Belt Ship Loader 300 to 350 t.p.h.

FRESH WATER: Fresh water available all berths at rate of 10–15 t.p.h.

FUEL: The Shell Company, B.P. (Aust.) Pty. Ltd., and Mobil Oil (Aust.) Pty. Ltd., can supply small quantites of fuel oil in drums from Port Adelaide, also in bulk ex-road and rail tankers. No fuel is stored at Port Pirie, all companies' local tanks are petrol, kerosene and dieselene only.

No bunker coal available at Port Pirie.

REPAIRS: Subject special arrangements.

TELEPHONES: Police 32 1200; Fire Department 32 3000; Harbour Master 32 1455.

AGENT: Patrick Agencies, POB 38, 15 David Street, Port Pirie, S.A. 5540. Tel. 32 3222. Cables: "Rikpat".

PORT STANVAC, S.A.: 35.06 S. 138.28 E. (See Plan)

DOCUMENTS: The following Australian forms are required at first port of call. If not on board, they must be completed on arrival:

2	copies	Form M & S 11 or M & S 14	(Crew List).
1	,,	,, 42 A	(Store List).
1	,,	,, 5	(Customs Manifest).
2	,,	,, C & E 886	(Ports of Call).
1	,,	,, QA 3	(Cargo).
1	,,	,, QA 4	(Pets).
1	,,	,, QA 5	(not necessary if no pets on board).
2	,,	,, FQ 360	(Health Report).

PILOTAGE: Compulsory. Mooring Master acts as Pilot. On approaching port, contact Port Stanvac Information Station on VHF Channel 16, day or night, for latest orders.

RESTRICTIONS: Approaches from the West, through Investigator Strait; from the East, through Backstairs Passage.

Minimum depth in channel to jetty berth is 40 ft. (12.2 m.). Minimum depth in Channel to Sea Line berth is 60 ft. (18.3 m.).

Height of tide, 9.0 ft. (2.7 m.) HHW, and 4.6 ft. (1.4 m.) LHW.

ANCHORAGE: Crude vessels — with Marino Rocks Lighthouse 065° distance 3.5 miles in 14 fathoms of water.

Product vessels – with Marino Rocks Lighthouse 065° distance 3 miles in 11 fathoms of water.

Not recommended anchor West of sea berth due to presence of sunken barges, although deep water.

MAX. SIZE: At Jetty berth: length 560 ft. (170 m.), draft 32 ft. (9.7 m.).

At Sea Line berth: length 1,000 ft. (305 m.), draft 51 ft. (15.5 m).

RADIO: VHF radio telephone Channels 16, 14 and 9. Call sign "PORT STANVAC". Mooring Master in radio contact with terminal while at berth.

TUGS: Obtainable from Port Adelaide. Normally 1 tug assists berthing.

BERTHING: Jetty extends over a stone causeway and thence north-westward for about 2,000 ft. (610 m.). Causeway is about 1,000 ft. (305 m.) long. The "L" head of the jetty is about 400 ft. (122 m.) long in a N.E. direction, with a depth of 35 ft. (10.7 m.) alongside.

A pipe-line extends about 1,800 ft. (548 m.) from the jetty head in a N.W. direction to the Sea Line berth in a depth of 60 ft. (18.3 m.) of water. At the Sea Line berth vessel moors using both anchors and ship's ropes to 5 buoys aft. In addition, up to 5.5 in. (0.139 m.) wires may be picked up from the sea bed. Use of these wires is recommended as vessel is moored beam on to tidal streams. After westerly storms, berth is exposed to heavy swell.

HOSES: Sea Line berth; two 12 in. (0.3048 m.) hoses connect vessel with 34 in. sea line. A shore gang of fitters joins ship to connect hoses under Berthing Master's supervision. These men are accommodated on board.

Ship's port derrick to be rigged with a single runner. Diver goes under water to connect hose.

Shore tanks situated 120 ft. (36.5 m.) above sea-level, high back pressure to be expected.

FRESH WATER: Fresh water available at the Products Wharf only, at an approximate rate of 25 t.p.h.

FUEL: Fuel and diesel oil available at jetty. Only Bunker "C" available at Sea Line berth.

MEDICAL: Doctor available.

REPAIRS: No facilities for repairs.

TIME: GMT plus 9.5 hours.

BALLAST: Facilities available to receive 12,000 L/T dirty ballast ashore from Product Wharf only.

POLLUTION: No dirty ballast or bilges may be pumped overboard. A maximum penalty for pollution of local waters is $A50,000 plus cost of any cleaning necessary.

REGULATIONS: This Terminal is in an open exposed roadstead. During the time a vessel is berthed at the Terminal, the ship's engines and propulsion machinery should be maintained in readiness to leave the berth under full power at short notice. No repairs which would interfere with this requirement are permitted.

SHORE LEAVE: Allowed. Launch service can be arranged. Crew members not allowed through refinery on foot, must use taxi or approved transport.

SHIPMASTERS REPORT: (March 1976).

Anchorage: Crude tankers normally in position, Marino Light bearing 075°T, distance 3.5 miles.

Moorings: 6 ship's ropes to Buoy No's 1-6 plus a minimum of 4 wires from buoys to ship. Carpenter's stoppers for wires provided by shore.

Hoses: Shore gang connects hoses under supervision of Mooring Master. Ship's crew handle winches. 1 officer to be present. Shore gang is not accommodated on board.

Time: GMT plus 9.5 hours but daylight saving time (plus 10.5 hours) is kept from last Sunday in October until first Sunday in March.

AUTHORITY: Petroleum Refineries (Australia) Pty. Ltd.

AGENT: See "Adelaide".

PORT WALCOTT, W.A.: 20.37 S. 117.11 E. (including Point Samson and Cape Lambert) **(See Plan)**

PORT LIMITS: The port is bounded on the South and West by the coast between the North of the Sherlock River and the Northern extremity of Dolphin Island, including all the intermediate bays, creeks, coves, inlets and navigable waters; on the North by an imaginary line from the Northern extremity of Dolphin Island to the Northern extremity of Delambre Island and thence Southeastward to a position 5 statute miles North of the mouth of the Sherlock River; and to the East by an imaginary line extending 5 statute miles Northward from the mouth of the Sherlock River.

HEALTH/DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory. No permanent Pilot stationed at Port Walcott. The Harbour and Light Department at Fremantle should be advised of vessel's ETA, with ten days advance notice.

Pilot Ladders, Hoists, etc: On arrival, Pilots will accept a pilot hoist, a pilot ladder not exceeding 9 m. in length, an accommodation ladder if the weather is suitable or a combination of pilot ladder and accommodation ladder.

Owing to swell conditions, a clean pilot ladder is required for departure. This should be rigged so that it is 1 m. above sea level and provided with 2 clean manropes.

This ladder is required to comply with Australian Standard Specification No. 1267 of 1975 which is based on the requirements of the SOLAS Convention and the Navigation Act.

A pilot hoist or accommodation ladder is *not* considered suitable for disembarking.

Whilst in the berth, the appropriate accommodation ladder is used for access to the ship.

ANCHORAGE: A position with Jarman Island Lighthouse bearing 187°, distance 8 miles. The Pilot and Quarantine Officer boards at this position.

Suggested anchorage positions:

Bearings of Jarman Island Lighthouse.

'A'	185°×5.5 miles	depth 11 m.
'B'	190°×6.0 miles	depth 12 m.
'C'	195°×6.5 miles	depth 14 m.
'D'	190°×7.0 miles	depth 14 m.
'E'	195°×7.5 miles	depth 15 m.
'F'	175°×6.5 miles	depth 13 m.
'G'	180°×7.0 miles	depth 14 m.
'H'	185°×7.5 miles	depth 15 m.
'J'	175°×7.5 miles	depth 16 m.
'K'	180°×8.0 miles	depth 15 m.

TIDES: Spring Range is 5.8 m. (19 ft.).

RESTRICTIONS: *Controlling depths* for ore carriers and large tankers, at present (1975) 12.5 m. (41 ft.) at LWOST.

For vessels bound for Lambert Service Jetty – 8.8 m. (29 ft.).

Berthing of ore carriers is usually carried out at about one hour before High Water or 1.5 hours before Low Water.

Owing to tidal peculiarities, berthing at the Lambert Service Jetty is either at about 2.5 hours before HW or 3.5 hours after HW.

MAX. SIZE: Largest vessel to date (March 1976) 227,913 m.d.w.t.

RADIO: VHF is available on Channel 6, 8, 10, 12, 14, and 16 though a continuous watch is not kept. ETAs to be given 10 days, 48 hours and about 24 hours, prior to vessel's arrival. Telegrams should be addressed Shipserve, Harbourmaster Portwalcott.

TUGS: Two tugs are available for use at Cliffs jetties only. Each is 3,200 h.p. with a bollard pull in excess of 50 tons. They are twin screw with Kort nozzles. One lines launch is available. Tugs supply towing equipment.

BERTHING: *Cape Lambert*

Cape Lambert Service Jetty is owned by Cliffs Robe River Iron Associates. The neck is 1,500 ft. long and the berthing head is 510 ft. long. Off each end of the head is a mooring dolphin some 90 ft. away. This permits a vessel of about 625 ft. long to berth. There is a min. depth of 10 m. at LW. The height of the jetty, above LW, is 35 ft. Cargo is handled by ship's gear. The jetty is designed for road transport only. This is not a common-user berth and permission must be obtained from the Port Authority before any cargo, other than C.R.R.I.A. cargo, is handled.

Lambert Ore Jetty is owned and operated by C.R.R.I.A. It extends 8,760 ft. to sea in a 046.75° direction. It is double sided and capable of handling ships up to 170,000 m.d.w.t. The depth of water in No. 1 (South) berth is 57 ft. (17.37 m.) and in No. 2 (North) berth is 63 ft. (19.2 m.). There is a single shiploader designed to operate at 6,000 t.p.h. Ships usually berth 'head out' and are secured to dolphins, parallel to the wharf. These dolphins are 25 ft. (7.6 m.) above low water. The height of the jetty is 61 ft. above low water and the boom of the shiploader is about 100 ft. above LW. The shiploader is capable of travelling over a distance of about 650 ft. (197 m.) but the boom will reach over a distance of about 870 ft. (265 m.). The boom will reach about 72 ft. over a ship.

STEVEDORES: Labour for stevedoring purposes is controlled by the Australian Stevedoring Industry Authority. In 1975, there were about 20 men available. Requests for labour should be made through an Agent or Stevedore. Hours of work are usually 0800–2130 and 2130–0630. This labour operates at Lambert Jetty.

CARGO GEAR: See "Melbourne".

FRESH WATER: Available.

FUEL: Not available.

TIME: GMT plus 8 hours.

STORES: Available by prior arrangement.

GENERAL: Port Walcott is connected by sealed roads to the towns of Wickham, Roebourne, Karratha, Dampier and Port Hedland, each of which has a hospital and other facilities. The sealed road also extends to Perth, some 1,100 miles away.

AIRPORT: At least 1 jet flight per day to Perth from Karratha (2 hours).

TANKERS: Usually berthed 'head-in' at the Lambert Service Jetty as the deeper water (35 ft.) is at the seaward end. Discharge is through an 8 in. pipe-line which is situated about the centre of the berth.

May be 'head-in' or 'head-out' at the Lambert Ore Jetty, using a mooring buoy which is laid some 85 m. (280 ft.) from the outer dolphins, for head or stern moorings. A basin has been dredged to 15.24 m. (50 ft.) to accommodate tankers. Discharge is through either a 24 in. or 12 in. pipe-line via a pair of "Wheaton Arms".

AUTHORITY: Harbour and Light Department, Fremantle. Harbour and Light Department, Point Sampson.

AGENTS: Sub-agent of Patrick Agencies, Fremantle.

PORTLAND, Victoria: 38.20 S. 141.37 E. **(See Plan)**

PORT LIMITS: So much of the waters of Portland Bay as lie Westward of a line bearing due North from Point Danger to the opposite shore of Portland Bay.

DOCUMENTS: Refer to "Melbourne".

PILOTAGE: Compulsory except for exempt Masters. Pilot boards 0.25 to 0.5 mile from main breakwater.

Approach from the West: A safe course into Portland Bay can be maintained by rounding Lawrence Rocks at a distance of 1.5 miles and altering until a course of 330° can be steered, which will clear the Southern side of the Bay between Danger Point and Portland by 1.5 miles. Steer this course until Whaler Point Lighthouse bears 270° about 2.5 miles distant where course can be altered for the harbour entrance.

Approach from East: Is a straight course after rounding Lady Julia Percy Island, 18 miles from the breakwater.

ANCHORAGE: Portland Bay is clear of all dangers and safe anchorage may be found 0.25 to 0.5 mile North and N.E. of the main breakwater and for smaller vessels between the Lee Breakwater and Whaler Reef. Holding ground is good, and excellent shelter is obtained from Westerly weather. Anchoring is not recommended in strong Easterly or South-easterly weather, as there may be a confused sea and swell.

RESTRICTIONS: *The Harbour* is bounded by 2 breakwaters, enclosing 250 acres. The entrance is 800 ft. wide.

Swinging Basin: Between the 2 breakwaters, bounded by No. 6 Berth and the Lee Breakwater.

Depth of water in the harbour is based on a datum of 0.63 ft. above LWOST, which ensures a depth of not less than 36 ft. under all tidal conditions. Mean rise and fall is approximately 2.5 ft. but the prevailing wind has a certain influence on the tide.

MAX. SIZE: The largest vessel to use the port to date was 741 ft. long and 104 ft. beam.

Deepest vessel to use the port to date was with a departure draft of 36 ft. 7 in.

Also see "Tankers".

HEALTH: Portland is a first port of entry. When requiring pratique, inform the Port Health Officer of the ETA, number of crew and passengers and the state of health of the complement. Use the prefix "Shipserv" for all cabled messages. All requirements as for Melbourne.

RADIO: Maritime VHF operating on Channels 12 and 16 is installed in the Harbour Master's Office and on the tugs.

Listening on Channel 16 between 0830 and 1700 hrs. and when shipping is expected.

Radio Advice of Arrival: Address ETA telegrams to the Harbour Master, using the prefix "Shipserv".

TUGS: 1 of 1,600 h.p., 1 of 660 h.p. and 1 of 250 h.p. available.

BERTHING: The main breakwater extends 4,200 ft. in a North-South direction from Battery Point with its Northern extremity in 46 ft. of water. There are 2 berths at the inshore end known as No. 1 and No. 2, K. S. Anderson Wharf.

Depth alongside No. 2 berth, is 36 ft. LW with limestone and sand bottom. Max. draft is 34 ft. 6 in., which may be increased if written application made to Harbour Master, stating the maximum required.

No. 1 Berth is suitable for bulk or general cargoes. It is also used for the discharge of diesel and fuel oil and for bunkering. It is a berth ideally suited for the assembly and handling of containers or unit loads as both road and rail transport can be utilised.

No. 1 Berth has been dredged to 40 ft. depth for a length of 900 ft. and a 40 ft. channel 300 ft. wide is dredged to the entrance. Max. draft 38 ft. Both Nos. 1 and 2 can be used for bulk grain loading

No. 2 Berth is a continuation of No. 1, and is also the grain loading berth with the silos situated at the South end of the wharf, and the loading gantry running along the roof of the shed. 2 travelling ship-loaders operate over the length of the berth; when used simultaneously capacity is 200 t.p.h. each, used singly 400 t.p.h. The berth is also used for discharge of diesel and fuel oil, and as a bunker berth. The tank farm is approximately 0.5 mile distant.

BULK LOADING FACILITIES: Located at No. 1 and No. 2 berth K.S. Anderson Wharf. The loading units consist of two 90 ft. high lateral traversing ship-loaders, for the delivery of bulk grain (oats, wheat, barley, maize and sorghum).

Maximum distance of traverse is 1,111 ft. with telescopic delivery spouts providing an additional 65 ft. at either end. Maximum permissible length of ship unlimited. Additional bollards are situated on main breakwater.

Maximum beam served to date 90 ft. in bulk carrier with wing tanks.

Maximum height above LW of ship's rail to swing spouts inboard 46 ft.

Gross handling rate per hour: oats 400, wheat 600, and barley 500 t.p.h. reduced when trimmers are used.

No. 6 berth is at right angle to K. S. Anderson berths and 450 ft. West. The berth is designed and built for the discharge of bulk cargoes but, as with No. 1 berth, is also used for the handling of general cargo.

It is 750 ft. in length with 36 ft. LW alongside and a clay bottom. Max. draft is 34 ft. 6 in., with the same conditions as for No. 1 and No. 2 berths.

TANKERS: *Lee Breakwater and S. L. Patterson Oil Berth* protrudes in an Easterly direction from point 3.7 cables South of Whaler Point Lighthouse for a distance of 3,870 ft., with its extremity in 40 ft. of water.

The S. L. Patterson Oil Berth is situated on this breakwater about 1,500 ft. from the seaward end.

The wharf is 250 ft. in length and designed for vessels of up to 38,000 tons grt. Depth alongside is 34 ft. low water, with limestone and sandy bottom.

Maximum draft permitted is 32.5 feet.

Berthing and unberthing of tankers is on a 24-hour basis, at the discretion of the Harbour Master. During darkness, a Pilot is compulsory.

The Shell Company of Australia Limited, and Ampol Petroleum (Victoria) Pty Limited have pipe-lines to the berth. Average discharge rate is approximately 300 t.p.h. The tank-farms are 1 mile from the wharf. This wharf can also be utilised as a fitting out or repair berth.

Also see "Berthing".

STEVEDORES: There are 120 registered members available.

Hours of work are from 0800 hrs to 1700 hrs., from 1700 hrs. to 2300 hrs. and midnight to 0700 hrs.

Extended shifts are allowed to be worked to 1900 hrs. each day (except Thursday and Sunday) when no twilight labour is available.

Pallets can be manufactured locally by prior arrangement.

Vessels can be serviced expeditiously under skilled supervision including fitting out for grain, battening out for freezer or general cargo and securing cargoes to departmental requirements. Ample supplies of dunnage are available.

MEDICAL: Medical, dental and optical services are available.

FRESH WATER: Is obtainable in unlimited quantity at all berths at a loading rate of over 20 t.p.h.

FUEL: Can be obtained ex-pipe-line on the K. S. Anderson Wharf for quantities in excess of 100 tons. Vessels can bunker at up to 350 t.p.h. for either grade of oil. Smaller quantities are delivered by road tank wagons.

REPAIRS: Limited to the Trust's workshops and local tradesmen.

GENERAL: *Provisions:* plentiful, good, and available at short notice. Bonded stores are at present only available from Melbourne at approximately 24 hours notice.

AIRPORT: An air service is maintained between Portland and Melbourne. 3 flights daily connecting with all interstate and international services.

TELEPHONES: At all berths. Tanker Berth No. 23.1852.

POLICE/AMBULANCE/FIRE: Fire Brigade 232998; Police 231999; Ambulance 231666; Hospital 231033, after hours, general patients 231400.

AUTHORITY: Portland Harbor Trust Commissioners.

AGENT: Sub-agent of Patrick Agencies.

RAPID BAY, S.A.: 35.32 S. 138.12 E.

LOCATION: On Eastern shore of St. Vincent's Gulf about 55 sea miles South of Port Adelaide.

DOCUMENTS: See "Melbourne".

PILOTAGE: Not compulsory but recommended. Pilot station as for Port Adelaide.

BERTHING: "T" shaped jetty, 1,600 ft. long, "T" head 737 ft. berthing length. Depth 29 ft. MLWS. Loading rate 1,100/1,200 t.p.h. Height of chute above water MLWS 38 ft. The fixed chute extends 32 ft. beyond the jetty fender line.

FRESH WATER: Not available.

FUEL: Small emergency supplies only by road tankers from Port Stanvac.

TUGS/REPAIRS: None.

OPERATIONS: Working hours flexible to suit vessels requirements.

VHF: Available.

AUTHORITY: Broken Hill Proprietary Co. Ltd., Whyalla.

AGENT: Sub-agent of Patrick Agencies, Adelaide.

ROCKHAMPTON, (Port Alma) Queensland: 23.24 S. 150.33 E. **(See Plan)**

CERTIFICATES/DOCUMENTS: All documentation carried out by ship's Agents either in Rockhampton or at main Agent's office. Also see "Melbourne".

PILOTAGE: Agent notifies Pilot of ETA, and boarding time then determined by Pilot, taking into consideration circumstances prevailing.

Pilot boards from 50 ft. white launch. Pilots can be contacted by VHF Channels 8, 12 and 16, or radio-telephone 2182 and 2760 kHz.

RESTRICTIONS: Channel depth 24 ft. LWOST. Berth depth 32 ft. LWOST. Two feet keel clearance required. Max. draft dependent on height of tide.

ANCHORAGES: Anchorage for Port Alma is Timandra Buoy, approximately 13 miles from Port.

HEALTH: Health regulations carried out by Agents. Pratique only necessary when port is first port of call. See "Melbourne".

RADIO: VIR Rockhampton.

TUGS: Tug assistance obtainable if required from Port of Gladstone.

BERTHING: Berth at Pilot's discretion after receiving advice from Agent as to ETA.

Present facilities comprise 950 ft. Concrete Wharf plus Bulk Loading Berth and Conveyor also utilised as tanker berth. All berths depth 32 ft. LWOST.

STEVEDORES: Agent advises Stevedoring Company of ETA. Requisitions to be lodged for labour before 1300 hrs. on previous day. No requisition can be lodged from 1300 hrs. Friday to 1300 hrs. Monday.

MEDICAL: All medical requirements carried out by Agent. Hospital available 40 miles from Port Alma.

TANKERS: 10-inch disch. lines. No slop facilities. 1 berth 32 ft. LWOST.

FRESH WATER: Fresh water available by road transport only, necessitating road haul of 40 miles, average cost $14.00/1,000 gallons.

FUEL: No bunkering facilities available. Installations contemplated in near future. All grades of fuel available by road transport.

FIRE PRECAUTIONS: Usual precautions as laid down by the Marine Board of Queensland.
GANGWAY/DECK WATCHMEN: Crew.
OPENING/CLOSING HATCHES: Crew.
CUSTOMS ALLOWANCE: Under supervision by Custom's Department, 200 cigarettes or 1 lb. of tobacco each 10 days. Wine/Spirits, no definite information available.
CARGO GEAR: As per the Navigation Act. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: Norway telephone 276555.
REPAIRS: Minor repairs only.
REPATRIATION: Facilities available.
AIRPORT: Regular services 43 miles from Port Area.
TIME: GMT plus 10 hours.
HOLIDAYS: Christmas Day, Good Friday, April 25th and Waterside Workers' Picnic Day.
POLICE/AMBULANCE/FIRE: Tel. No. 000. 40 miles distance.
TELEPHONES: No provisions for placing telephone on board ship. Public telephone on Wharf.
AUTHORITY: Rockhampton Harbour Board.
AGENT: Sub-Agents of Patrick Agencies, Brisbane.

SPRING BAY, Tasmania: 42.33 S. 147.56 E.

DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilot boards from a tug (black hull, red funnel with black top), on a line joining the Southernmost part of Freestone Point to the Northernmost part of Luther Point (see Chart AUS 170). ETA is usually sent to vessel's Agent 72 hours prior to vessel's arrival and confirmed 24 hours and 6 hours before arrival at the Pilot station. ETA should also be sent to Harbour Master, Hobart, VHF Channel 16, call sign "Hobart Harbour". The tug from which the Pilot boards leaves Spring Bay Wharf 30 minutes before a vessel is due at the pilot station, and also keeps a listening watch on VHF Channel 16.
ANCHORAGE: A good anchorage can be found in depths of 36 to 50 ft. approximately 1–1.25 miles S.W. of Spring Bay Wharf.
RESTRICTIONS: The wharf is used exclusively by vessels loading wood chips from Tasmanian Pulp and Forest Holdings. The main wharf, on which the wood chip loader is situated, is 800 ft. long with additional dolphins (3) and a mooring block for head, stern and breast lines. Ships are normally berthed starboard side to and the port anchor is used approaching the berth. The ship loader is a fixed structure and vessels loading are required to move up and down the wharf using their own lines. At present vessels are only berthed during daylight hours, but may leave during the hours of darkness at the discretion of the Pilot. Should a vessel require to immobilise her engines, application must be made to the Harbour Master; if permission is granted a tug will be required to stand by alongside.
MAX. SIZE: The min. depth alongside the wharf is 35 ft., and the mooring dolphins and ship loading facilities were designed to accommodate specialised ships with an overall length of 685 ft. No difficulty is envisaged in working ships having an overall length of up to 800 ft.
HEALTH: The local medical practitioner boards vessels after berthing and acts for the Commonwealth Department of Health. Immigration/Customs Officers travel by road from Hobart and board after pratique has been granted. Quarantine authorities must be informed of suspected disease or fever at least 18 hours before arrival. Also see "Melbourne".
RADIO: Hobart Radio, call sign VIH. Hours of duty EST (add 1 hour for Summer Time). Monday-Saturday inclusive 0730–1730 hrs. Sunday, 0800–1600 hrs.
TUGS: 1 tug is stationed at Spring Bay. When a ship is due a second tug is despatched from Hobart and remains in the port area throughout the vessel's stay. 1 of the tugs is used to embark and disembark the Pilot as well as assisting in berthing and unberthing. Should tugs be required to stand-by during loading operations an additional charge will be made in respect of crews' wages etc. It is customary to use the tug's lines, for which an additional charge is made.
MEDICAL: A local doctor is available and well equipped health clinics are situated at Triabunna (3 miles) and Orford (7 miles).
DENSITY: 1025.
FRESH WATER: Limited supplies are available from the wood chip factory.
FUEL: None laid on to the wharf. In an emergency limited supplies could be provided by road tankers from Hobart.
FIRE PRECAUTIONS: No special fire precautions other than non-smoking or lighting of fires or use of naked lights.
GANGWAY/DECK WATCHMAN: None available.
OPENING/CLOSING HATCHES: Hatches are opened by the ship's crew.
CERTIFICATES: Register, Load Line Certificate, Deratisation Certificate, Light Dues, Articles of Agreement, Clearance from previous Port.
CUSTOMS ALLOWANCES: See "Hobart".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None, see "Hobart".
REPAIRS: No facilities available for major repairs, but the wood chip factory may be able to assist in minor repairs. Local Hobart firms available. See "Hobart".
REPATRIATION: Facilities available through Hobart.
AIRPORT: Hobart Airport is situated 49 miles from Spring Bay Wharf. Frequent services operate to the mainland from where services operate world wide.
TIME: Local time (Eastern Standard Time) 10 hours ahead of GMT. Summer Time in force from October to March when clocks advanced one hour.
HOLIDAYS: See "Hobart". Ships may be loaded on days which are regarded as holidays in Hobart.
POLICE/AMBULANCE/FIRE: Police, 573116; Ambulance, 573129; Fire, 573187.
TELEPHONES: A telephone is connected to all vessels on arrival.
AUTHORITY: Marine Board of Hobart.

SYDNEY, N.S.W.: 33.55 S. 151.12 E. (See Plan)

DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilots boarding ground is within 2 miles of entrance to Port Jackson. Pilot vessels fitted with VHF for communication with other ships. Watch maintained on Channel 13 while at sea and messages conducted on Channel 6.
MOVEMENT DIRECTIONS: See under "VHF".

1. Vessel shall not enter port until authorised to do so by Port Operations Officer.
2. Vessel entering port shall report to Port Operations Officer–
   (a) when passing Sea Buoy, Bradley Head, Fort Denison and, where applicable, Longnose Point, and
   (b) as soon as secured at berth or anchorage.
3. Vessel proceeding to sea shall report to Port Operations Officer–
   (a) 1 hour before departure.
   (b) when passing Longnose Point (where applicable), Fort Denison, Bradley Head and the Buoy and
   (c) when clear of port area.
4. Vessel moving from berth or anchorage in port to another shall report to Port Operations Officer–
   (a) 1 hour before moving.
   (b) when passing Longnose Point, Fort Denison or Bradley Head, and
   (c) when secured at new berth or anchorage.

Note that–
   (a) a vessel must not be moved from any berth or anchorage in port without prior approval of Harbour Master (given by Port Operations Officer), and
   (b) Every Port Operations Officer has been appointed to exercise powers of Harbour Master in giving enforceable directions relating to vessels in Port.

APPROACH DEPTHS: 80 ft. (24.38 m.) in entrance to Harbour, 42 ft. (12.8 m.) in East Channel, 45 ft. (13.71 m.) in West Channel.
HARBOUR BRIDGE CLEARANCE: 171 ft. 9 in. (52.35 m.) less 8 ft. (2.43 m.) for painting gantry.
HEALTH: See "Melbourne".
TIDES: Higher High Water 5.2 ft. (1.57 m.). Lower High Water 4.2 ft. (1.27 m.). Fort Denison.
RADIO: Sydney – VIS.
VHF:

1. PORT OPERATIONS AND INFORMATION SERVICE

Service co-ordinates flow of shipping traffic within Port of Sydney to ensure expeditious movement of vessels in safety, and provides information to Pilots and Exempt Masters as aid to safe navigation in Port.

Maritime VHF Radio Service operated by Board for Ports of Sydney, Newcastle, Botany Bay and Port Kembla is integrated into Port Operations and Information Service.

Service manned continuously on watch-keeping basis, each watch being under control of qualified Master Mariner, known as Port Operations Officer, who is responsible to Harbour Master.

Rules to be observed by shipping contained in Port Operations and Information Service Manual, and all shipping using port will be required to observe these rules.

Instructions concerning Maritime VHF Radio Service have been revised to fit in with Port Operations and Information Service. The revised instructions also contained in Port Operations and Information Service Manual.

Copies of Manual may be obtained, on request from the Harbour Master's office.

2. SHORE STATIONS: (Call sign "Sydney Maritime").

Interconnected system of stations handling messages for Signal Stations at Newcastle, Sydney and Port Kembla operated from central control using call sign "Sydney Maritime", will exercise control of service and provide facilities indicated below for area from 50 miles North of Newcastle to 50 miles South of Port Kembla and a distance of 50 miles to seaward.

Ships requested maintain watch on Channel 16 when in this area. If Channel 16 in use for distress, urgency or safety communications, Shore Station will maintain continuous watch on Channel 12 and ships may establish contact with Shore Station on this channel.

On the hour "Sydney Maritime" will give identification call followed by any general messages or navigational warnings.

On request Shore Station will provide following services:

(a) Navigational information.
(b) Locking weather reports from Signal Stations.
(c) Booking of ship's telephones, shore power supply, temporary lighting and other port services provided by Maritime Services Board of N.S.W.
(d) In addition, Shore Station on request from Pilots or Exempt Masters, allocates a Channel for use between ships and attendant tugs during berthing operations.

Radiotelephone Discipline. To ensure that the full advantage of efficient communications is achieved, strict radio discipline and attention to procedure, particularly on the Safety and Calling

Channel No. 16 is imperative. Messages must be as brief as possible.

3. ADVICE OF ETA – SYDNEY AND NEWCASTLE HARBOURS

Vessels proceeding to Sydney and Newcastle required advise either Shore Station, "Sydney Maritime" (per medium of Maritime VHF Radio) or "Marboard" (per medium of the coastal radio service) of estimated time of arrival at entrance to port concerned at least four hours prior to such time.

"Sydney Maritime" maintains continuous watch on Channel 16 for ships reporting ETA.

4. CHANNELS IN USE

Channel No.	*Title*	*Use*
16	Safety and Calling	Initial contact or emergency use. The calling entry to either Port Information, Port Operation or Intership Channels.
12	Port Operation (Port information)	Primarily for ships passing and receiving navigational information to and from Shore Station ("Sydney Maritime").
6	Interships	1. For intership communications. 2. Working Channel for Pilot Vessels. 3. Allotted by "Harbour Control" for temporary use between ships and attendant tugs at *Port Kembla* on request of Pilot or Exempt Master.
8	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in *Sydney Harbour* between ships and tugs during berthing operations.
13	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in Newcastle Harbour between ships and tug, during berthing operations. 2. Used by Port Operations Officer when passing information to vessels.
14	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in *Botany Bay* between ships and tugs during berthing operations. 2. Allocated by "Harbour Control" for Naval berthing operations and other special purposes.

5. DISTRESS AND EMERGENCY

In the case of fire, explosion, loss of life, sinking, collision, or such emergency, vessels should immediately call on Channel 16 (Safety and Calling) using International R/T distress signal "Mayday" or urgency signal "Pan" followed by name of vessel and signal letters, giving its position and type of emergency and if assistance required.

Other vessels on hearing a distress message must cease any transmissions immediately.

The signal "Mayday" should be used only when ship sending it is threatened by grave and imminent danger and requires immediate assistance.

The signal "Pan" (pronounced Panne) should be used by a station having a very urgent message to transmit concerning its safety, or that of another ship, or of some person on board or in sight.

TUGS: Powerful modern tugs, operated by private companies, available.

BERTHING: See "VHF".

Woolloomooloo: 8 berths, depths 28 ft. to 37 ft. (8.53 m. to 11.27 m.).

Darling Harbour: 20 berths, depths 8 ft. to 36 ft. (2.43 m. to 10.97 m.).

Pyrmont: 14 berths, depths 27 ft. to 35 ft. (8.23 m. to 10.66 m.).

Glebe Is.: 5 berths, depths 32 ft. to 42 ft. (9.75 m. to 12.8 m.).

Sydney Cove: 3 berths, depths 12 ft. to 35 ft. (3.65 m. to 10.66 m.).

Walsh Bay: 8 berths, depths 23 ft. to 40 ft. (7.01 m. to 12.19 m.).

Balmain: 2 berths, depths 33 ft. to 38 ft. (10.05 m. to 11.58 m.).

White Bay: 3 berths, depths 36 ft. (10.97 m.).

Rozelle Bay: 6 berths, depths 9 ft. to 20 ft. (2.74 m. to 6.09 m.).

Snails Bay: 4 berths, depths 36 ft. to 40 ft. (10.97 m. to 12.19 m.).

Mort Bay: 2 berths, depths 31 ft. (approx.) (9.74 m.).

Oil Terminals: See "Tankers".

HEAVY LIFTS: *Wharf Cranes:* Woolloomooloo: Berth No. 11: 2 portal cranes 26 tons (26.4 tonnes) max.

Darling Harbour: Berth Nos. 8, 9 and 10: 1 portal crane, 26 tons (26.4 tonnes) max.

Balmain: Berth No. 2: 3 portal cranes, 20 tons (20.3 tonnes) max.

Container Berths: White Bay: Berth No. 4: 1 twin lift 45 tons (45.72 tonnes) container crane, and terminal equipment.

White Bay: Berths Nos. 5 and 6: 3 twin lift 45 tons (45.72 tonnes) container cranes, and terminal equipment.

Glebe Island: Berth Nos. 1 and 2: 2 single lift 35 tons (35.56 tonnes) container cranes and terminal equipment.

A 60 ton (60.96 tonnes) and a 150 ton (152.4 tonnes) floating crane available, and a 250 ton (254 tonnes) crane on Fitting Out Wharf at Garden Island Dockyard.

BULK LOADING FACILITIES: Glebe Island, Berth No. 7 (bulk wheat). Max. permissible length and beam of ship using bulk berth: length 735 ft. (224.06 m.), beam 107 ft. (32.61 m.).

Berth No. 8 (bulk soda ash). Max. length 326 ft. (99.36 m.), max. beam 45 ft. (13.71 m.). This is a private berth leased by Imperial Chemical Industries of Australia, and the plant is suitable only for the unloading of bulk soda ash.

Balmain: Berth No. 1 (bulk coal). Max. length 650 ft. (198.4 m.), max. beam 97 ft. (29.56 m.). Loading capacity 1,000 t.p.h. max.

STEVEDORES: Private companies. Stevedoring regulations are the responsibility of an operations supervisor, nominated by the ship's Agent when applying for a berth.

TANKERS:

	Max. permissible length of vessel	*Depth alongside*
Gore Bay No. 1 (Shell)	850 ft. (259 m.)	45 ft. (13.4 m.)
Gore Bay No. 2 (Shell)	560 ft. (171 m.)	31 ft. (9.45 m.)
Gore Bay No. 3 (Shell)	560 ft. (171 m.)	30 ft. (9.14 m.)
Berrys Bay No. 1 (B.P.)	525 ft. (160 m.)	28 ft. (8.53 m.)
Berrys Bay No. 2 (B.P.)	600 ft. (183 m.)	33 ft. (10.06 m.)
Ballast Point (Caltex Oil)	700 ft. (213 m.)	29 ft. (8.83 m.)
Pulpit Point (Mobil Oil)	550 ft. (168 m.)	28 ft. (8.53 m.)
Chowder Bay Dept. of Navy	560 ft. (171 m.)	31 ft. (9.45 m.)

FRESH WATER: Available at all berths at a rate of flow of approximately 30 t.p.h.

FUEL: All grades available.

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: The following countries maintain consuls in Sydney:

Argentina	Great Britain	Norway
Austria	Greece	Panama
Belgium	Hungary	Papua – New Guinea
Brazil	Iceland	Peru
Bulgaria	Indonesia	Philippines
Canada	India	Poland
Chile	Israel	Portugal
Columbia	Italy	Romania
Costa Rica	Japan	Singapore
Cuba	Jordan	Sierra Leone
Czechoslovakia	Khmer	Spain
Denmark	Korea	Sweden
Dominican Republic	Lebanon	Switzerland
Ecuador	Malaysia	Thailand
Egypt	Malta	Turkey
Ethiopia	Mexico	Uruguay
Finland	Monaco	U.S.A.
France	Netherlands	U.S.S.R.
Germany	New Zealand	Yugoslavia

REPAIRS: Every facility available.

DRY DOCKS: Captain Cook Dock, Garden Island – length 1,139 ft. (347.16 m.), No. 1 Sutherland, Cockatoo Island – length 690 ft. (210.33 m.), No. 2 Fitzroy, Cockatoo Island – length 478 ft. (145.67 m.). Several smaller dry docks and a number of slipways available.

CERTIFICATES:

Last Port Customs Clearance.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Ship's Articles (British Vessels).
Safety Construction.

SPECIAL REGULATIONS: *Smoke Restrictions:* Ringelmann 2 limited to 10 minutes overall, 5 minutes continuous, in 60 minutes, Ringelmann 3 limited to 3 minutes in 30 minutes, in special circumstances only and as far as practicable from shore, Ringelmann 4 prohibited absolutely. Tubes must not be blown in port.

Breaches of Port Laws by a ship (in particular, oil spillages) dealt with by requiring Master to authorise ship's Agent to accept any summons and the Agent to undertake to appear, so as not to delay sailing. If Master refuses, he may be arrested, charged and released on bail. However, it is in Master's interests to give authority, because this allows time for consideration of whether any action is to be taken.

DUES: Commonwealth Light Dues payable on the nett register tonnage of vessel, valid for a period of 3 months, in Australian waters. Harbour and Light Dues payable on vessels gross tonnage valid for 6 months for the State of N.S.W. only.

AUTHORITY: The Maritime Services Board of N.S.W.

AGENT: Patrick Agencies, POB 3918, 33/35 Pitt Street, Sydney, New South Wales 2001. Tel. 27-6611. Telex. AA. 20618 Cables: "Rikpat".

THEVENARD, S.A. 32.09 S. 133.39 E.

(See Plan)

CERTIFICATES/DOCUMENTS/HEALTH/CARGO GEAR: See "Melbourne".

PILOTAGE: Compulsory. Pilots board 2 miles seaward of No. 1 light beacon.

MAX. SIZE: Length 650 ft. (198 m.) at the bulk loading berth; beam 100 ft. (30 m.). Draft subject to keel clearance of 2 ft. 6 in. (0.76 m.) for vessels up to 27 ft. (8.2 m.) draft and keel clearance of 3 ft. (0.91 m.) for vessels over 27 ft. (8.2 m.) draft provided weather and sea are calm.

RESTRICTIONS: Channel depth 27 ft. (8.2 m.) LW. There is a min. depth of 18 ft. (5.5 m.) LW in the swinging area off the berths.

FUEL: Not available.
BERTHING: Two berths, depth alongside 32 ft. (9.8 m.) LW. Vessels will be berthed head out if the draft on arrival is suitable to the depth of water in the swinging area. This particularly applies to deep loading vessels. A small tug stationed at the port to facilitate the berthing and departure of vessels. The bulk loading plant will be manned on a two shift basis with overtime as found necessary.
FRESH WATER: Small quantities available. Rate 12 tonnes/hour.
REPAIRS: None.
AUTHORITY: Department of Marine & Harbours, Adelaide.
AGENT: Sub-agents of Patrick Agencies.

THURSDAY ISLAND, Queensland: 10.35 S. 142.13 E. (See Plan)

DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Pilotage compulsory. ETA 24 hrs. before arrival stating max. draft and direction from which vessel arriving to: Harbour Master, Thursday Island. Further amended ETA if necessary prior to arrival. Pilot boards in vicinity of Tucker Buoy or Scott Rock Buoy as required. Harbour Master will advise boarding ground after receipt of max. draft and direction from which vessel arriving. Pilot vessel white hull, yellow top, flying pilot flag. Vessel awaiting Pilot to anchor West of Black Rock in Normanby Sound.
ANCHORAGE: West of Black Rock in 5.5 fathoms. Nurses' Home over shoulder of Black Rock 098 (T) with two white beacons S.E. side Goods Island in line 005 (T).
RESTRICTIONS: Daylight entry only. Draft restricted to 23 ft. (7.01 m.) LWOST.
RADIO: Thursday Island VII.
VHF: Channels 12 and 16.
TUGS: No tugs.
STEVEDORES: 0800 hrs. pick up for day work. 1000 hrs. notice for night work. 1600 hrs. Friday notice for week-end work. Mainly general cargo handled. Approximately 8 t.p.h.
MEDICAL: Notice of required medical attention with ETA message to Harbour Master. Hospital, four doctors available. Vaccinations etc., as per Commonwealth of Australia requirements.
DENSITY: Salt at all states of tide.
BERTHING:

Wharf	*Length (Metres)*	*Depth (Metres)*
East	30	4.8
Engineers demolished, to be rebuilt		
Caltex	22.9	5.0
Horn	12.5	5.0

FRESH WATER: Available in limited quantities most of the year.
FUEL: Small amounts diesel and distillate available at East Jetty. Bulk distillate available at Caltex Jetty, approx. 20 t.p.h.
GANGWAY/DECK WATCHMEN: Crew member on gangway sufficient.
OPENING/CLOSING HATCHES: By Stevedores.
CERTIFICATES: Normal Commonwealth of Australia requirements. See "Melbourne".
CONSULS: Nil.
REPAIRS: Deck and engine repairs, excluding large castings.
REPATRIATION: Available.
AIRPORT: Airport on Horn Island, 2 miles by launch, 4 miles by bus. Five flights per week. Ansett-ANA regular airline. Private charter plane available.
TIME: Australian Eastern Standard Time.
HOLIDAYS: Normal Queensland Public Holidays. No cargo can be worked on Christmas Day, Good Friday, Anzac Day.
POLICE/AMBULANCE: Police 20. Ambulance 77.
TELEPHONES: None.
SERVICES: Garbage disposal. Apply to Harbour Master.
DELAYS: As wharf space limited and berthing is on a "first come, first served" basis, delays vary with amount of shipping.
AUTHORITY: Harbour Master, Department Harbours & Marine.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

TORRES STRAIT:

GANNET PASSAGE AND PRINCE OF WALES CHANNEL: These are the 2 tidally restricted and, therefore, controlling areas for the transit of Torres Strait. There is a least depth of 9.8 m. (32 ft.) in Gannet Passage (Australian Notice to Mariners 242/1970) and the recommended track is marked by light buoys which may be re-positioned from time to time. Most of the water along the recommended track from Gannet Passage to Twin Island through P.O.W. Channel is between 11.3 and 13.7 m. (37 and 45 ft.).

Mean HHW at Booby Island is 11.9 ft. (3.6 m.) and the Mean LLW is 3.1 ft. (0.925 m.). Mean HHW at Goods Island is 8.8 ft. (2.5 m.) and Mean LLW is 2.3 ft. (0.7 m.). HWS at Twin Island is 8.7 ft. (2.45 m.) and LWS is 1.3 ft. (0.35 m.). An automatic telemetric gauge has been established at Booby Island by Australian Notice to Mariners 138/1970 for the promulgation of the exact tide at Gannet Passage. Further tide gauges are to be erected at various positions in the Prince of Wales Channel.
KEEL CLEARANCE AND MAX. DRAFT: The Queensland Coast & Torres Strait Pilot Service will pilot vessels through Gannet Passage with a minimum underkeel clearance of 1 m. at all times of the year, subject to weather conditions, and on a maximum draft which at no time must exceed 11.89 m. (39 ft.). This draft limitation extends to Cairns on the Inner Route of the Great Barrier Reef and to Bramble Cay on the Great Northeast Channel Route. Masters of deep draft vessels are advised that it may be necessary to reduce speed in certain areas and that they may be required, under certain conditions, to display the IMCO recommended night and day signals indicating reduced manoeuvrability due to draft.
PILOTAGE BOARDING STATIONS: The Queensland Coast & Torres Strait Pilot Service maintains a base station on Thursday Island. Pilots will board or land about 4.5 miles West of Booby Island or about 3 miles West of Goods Island as required by the vessel. Pilot cutters on those stations keep a listening watch on VHF radio, Channel 16. The base station – call sign "THURSDAY ISLAND HARBOUR" – keeps a VHF radio listening watch on Channel 16 and operates on Channel 12. Other boarding/landing stations are:
Northern Territory: Darwin
Gulf of Carpentaria Ports: Weipa, Gove, Groote Eylandt.
Papua New Guinea: All Main Ports and off Basilisk Light Beacon (entrance to Port Moresby).
Australian East Coast: Port Kembla, Botany Bay, Sydney or 1.5 miles off Sydney Heads, Newcastle, Brisbane or Brisbane pilot vessel off Point Cartwright, all Queensland Ports and Fairways, Grafton Passage (Euston Reef Light Beacon), Fitzroy Island off Cairns.
Any other port or place by arrangement with "TORRES" Sydney.
TO ORDER PILOTS:
South and East Bound: Radio "TORRES" Sydney about 5 days in advance giving destination, maximum draft and ETA at Booby or Goods Islands, whichever may be required. Radio "STRAITS-PILOTS" Thursday Island, 24 and 6 hours before arrival confirming or amending ETA in local time (GMT + 10 hours). When about 15 miles West of Booby Island make contact by VHF "THURSDAY ISLAND HARBOUR" on Channel 16. Masters of deep draft vessels will be advised by "STRAITSPILOTS" the periods when tidal heights at Gannet Passage will allow their vessels to cross.
North and West Bound: If in an Australian Port instruct Agents to arrange with "TORRES" Sydney, giving as much notice as possible. If from an overseas or intermediate port, radio "TORRES" Sydney about 5 days in advance giving ETA at embarkation point, maximum draft and port of destination. Confirm or amend ETA to "TORRES" Sydney 48 hours before arrival and give definite confirmation 12 hours before arrival.
All radio messages to "TORRES" Sydney will be acknowledged. Masters are advised all radio messages should be prefixed with the free service instruction word "SHIPSERV". Use of this prefix indicates it is a shipping message and will therefore be given priority in delivery on a 24 hours a day basis, including weekends and public holidays.
COMMUNICATIONS:
(a) All ships traversing Torres Strait are requested to keep a continuous listening watch on VHF radio, Channel 16, when between Carpentaria Light Vessel and Wyborn Reef on the Inner Route and Bet Reef on the Great Northeast Channel Route.
(b) In addition to (a), all vessels, regardless of size, are requested to open VHF sets on Channel 16 when sighting another vessel in the waters between Wyborn Reef and Cairns on the Inner Route and between Bet Reef and Bramble Cay on the Great Northeast Channel Route. This is to facilitate traffic safety and it is essential VHF sets be left open until vessels have passed, and are well clear of, one another.
(c) Shipmasters are requested to ensure that their Radio Officers maintain International Radio Watch hours when their vessels are in the waters between Carpentaria Light Vessel and Cairns on the Inner Route or Bramble Cay on the Great Northeast Channel Route.

AUTHORITIES: Australia Pilot, Volume 3, 1973, pp3 & 81. Annual Summary of Australian Notices to Mariners, 1975 pp 91, 92. Dept. Harbours & Marine, Queensland, Notice No. 49/1971, (AH70. 116) The Queensland Coast and Torres Strait Pilot Service, 185 Macquarie Street, Sydney, N.S.W. 2000.

TOWNSVILLE, Queensland: 19.17 S. 146.48 E. (See Plan)

PORT LIMITS: The Townsville Harbour Board exercises jurisdiction over the Port of Townsville which is located at 19° 17′ South Latitude and 146° 48′ East Longitude and is the area comprised within a line connecting Cape Cleveland with the N.E. extremity of Magnetic Island, thence by the line of high water mark to the most Northerly extremity of Magnetic Island, thence by a line to the White Rock, thence to Bay Rock, thence to Cape Pallarenda, thence by the line of high water mark on the mainland to the point of commencement, and including all navigable rivers communicating with that area and the banks and foreshores thereof.
APPROACHES: The approach to Cleveland Bay anchorage from the Southward is clear of dangers, with the exception of Salamander Reef, the Four-foot Rock, and the Twenty-foot Rock, all these lying within a radius of 3 miles of Cape Cleveland Lighthouse.

To clear these dangers, passing North of them bring Mount Marlow in transit with the extremity of Hawkings Point, bearing 265° (258° Mag.) before approaching within 5 miles of Cape Cleveland, which will then bear 252° (245° Mag.); and, if passing between them, the leading lights on Cape Cleveland should be brought in line bearing 291° (284° Mag.) before they are approached within 5 miles. Proceeding into Cleveland Bay a depth of not less than 8.2 m. will

be obtained by keeping North of the line Mount Marlow in line with Hawkings Point.

Approaching Cleveland Bay from the Northward, passing East of Magnetic Island a vessel should keep at least half a mile off Magnetic Island shore to obtain not less than 9.1 m. of water at LWOS. The shore is steep too except for Orchard Rocks off the N.E. extremity of the island.

ENTRANCE CHANNELS: 10 pairs of lighted beacons (numbered East and West from seaward) and the East and West Breakwater beacons mark the entrance channels into Townsville Harbour. The Fairway beacons are 210 m. apart transversely. Nos. 2 and 3 beacons are 164 m. apart and all other pairs of beacons are 180 m. apart.

Sea Channel: This Channel 1.75 miles in length (for use by vessels with draft exceeding 8 m.) lies between Nos. 1, 2, 3 and 4 beacons which are spaced at 1,070 m. intervals. Only Nos. 1 and 4 beacons are fitted with day marks.

The centreline of this channel is marked by the V-shaped white Sea Leads in line bearing 201.5° (194.5° Mag.), at night the Front Lead (No. 5 East Beacon) exhibits a white light flashing every second.

The Back Sea lead, 915 m. from the Front Lead, exhibits a white light flashing every 1.5 seconds.

Platypus Channel: The channels alter in direction at No. 4 Beacons and the Centreline of the Platypus Channel proceeds in a 212° (T) direction 3.5 miles to the harbour entrance and is marked by 2 V-shaped Gayglo Orange Triangular Leads with black centre, in line bearing 212° (205° Mag.), at night these leads each exhibit a Red Neon Candle Light. No. 5 beacons are 520 m. from No. 4 beacons, thence there are 5 pairs of beacons and the East and West Breakwater beacons at 1,000 m. intervals.

DOCUMENTS: Customs requirements:

3 Crew Lists, form M. and S–11.
3 Passenger Lists.
3 Lists of Ports of Call.
1 Form 42A Ships Stores.
1 Form 5 Articles Owned by or in the possession of Master, Officers and Crew.
1 Form QA4 Quarantine Notice.
2 Forms QA5 Quarantine Shipmaster's Bond.
2 Inward Manifests.
1 Bill of Lading.
1 Outward Manifest.
1 Form 40 Application for Clearance and Guarantee to Pay Duty.

Health:

Form Q360 Health Report which is taken aboard by inspecting Officer.

Harbour Authority:

2 copies of Inward and Outward Manifest.

PILOTAGE: The Pilot is ordered through the ship's Agent or direct to Harbour Master at least 24 hours before arrival or last port of departure stating ETA and draft. Telegraphic Address "Harbour Master". VHF Channel 16. Call sign "Townsville Harbour". Pilot launch is 42 ft. wooden launch equipped with VHF Channels 6, 12 and 16. Light or sound signal by vessel requiring Pilot is International Call G. For other than deep draft vessels Pilots board within 1.5–2.0 miles East of Hawkins Point. Ladder placed on starboard side. Location of anchorage for vessels awaiting a Pilot is off Magnetic Island between Bremer and Hawkins Point.

ANCHORAGES: Boundaries: Orchard Rocks/Cape Cleveland. Cleveland Bay Depths 27 ft. to 40 ft.

RESTRICTIONS: 2 ft. of water under keel at all times.

Harbour Depths:

Sea Channel and Platypus Channel (width 92 m.)	10.7 m.
Swing Basin (396 m. diameter)	10.7 m.
No. 1 (tanker) berth (4.6 m. off)	12.5 m.
No. 2 (20t crane) berth (4.6 m. off)	8.0 m.
No. 3 (Container crane) berth (4.6 m. off)	10.1 m. (to mark 31) 8.5 m. (31 to 34)
No. 4 (Gen. & Ro-ro) berth (4.6 m. off)	9.0 m.
No. 6 (No. 1 Pier E) Gen. cargo berth (4.6 m. off)	8.0 m.
No. 7 (No. 1 Pier W) Minerals shiploader berth (4.6 m. off)	9.9 m.
No. 8 (No. 2 Pier E) Freezer berth (4.6 m. off)	10.2 m.
No. 9 (No. 2 Pier W) Sugar shiploader berth (4.6 m. off)	10.4 m.
No. 10 (Container Ro-ro berth)	7.7 m.
Between berth 4 and 6 (77 m.)	8.2 m.
Between berth 7 and 8 (84 m.)	8.2 m.
Between berths 9 and 10 (142 m.)	8.0 m.

MAX. SIZE:

Berth No.	Length	Max. Length of Vessel
1	244 m.	238 m.
2	256 m.	238 m.
3	256 m.	238 m.
4	246 m.	238 m.
6	134 m.	160 m.
7	183 m.	195 m.
8	217 m.	220 m.
9	230 m.	228 m.
10	160 m.	152 m.

Generally, the limit in size of vessels entering the harbour will be 238 m. in length and 34 m. beam. Large vessels will only be taken into No. 4 berth on condition that no vessels are berthed at No. 3 berth closer inshore than mark No. 22 on arrival and mark No. 20 on departure and that a vessel berthed at No. 6 berth is shoreward of No. 5 mark on both arrival and departure of a vessel at No. 4 berth.

When tankers of over 213 m. in length are being berthed at No. 1 berth, no vessel at No. 2 berth is to be seaward of mark No. 43.

Decking of all wharves is 5.18 m. above datum with the exception of No. 3 which is 5.97 m.

Largest single cargo: Inward 49,472 tonnes of bulk oil. Outward, 31,883 tonnes of raw sugar.

Deepest draft vessel, 11.65 m. Longest vessel, 236.2 m. Largest vessel (Tanker) 58,752 d.w.t.

HEALTH: Townsville is a first port of entry and notification of quarantine inspection requirements should be made not more than 24 hours nor less than 12 hours in advance. Inspections may be carried out at the wharf or at the quarantine anchorage, at the discretion of the Quarantine Officer. Rat guards are to be maintained on all mooring lines while vessels are berthed in the Townsville Harbour.

RADIO: Townsville Radio. The Port Radio Station "Townsville Harbour" keeps continuous watch on VHF Channel 16. Working Channels 6 & 12.

TUGS: Normally join at harbour entrance. Tug lines or (optional) ship's lines. Tugs equipped with VHF radio and operate on Channel 16, the same as Townsville Harbour. Two tugs available bollard pull 26 tons each.

VHF: Continuous watch maintained on Channel 16. Call sign "Townsville Harbour". Channels 6 and 12 also available.

BERTHING:

No. 1 berth (isolated) is used exclusively by tankers for bulk oil discharge and by all types of vessels for bunkering.

No. 2 berth (eastern breakwater) has two 20 t. electrically operated, level luffing, travelling jib cranes with an outreach of 13.7 m. and height above wharf of 18.288 m. the cranes may be "married" to lift 40 tons.

No. 3 berth (eastern breakwater) is equipped with a container crane which is leased to Townsville Transport & Services Pty. Ltd. and is operated and controlled by Northern Shipping & Stevedoring Pty. Ltd. Both of these companies are part of the M.I.M. Holdings Group. The crane has lifting capacity of 55 tons and its equipment includes an extendable spreader to suit all sizes of containers, a grab of 7.6 cu.m. capacity and a heavy lift hook. Maximum height of lift above wharf deck is 27 m. whilst the outreach beyond the wharf face is 31.85 m. and outreach over rail and road services is 23.77 m. Distance between bogies is 32.61 m. The crane traverses the full length of the berth.

No. 4 berth (eastern breakwater) has a landing pad, supported by steel piling, to service stern angle ramp Ro-ro vessels in the U.K./Continent trade.

No. 6 berth (No. 1 pier E.) is a general purpose berth with oil bunker and bulk molasses loading pipe-line facilities.

No. 7 berth (No. 1 pier W.) supports a bulk shiploader through which passes mineral concentrates, phosphate rock and ores up to 102 mm. aggregate at the rate of 800 t.p.h. The berth is also equipped with bulk molasses loading pipe-line facilities.

No. 8 berth (No. 2 pier W.) services the export frozen beef trade with cargoes drawn from freezer stores erected on the pier. It also serves as a general purpose berth.

No. 9 berth (No. 2 pier E.) is the raw sugar loading berth. A bulk shiploader delivers sugar to carriers at the rate of 1,500 t.p.h.

No. 10 berth (A.N.L. Ro-ro berth) is equipped with a stern ramp for Ro-ro traffic and 25 tons, 32 m. radius, travelling jib crane for container and unit load handling.

Wharf Sheds: No sheds are available for general cargo storage at the harbour. Both free and bonded warehousing is available within 4 km. of the wharves.

Storage facilities:

Oils – all major Oil Companies operate ocean terminals close to the Harbour.
Raw Sugar – 2 storage sheds of 285,000 tonnes total capacity.
Molasses – 4 bulk storage tanks of 35,000 tonnes total capacity.
Zinc Concentrates – 20,000 tonnes covered storage area.
Frozen Meat – 2 cold stores on No. 2 Pier, total capacity 2,500 tonnes.
Open space storage for Rock Phosphate, Sulphur, Crude Lead and Refined Copper.

Container Terminals: No. 3 berth, with an area of 1.2 ha., has storage accommodation for 184 dry containers.

No. 10 berth, with an area of 2.6 ha., can accommodate 400 containers, 18 of which may be connected to refrigeration power outlets.

Northern Shipping and Stevedoring Terminal with an area of 0.66 ha., has a holding capacity of 112 refrigerated containers.

Container Terminals work 24 hours per day, 7 days per week to effect speedy turn around of shipping.

STEVEDORES: Times for ordering labour: Normal 1400 hrs. previous working day. Bulk Cargoes 0930 hrs. for night labour. Saturday or holidays 0930 hrs. previous working day. Priority labour 1400 hrs. previous working day. Notice required for difficult or long tows or a cargo requiring particular or special handling.

MEDICAL: Advance notice not particularly required unless urgent assistance required. Hospital facilities available. Health book inspected by boarding doctor.

TANKERS: Diameter of load/discharge lines: white fuel 10 in., black fuel 12 in. No residue discharge facility available. One tanker at berth at any time. Max. permitted draft at berth 31 ft.

DENSITY: Average density 1025 at all times.

FRESH WATER: Fresh water is available at all berths: delivery is at

the rate of approximately 90 t.p.h. using 4 hoses. Hoses have 2.5 ins. London V thread fittings.
FUEL: Bunker fuel oil and distillate is available through pipe-lines at berths 1, 6 and 7. Road tankers are used to bunker small ships at other berths.
FIRE PRECAUTIONS: Tankers required to have safety fire wires lead off foc'sle head and run as far aft as possible. Vessels at all times capable of manoeuvring with main engines.
DEVELOPMENTS:

In Progress:

1. No. 10 berth, and the approaches thereto, is being dredged to 10.7 m.
2. Site preparation works for No. 3 and No. 4 raw sugar storage sheds and reconstruction of Ross Street, to provide a new access road to the port, are proceeding.
3. At No. 3 berth at 45 m. recess between the breasting wharf and the mooring platform is being filled in and the crane rail extended to allow the crane to operate along the full length of the berth.
4. Construction of facilities for the Phosphate Rock trade include excavation of a pit and laying of foundations for the installation of a rotary tippler, construction of rail access to the storage area and construction of a conveyor system to deliver the product to the bulk shiploader at No. 7 berth.
5. Up-grading of No. 10 berth involving the construction of a mooring and berthing dolphin and extension of the wharf.

Planned:

1. Construction of shed for storage of phosphate rock fines.
2. Dredging of No. 6 and No. 7 berths to permit berthing of 50,000 d.w.t. vessels.
3. Reconstruction of No. 2 berth to 50,000 ton ship standard and dredging of 12.2 m.
4. Demolition of Magazine Hill.
5. Construction of 457 m. rock wall extending from Eastern breakwater in a Southerly direction.
6. Reclamation of 22.3 ha. behind Eastern breakwater to service No. 3 container berth and other facilities.
7. Construction of additional rail access over South bank of Ross River to facilitate the passage of phosphate rock trains transporting in excess of one million tonnes annually.
8. Construction of 1 or possibly 2 additional raw sugar storage sheds.
9. Construction of new rail access for sugar trains and marshalling yards in the area now occupied by Perkins Street.
10. Installation of stacker/reclaimer for phosphate rock when the trade exceeds one million tonnes annually.
11. Upgrading of No. 6 berth, construction of berthing and mooring dolphins and installation of a bulk shiploader.
12. In the long term, the Board plans to develop port facilities South of Ross River and has acquired land in the area for this purpose.

GANGWAY/DECK WATCHMEN: Services available at ship's option.
OPENING/CLOSING HATCHES: Optional for either crew or stevedores.
SHIP'S CERTIFICATES:
Passenger Ship Safety.
International Load Line.
Ship Safety Construction.
Ship Safety Equipment.
Ship Safety Radiotelegraphy.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 0.5 lb. tobacco on arrival and then can be purchased by the packet from bar on board. Wine and/or spirits: 1 opened bottle (26 oz.) spirits or wine on arrival and then spirits by the glass and wine by the bottle, from the bar on board.
CARGO GEAR: Australian Navigation Dept. requirements.
CONSUL: Netherlands representative, Tel. 71.6188.
REPAIRS: All deck and engine repairs can be carried out.
DRY DOCKS: Slipway with a capacity of 1525 tonnes d.w.t. Slip can accommodate a 67 m. length vessel. Air, power, and water are available at the slip.
REPATRIATION: Full facilities exist for effecting crew changes and arranging repatriation.
AIRPORT: Distance from airport 6 miles, regular services.
TIME: East Australian Standard Time, GMT plus 10 hours.
HOLIDAYS: Cargo can be worked on all holidays except Christmas Day, Good Friday and the Waterside Workers' Picnic Day.
EMERGENCY TELEPHONE NUMBERS: Police, Ambulance or Fire "000", and ask to be connected to service required. Non-emergency numbers. Police 71.2121, Ambulance 79.3722, Fire Station 71.2111. Hospital 72.1333.
TELEPHONE: Ship to shore telephones are available at all berths. Oil tankers berthed in the port are required to have on board a flash proof telephone of a type approved by Telecom Australia.
Ships telephone lines are barred access to STD and trunk facilities.
SERVICES: Services available for compass adjusting, radio and radar service. A floating boom and an oil skimming device is available to deal with oil spills. Chemical dispersants are used for minor spills.
A garbage collection vehicle will call at each ship which has ordered the service before 0800 hrs. each day or at other times as directed by the Quarantine Officer. All garbage must be kept in drums with tight fitting lids on board the vessel until the arrival of the collection vehicle.
Ships crew is required to deliver garbage to the collection vehicle.
SHORE LEAVE: Crew members allowed shore leave.
AUTHORITY: Townsville Harbour Board.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

USELESS LOOP (Shark Bay), W.A.: 26.05 S. 113.24 E.

DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory: Notice for Pilots is by 'Shipserv' message to Harbour Master, Carnarvon, 7 days, 48 hours and 24 hours prior to arrival.
Pilot boarding ground is 5 nautical miles 270° from Babbage Island Light Tower, Carnarvon.
Pilots remain on board during transit to Useless Loop, when berthed alongside jetty and until disembarkation in above position.
TUGS: None.
BERTHING: One berth. Owned and operated by Shark Bay Salt Pty Ltd. Conveyor belt system from Salt Stock Pile to ship gross rate 700 t.p.h. Dolphin type jetty length 620 ft. runs approximately North and South directions and 2.1.cables from Topper Island. Min. depth at berth 33 ft. LWOST. Rise of tide approximately 3 ft. Winds predominantly S.E./S.W.
FUEL: Not available.
FRESH WATER: None available.
REPAIRS: Not available.
AUTHORITY: Harbour & Light Department, Fremantle.
AGENT: See "Fremantle".

WALLAROO, S.A.: 33.56 S. 137.37 E. **(See Plan)**

DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilot boards from 1 to 1.5 miles 260° (T) from Moonta Shoal Light Beacon.
RESTRICTIONS: Approach Channel and basin 28 ft. (8.5 m.) ISLW.
BERTHING: 6 berths. Depths various from 24 ft. (7.3 m.) to 31 ft. (9.4 m.). Bulk loading berth max. permissible length 650 ft. (198 m.), max. beam 100 ft. (30 m.).
TUGS/FUEL: None.
STEVEDORES: Arrangements with private companies.
VHF: Available.
FRESH WATER: Available all berths. Delivery rate 15 t.p.h.
REPAIRS: Minor repairs only.
AUTHORITY: Department of Marine & Harbours, Adelaide.
AGENT: Sub-agent of Patrick Agencies, Adelaide.

WEIPA, Queensland (including Albatross Bay): 12.42 S. 141.41 E. **(See Plan)**

DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Vessels requiring Pilot may apply to Harbour Master, Weipa 48 hours before arrival, confirming ETA 24 hours before. Vessels to give Harbour Master their draft. Generally speaking berthing draft should be, forward 2% of vessel's length and aft, the propellor completely immersed.
Pilot boat is 11 m. (length), named "Rowland Masterman" and painted orange. It may be contacted on VHF Channel 16. Pilot boards 1 mile from Fairway Beacon.
ANCHORAGE: Anywhere in Albatross Bay except between 2 lines situated 1 mile North and South respectively of the line of leads and extended to the port limits.
RESTRICTIONS: Weipa Approach Channel is 7.8 miles long with a min. depth of water 11 m. (36 ft. 1 in.) LWOST. Usually vessels up to 30,000 d.w.t. enter channel at any stage of the tide. Vessels of over 30,000 d.w.t. enter at any stage of the flood up to 2.5 hours before HW.
Usually vessels up to 30,000 d.w.t. can berth at any state of the tide. Vessels of over 30,000 d.w.t. due to their departure draft and existing tug power must berth starboard side alongside and can do so at any stage of the flood tide. Vessels normally depart 1.5 hours before HW. Some vessels up to 30,000 d.w.t. can depart on LW.
MAX. SIZE: Maximum LOA 254 m. (835 ft.) Beam 35.3 m. (116 ft.) Draft depends on height of tide and 90 cm. (3 ft.) keel clearance is required.
RADIO: Forcomal, Sydney Radio and within 48 hours Thursday Island Radio. VHF Weipa Harbour, Channel 16.
TUGS: Vessels entering North of Cora Bank tugs join at No. 9 Beacon. Vessels entering South of Cora Bank tugs join at No. 16 Beacon. Tugs are usually used in the lashed up position using tug's lines.
3 tugs are available of 13, 23 and 24 tons bollard pull.
BULK HANDLING FACILITIES: Two Bauxite Berths, Lorim Pt. West old berth and Lorim Pt. East which is an extension of the previous old berth. Depth alongside Lorim East 12.5 m. (41 ft.) Lorim West 12.4 m. (40 ft. 8 in.).
Loading rates are Lorim West 3,500 t.p.h. Lorim East 6,000 t.p.h. If there are vessels at both berths loading simultaneously the rates are West 3,500, East 4,500.
STEVEDORES: No stevedores at Weipa.
MEDICAL: Inoculations per Australian Regulations. No notice required for medical attention. Urgent cases flown out and treated at Cairns or Thursday Island.

DENSITY: Dry Season 1024. Wet Season 1012. These figures can vary considerably.
FRESH WATER: Supplied in cases of emergency only. 5 t.p.h.
FUEL: Not available.
STORES: Very limited stores are available. In emergency large orders could be supplied only if several days notice given by radio, as they have to be flown from Cairns.
DEVELOPMENTS: The Alumina Plant at Weipa has been deferred indefinitely. It is intended to widen and deepen the existing channel to improve access.
GANGWAY/DECK WATCHMEN: Not available.
OPENING/CLOSING HATCHES: Work carried out by crew.
SHIP CERTIFICATES: Ship's Register, Load Line, Safety Radio and Safety Equipment Certificates. See also "Melbourne".
CARGO GEAR: No additional requirements. See "Melbourne".
CONSULS: None.
REPAIRS: Not available.
REPATRIATION: Can be arranged.
AIRPORT: 7 miles from airport. Served by Ansett ANA.
TIME: GMt plus 10 hours.
AUTHORITY: Harbour Master, Dept. Harbours and Marine, Weipa.
AGENTS: Sub-agent of Patrick Agencies (through Patrick's Melbourne).

WESTERNPORT, Vic.: 38.21 S. 145.14 E.

(See Plan)

PORT LIMITS: The Port Authorities consider a vessel to be arrived when she crosses an imaginary line between West Head and Point Grant.
DOCUMENTS: Application for berth, tugs, mooring launches, telephones, and notification to load or unload, to be delivered by Ship's Agent to Harbour Master not less than 24 hrs. before arrival.
Customs Documents required:

Form	M & S 11	Crew List and attachments, 3 copies.
	M 42 A	Stores List, 1 copy.
	5	Articles owned by or in possession of crew, 1 copy.
	C & E 886	Ports of call since commencement of voyage, 3 copies.
	QA 3	Quarantine Form. (Animals carried as cargo), 1 copy.
	QA 4	Quarantine Form. (Animals carried as pets), 1 copy.
	QA 5	Ship Master's Bond re animals carried, 1 copy.
	Q 360	Health report of all persons on board, 2 copies.
		Inwards Manifest, 1 copy.
		Outwards Manifest, 1 copy.
	40	Application for clearance.

PILOTAGE: Pilotage compulsory for merchant vessels except those specially exempted. Pilots for Westernport are available on a 24-hr. basis. Warning must be given not less than 24 hrs. prior to vessel's arrival. Pilot for Westernport will board from a launch, painted orange and showing the signals and lights prescribed for such vessels, by day approximately 3 miles Southward from West Head. By night in the white sector of McHaffie's Point Light, with Cape Schank Light bearing 295° (White), at the entrance to Westernport. Pilot launch is equipped with VHF Channel 16 (156.8 mHz).
In bad weather, vessels up to 32 ft. draft obtain Pilot by proceeding to black can buoy moored 2 miles – 084° from Flinders Jetty light; at night buoy shows green flash light every 4 secs.
ANCHORAGES: Anchorage within port between Southern edge Tortoise Head Bank, and Northern shore of Phillip Island. Anchorage 4 miles in length, East to West, and 1.25 miles wide, depths 9 to 15 fathoms at Western end, decreasing 6 to 10 fathoms at Eastern end.
An anchorage area having a least depth of water of 28 ft. has been established adjacent to Long Island Jetty.
RESTRICTIONS: No vessel shall enter port with less underkeel clearance than ten per cent of draft.
MAX. SIZE: Governed by underwater clearance. Vessels drawing up to 48 ft. may enter depending on state of tide, but underkeel clearance shall not be less than ten per cent of draft.
Oil jetties can accommodate vessels of up to 100,000 tons, depending upon water available.
See "Tankers".
RADIO: *Advice to ships Masters on Westernport Harbour Control*
GENERAL INFORMATION

1. *Radio Watch*	A continuous radio watch will be kept by Harbour Control on VHF Channel 16.
2. *Pilot Boarding Ground*	Position 3 mile × 180° from West Head will be identified as position "A".
3. *Fairway Buoy*	Position of Fairway Buoy (Fl. 4 sec.) will be identified as position "B".

INWARD BOUND VESSELS
1. Vessels shall report to Harbour Control at least 1 hour before arrival at position "A" or "B", giving ETA position "A" or "B", deepest draft and information re-hull leaks and health of crew, etc.
2. Vessels must request permission to enter port.
3. Vessels shall advise Harbour Control when passing Fairway Buoy (position "B").
4. Vessels shall advise Harbour Control when rounding Sandy Point and request VHF Channel for berthing operations and tugs.
5. Vessels shall report to Harbour Control (Channel 16) when all fast, finished with engines and tugs dismissed.

OUTWARD BOUND VESSELS
1. Vessels shall contact Harbour Control 1 hour before fixed time of departure advising if they will/will not be ready to sail in 1 hour's time.
2. Vessels will be advised at sailing time by duty Harbour Master re permission to sail, port movements, etc.
3. When vessels clear their berth and tugs dismissed and proceeding they shall report this to Harbour Control (Channel 16).
4. Vessels to advise Harbour Control when (a) Rounding Sandy Point. (b) Clear of Port.

VESSELS PROCEEDING TO ANCHORAGE
1. Vessels inward and outward to an anchorage are to use the same procedure as in above for inward and outward vessels respectively. Vessels will be advised if required to anchor and what anchorage to use. Whilst at anchor vessels shall keep a continuous listening watch on Channel 16.
2. Vessels shall advise Harbour Control when they have anchored and also when vessels are underway again from an anchorage.

ENGINE TRIALS AND LIFEBOAT DRILLS, ETC.
1. Vessels wanting to carry out engine trials shall first obtain permission from the duty Harbour Master.
2. When lifeboat drills are to be held and boats swung out and put into the water the duty Harbour Master shall be given prior notice.
3. All vessels in the port shall notify Harbour Control (Channel 16) of any distress signals sighted or any untoward occurrence.

PRATIQUE: Advise state of crew's health 24 hrs. prior to arrival. If all healthy, pratique granted subsequent to berthing; if crew's health suspect, doctor boards prior to berthing. Pratique automatic when more than 14 days have elapsed since calling at a foreign port, and the vessel has subsequently been granted pratique first at another port within the Commonwealth of Australia. Pratique may be granted 24 hrs. a day.
TUGS: Two tugs are available both of 1,500 h.p. and 22 ton bollard pull. Tugs join vessel at Sandy Point. Ship's lines normally used by tugs. Tugs are fitted with VHF and radar and fire-fighting equipment.
BERTHING: Berthing subject to Harbour Master's direction. 3 oil berths, 1 roll-on/roll-off berth, 1 livestock berth and 2 tug berths are available.
Additional berth, Lysaghts Steel wharf. Roll-on/roll-off stern ramp jetty accommodating vessels up to 10,000 d.w.t. Approach Channel 9.1 m. depth. Alongside depth 12.1 m. Swinging basin 1,500 ft. diameter.
A conventional cargo wharf designed to handle steel products has been established to the North of the Ro/Ro berth. Particulars as follows:–
Steel Industry Wharf No. 2
Owned by J. Lysaght (Australia) Ltd.

Maximum size of vessel:	up to 19,500 d.w.t. (Sim Metal Venture size).
Distance from berth to plant:	1.6 km.
Minimum depth of water:	Approach channel 9.1 m. Alongside 12.2 m. Swinging basin 457 m. diameter.
Tidal range at berth:	Between 2 m. and 3 m.
Nature of Bottom:	Mud, clay and some rock.

Vessel can dock/undock at any stage.
Vessel can dock/undock during hours of darkness.
Vessels moor using ship's lines to Harbour Master's requirements.
Docking Pilots used, unless Master holds special exemption. Water available.
Bunkers by Road Tanker only, subject to Harbour Master's approval.
Engines may be immobilized whilst ship is alongside, subject to Harbour Master's approval.
Stores and supplies can be delivered from dock or by launch.
General Remarks: Steel Industry Wharf Number 2, designed for conventional shipping, adjacent to and extending in a generally N.E. direction from Number 1 Ro/Ro wharf. Re-inforced concrete wharf, with wooded fendering arrangement. Wharf 152 m. long, 15.6 m. to 24 m. wide, bears 37° 4′. A mooring dolphin is provided 30 m. N.E. of the fendered wharf.
STEVEDORES: Westernport is a class "B" port for stevedoring facilities. Port Waratah stevedores available. Require ETAs of vessels from Agent. Ordering time for labour: Dayshift by 1000 hrs. previous day, afternoon shift by 1600 hrs. previous day. All close holidays observed.
MEDICAL: Two qualified medical practitioners available and 20-bed Nursing Hospital. Agent should receive prior notice of particulars of vaccinations required.
TANKERS: No ballast to be discharged into the sea (this includes clean ballast). Three tanker berths, two capable of accommodating 100,000 ton tankers with 52 ft. of water alongside, and the other capable of accommodating 40,000 ton tankers with 42 ft. of water alongside.
Pipe-line hose connections: 16, 14, and 12 ins. black oil, 10 in. white oil, 8 in. bunkers.

Oil jetties are approached through a wide, well-buoyed Channel and each have well-dredged turning basins.

Long Island Point Jetty (Esso).

Situated 15 miles from entrance, depth alongside 52 ft. Bunkers not available at this berth. Dirty ballast facilities for up to 24,000 tons. Shore gangway used.

Crib Point (B.P.)

Situated 13 miles from entrance. No. 1 jetty, depth alongside 52 ft. No. 2 jetty, depth alongside 42 ft. Bunkers are available ex-wharf. Dirty ballast facilities for up to 30,000 tons. Shore gangway provided at No. 1 Crib Point Jetty (BP). Ships gangway used at No. 2.

DENSITY: Average density 1030 oz. per cu. ft.

FRESH WATER: Available. Approximate rate 100 t.p.h. Approximate price $1.00 per 4.5 cu.m. Delivery from hydrants at jetty head.

FUEL: Fuel oil and diesel oil available at Crib Point Jetty only, via direct line from refinery. Delivery rate approx. 350 t.p.h. 48 hrs. notice is required for lub. oil. Small quantities of marine fuel are available from road tankers..

POLLUTION: Cases of discharging dirty ballast or oil spillages will be investigated and vessels are liable to fines and/or detention. Vessels shall not discharge into the waters of the port any part of the contents of their cargo, slop or ballast tanks (this includes clean ballast) or bilges which are liable to pollute these waters. Masters shall ensure that pipe-lines and equipment are clean before using them for discharging anything into the waters of the port. Scuppers shall be plugged effectively and no leakage or spillage from any vessel shall be allowed to leak or be swept overboard. Masters of vessels must seek permission from Harbour Master before pumping anything into the waters of the bay. The State of Victoria has stringent laws in force concerning the pollution of the sea by oil.

FIRE PRECAUTIONS: Vessels shall not immobilise main engines whilst alongside jetties.

GANGWAY/DECK WATCHMAN: A shore watchman may be hired. Cost borne by the vessel.

CERTIFICATES:

Clearance from last port.
Ship's Register.
Articles of Agreement.
Official Log Book.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat. Certificate.
Light Dues Certificate (receipt).
Pratique Certificate from last port (if to be used in this port).

CUSTOMS ALLOWANCES: *(a)* Tobacco: each crew member permitted either 200 cigarettes or 8 oz. of pipe tobacco, or 8 oz. of Fine Cut Tobacco out of Bond. *(b)* Wine and/or Spirit: each crew member is allowed 0.17 gallon of wines or spirits (opened).

IDENTIFICATION CARDS: Required for all nationalities except the United Kingdom, Canada, South Africa, Japan, Israel, Norway, Denmark, Fiji, Hong Kong, Malaysia, and South Korea. Also see "Melbourne".

CONSULS: None.

REPAIRS: Facilities for medium size deck and engine repairs. All repairs subject to Harbour Master's approval.

REPATRIATION: Facilities available.

AIRPORT: Nearest major commercial airport is Tullamarine, 55 miles distance, from which there are frequent interstate and international flights. Airport accessible by road in about 2 hrs. by taxi-car.

TIME: Summer, GMT plus 11 hrs. Winter, March-October GMT plus 10 hrs.

HOLIDAYS: Oil terminals work on all holidays. Roll-on/roll-off observe close holidays.

POLICE/AMBULANCE/FIRE: Police Hastings 791270; Ambulance Frankston 7832222; Fire. Hastings 791345, and Crib Point 839221.

TELEPHONES: Port Authority insists that Public Telephone is placed on board. Cost of this service $50.00, plus cost all trunk calls.

GENERAL: Vessels secure to oil jetties using ship's lines and shore preventer wires at all times.

Smoke emissions controlled under the Clean Air Act which will operate under the jurisdiction of the Environment Protection Authority.

SERVICES: Tank washings must be discharged ashore, and not into waters of the port. Licensed Compass adjuster available. Underwriters' Representatives available.

SHORE LEAVE: Crew members permitted shore leave, and launches can be supplied to vessels at anchor, provided vessels have pratique, and have been cleared by customs.

DELAYS: No delays anticipated. Port operates 24 hrs. per day.

AUTHORITY: Ports and Harbours Branch, Department of Public Works, Melbourne; or The Harbour Master, Crib Point.

AGENT: See "Melbourne".

WHYALLA, S.A.: 33.02 S. 137.36 E. (See Plan)

LOCATION: Situated on Western shore of Spencer Gulf opposite to and 27 miles by sea from Port Pirie. Open to all Southerly winds, which seldom interfere seriously with operations.

FACILITIES: Jetty for iron ore loading, and dredged harbour with one main wharf for steel and general cargo, and for bulk cargoes of coal, coke, limestone, pigiron, salt, etc. Harbour berths are safe berths.

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory except for those vessels whose Masters hold Exemption Certificates. Pilots board 0.5 to 1.5 miles East (105°) of Whyalla No. 1 Ore Loading Jetty. Vessels requiring Pilot should request service in sufficient time enable Pilot be ordered before 1600 hrs. Monday to Friday and should show prescribed signal within at least 10 miles of Whyalla. If delayed berthing, Master informed by radio and recommended anchor at Pilot boarding station (see above).

ANCHORAGES: Quarantine line extends in direction 241° from Black Point to Coast Southwestward of port. Quarantine anchorage shown on Australian Chart AUS.135, lies Southeastward of quarantine line and Eastward of jetty. Anchor preferably North of harbour leads. Vessels should not anchor on harbour or jetty leads, but should anchor, draft permitting, approximately 1 mile North of Outer Fairway beacon. Holding ground good with hard clay and sand bottom.

RESTRICTIONS: Vessels will not be moved within port by Pilot unless at least 10% of max. draft in water beneath keel. Min. clearance 2 ft. Also see "Berthing".

PRATIQUE: Whyalla is a port of first entry. 48 hours' notice of request for pratique required. Pratique granted at anchorage or in berth. Also see "Melbourne".

RADIO: Cable "Hematite Whyalla" also local Agent *(a)* on departure from previous port advising ETA and total cargo for discharge Whyalla (if any); *(b)* 48 hours prior arrival giving ETA; *(c)* 24 hours prior arrival giving ETA; *(d)* advise any alteration in ETA exceeding 2 hours; *(e)* advise estimated draft on arrival fore and aft. These cables necessary in order ensure loading and labour. Cables to be signed with Master's name. Cables sent outside working hours should be prefixed "Shipserv". In event vessel arriving direct from overseas port requiring pratique, following additional advice to be cabled: No. of crew, nationality, and whether health vaccination certificates required.

VHF: Port equipped with VHF. Service maintained 24 hours a day. Call sign "Whyalla Harbour".

TUGS: All tugs fitted VHF radio. 4 tugs available between 2.5 and 23 tons bollard pull. Wire towropes not to be used unless risk of damage to tug undertaken by ship. Charge for use of tug's lines. Orders for tugs to be made at least 2 hours before required and not later than 1530 hrs. Monday to Friday. Ferry services undertaken to ships at anchorage outside harbour when requested.

BERTHING: Iron ore loading jetty no longer in service, lies near Eastern side of town is 2,273 ft. long with T head formed by 6 dolphins. At night, the dolphin shows fixed white light.

No. 2 Jetty max. length of vessel 820 ft. Depth of water alongside 38 ft. LW. Approach Channel depth 35 ft. LWOST. Swinging basin, depth 35 ft. LWOST.

Stowage factor iron ore, 13–15 ft. per ton. No stevedoring incurred and generally cargo loaded lower holds and no trimming necessary.

Whyalla Harbour: About 1.25 miles to North or iron ore jetty. Entrance Channel 300 ft. wide and approx. 6,000 ft. length. Water depth in Channel and basin 9.5 m. LWOST. Depth of water at Harbour Wharf 10.7 m. LWOST. Berth length 600 ft.

DENSITY: Specific gravity of water approximately 1028 to 1035 therefore vessels must load light.

STEVEDORES: Shift work 21 hours per day on continuous 7 day roster. At least 24 hours notice for labour requirements.

MEDICAL: Resident doctors and hospital available.

FRESH WATER: Available at No. 2 Jetty and all wharves.

FUEL: Bunkering not normally undertaken. Fuel oil, coal and diesel oil available at Whyalla Harbour Wharf in emergencies only.

REPAIRS: Essential repairs only. Consult ship's Agents before maintenance or repairs undertaken.

STORES: Marine and bonded stores can be procured by arrangement with Adelaide. 5 days notice required.

SURVEYORS: Resident surveyors for Lloyds, also Department of Shipping & Transport. Lloyd's agents are Adelaide Steamship Co. Ltd.

GANGWAY/DECK WATCHMAN: Available at ship's option.

REPATRIATION: Air, road and rail facilities available.

AMBULANCE: In event of accident contact Agent or BHP 419 or BHP 2205. After hours BHP 699. St. John's Ambulance Services (tel.: 45–7777) available 24 hours daily.

Aerial Ambulance available for transfer of patients to a metropolitan hospital.

SHORE LEAVE: Crew members permitted shore leave, and launches, at ship's option, provide regular schedule to anchorage – weather permitting.

AUTHORITY: The Broken Hill Proprietary Co. Ltd.

AGENT: Sub-agent of Patrick Agencies, Adelaide.

WYNDHAM, W.A.: 15.27 S. 128.06 E. (See Plan)

PORT LIMITS: All waters in the Cambridge Gulf South of a line extending from Cape Dussejour to the summit of Hill 437 on Lacrosse Island, thence to Cape Donett.

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: Compulsory for all vessels entering port except those whose Masters have pilotage exemptions. Pilot boards South of Lacrosse Island in a position with Lacrosse Lt. Ho. bearing 350° distant 5.5 miles. Vessels arriving early should anchor in or near this position. Preferably vessels should arrive at Pilot boarding ground at dawn, as Gulf negotiated during daylight only.

Pilot resident at Wyndham, and essential give early advice when pilotage service required. 48 hours prior arrival give ETA to Harbour and Light Department, Wyndham.

All ships awaiting a Pilot should maintain listening watch on VHF Channel 16 at least 2 hours prior to Pilot boarding time, have engines on stand-by at least 1 hour before boarding time, and be ready to proceed in accordance with the Pilot's instructions given by VHF.

The approaches Channel has a min. depth of 6.4 m. LWOST.

ETA: Shipserve "Harbour Master Wyndham" required 48 and 24 hours notice prior arrival. The 24 hours message should be timed to be delivered before 1630 hrs. local time on the day before arrival so that arrangements can be finalised, when possible, in working hours.

Indicate max. draft in the 48 hours notice.

APPROACHES: Generally speaking, it is preferable to arrive at the Pilot station at daybreak. Approach Medusa Bank Buoy and pass Westward (buoy bearing 090° distance 1 mile). Steer 180° until Lacrosse Island lighthouse bears 040°, distance 2 miles. Alter course to 145° to a position with Shakespeare Hill and Cone Hill in transit (086°), Cone Hill distance 4 miles. The course should then be altered to 225°. Course clears Guthrie and East Banks and puts Black Cliff right ahead.

It will be noted that a conspicuous hill (un-named) is sighted immediately behind Black Cliff Point and these together form an excellent lead down this part of the Gulf to a position off Islet Point. From this point onwards pilotage is fairly complicated. There is a submerged wreck off the jetty, which must be considered when berthing and unberthing. Large vessels may only navigate the Hard Channel at half tide or better, as there is a 6.4 m. patch in the fairway.

HEALTH: Wyndham is a first port of entry. Masters are required to radio Port Health Authority, Wyndham, not less than 12 hours prior to arrival at pilotage station and giving state of health of the vessel. Examination for pratique is usually conducted after arrival alongside and nobody is permitted ashore until doctor's examination is completed.

RESTRICTIONS: The max. length of vessel permitted to navigate the Gulf is 189 m. overall. The Gulf is not navigable during hours of darkness at present.

MAX. SIZE: Length 189 m. draft 9.14 m.

BERTHING: There is a jetty of 283 m. in length. The Southern 210 m. having a least depth of 9.14 m., there is slightly less water at the Northern end.

Ordinary moorings are used. A launch is on station to run lines. There is no tug available.

FRESH WATER: Available at both berths. Supply is 10 t.p.h. approx.

STEVEDORES: Working hours: 0730 to 1130 hrs., 1230 to 1630 hrs., 1630 to 1830 hrs. When no extension of work, labour finishes at 1630 hrs.

Labour is organised by the Asia & Stevedoring Companies. WWF conditions prevail, four gangs are available. Prior advice as to labour requirements, hatches to be worked, etc., is of great assistance to stevedores.

CARGO HANDLING: By ship's gear only direct to railway wagons and motor transport. One 12-ton Coles slewing crane and two 5-ton mobile cranes are available, provided sufficient notice is given. A short railway connects the jetty, goodshed, and meatworks. Fork-lift trucks and pallets are used for handling general cargo where suitable.

FUEL/TUGS/REPAIRS: None.

TIME: GMT plus 8 hrs.

AUTHORITY: Harbour & Light Department, Fremantle. Local Authority: Harbour Master, Harbour and Light Department, Wyndham.

AGENT: Sub-agent of Patrick Agencies, Fremantle.

YAMPI SOUND, W.A. (Cockatoo Island and Koolan Island): 16.08 S. 123.38 E.

PORT LIMITS: The port limits, which are not marked on the charts of the area extend from a position in Lat. 16° 13′ 13″ South, Long. 123° 32′ 32″ East in a Northerly direction for 10 miles to about midway between Bathurst and Irvine Islands, thence Eastward for 15 miles, thence Southwards to the mainland passing nearly 0.75 of a mile Eastwards of Koolan Island. The Southern limits of the port includes all the intermediate coastline between the Eastern and Western limits as defined above.

DOCUMENTS: The following documents should be prepared prior to arrival if Yampi is the first port of entry to Australia:

Health:

2 copies – Form Q360

Customs:

2 copies – Form M&S 11 (List of Crew)
1 copy – Form 42A (Store List)
1 copy – Form 5 (Articles owned or in possession of Master, Officers or crew)
3 copies – Form C&E (Ports of Call)
1 copy – Form QA4 (Declaration of Ship's Pets)
1 copy – Form QA5 (Shipmaster's Bond) – completed only if pets on board
3 copies – Crew List – unofficial
3 copies – Ship's Bonded Stores – unofficial

The following Certificates are required to be produced if Yampi Sound is the first port of entry to Australia:

Loadline Certificate
Safety Radio Certificate
Safety Equipment Certificate
Safety Construction Certificate
Commonwealth Light Dues Certificate (receipt)
Custom's Clearance from last port

PILOTAGE: Yampi Sound is not a compulsory pilotage area. However, the Company's Port Officer holds a foreign going Master's Certificate, is well versed in local conditions and will act as Pilot for Masters requiring his service. The Port Officer will board at the quarantine anchorage.

As a Westerly wind is quite common, Masters are advised that their vessel should be adequately ballasted prior to berthing operations.

ANCHORAGE: Yampi Sound is a well sheltered deep water port with good all weather anchorages. The quarantine anchorage for Cockatoo Island is located on the Southern side of Cockatoo Island with Cockatoo Island light bearing 060° True, distance 1.5 miles.

Koolan Island is located on the Eastern side of Yampi Sound, with Nares Point bearing 090° True, distance 2 miles.

MAX. SIZE: *Koolan Island:* LOA, 260.7 m. (875 ft.). Breadth, 40.23 m. (132 ft.). Draft (ordinary) 15.54 m. (51 ft.) however loading permitted to 52 ft. on rising tide.

Cockatoo Island: LOA, 225.55 m. (740 ft.) Breadth, 36.57 m. (120 ft.). Draft (ordinary) 12.49 m. (42 ft.). However vessels can exceed the berth depth (42 ft.) by completing loading on a rising tide, to a max. draft of 13.41 m. (44 ft.).

HEALTH: Yampi Sound is a first port of entry to Australia, and valid Vaccination Certificates are required. The doctor is normally available during dayiight hours only, excepting emergencies.

A gangway is required at the quarantine anchorages to allow the doctor and customs to board. A pilot ladder is not acceptable.

RADIO: The port is able to communicate with vessels which are fitted with VHF radio through the normal international maritime channels. The call sign is "KOOLAN ISLAND". A continuous listening watch is not maintained on Channel 16.

The telegraphic address for Yampi Sound is "Ironsteel", Derby, W.A., and Masters of vessels destined for Yampi Sound are required to advise their ETA by radio on departure from the previous port, and at 72 hours, 48 hours, and 24 hours prior to arrival, depending on the vessel's departure from that port.

TUGS: The following vessels are available for shipping movements within Yampi Sound.

Kalibah – 850 hp. Tug – 15 tonne bollard pull
Takora – 350 hp. Tug – 5.5 tonne bollard pull
Tangara – Line launch

Also available for general cargo work is

Wandi II – Landing Barge of 60 tonne capacity

TIDES: Tidal streams within Yampi Sound generally set Easterly with the flood, and Westerly with the ebb tide. At Koolan Island wharf, the tidal stream sets Eastward except for a period from 0.5 hour before to 2.5 hours after high water when the tidal stream sets Westward.

At Cockatoo Island jetty the tidal stream sets Eastward except for a period from 1 hour before to 3 hours after high water when the tidal stream sets Westward.

At spring tides these streams are most pronounced, however may become confused at neap tides.

Further advice on tides and tidal movement can be obtained from the Company's Port Officer.

LOADING ZONES: A Summer Loading zone exists at Yampi Sound with the exception of a Seasonal Tropical Allowance from 1st May to 30th November.

BERTHING:

Koolan Island

The loading berth at Koolan Island consists of a substantial, well fendered wharf 170.7 m. long with the centre located approximately 16° 08.3′ S., 123° 44.3′ E. Additional mooring dolphins are located each end of the wharf to accommodate vessels of up to 130,000 d.w.t. with a maximum beam of 41 m.

The depth of water alongside the wharf is 14.8 m. at LWOST with a tidal range of up to 10.67 m.

The shiploader consists of a travelling, retractable, luffing, conveyor boom capable of loading iron ore at a rate of 3,000 t.p.h., and can move a distance of 118.9 m. along the wharf. Larger vessels may be required to shift along the berth to complete loading operations, the vessel's Master being fully responsible for shifting operations at all times.

Loading is normally continuous with the exception of closed holidays such as Christmas Day, Anzac Day, Good Friday, etc.

General cargo handling facilities at this wharf include a 33 tonne travelling and luffing crane on the Eastern end. Shore labour is available only for use as mooring gangs, and loading and handling of cargo on the wharf only. There are no ship foremen.

Cockatoo Island

The loading jetty at Cockatoo Island consists of 6 dolphins aligned in a 117° T – 297° T direction over a distance of 210.3 m. with its centre, located approximately 16° 06.3′ S. 123° 36.8′ E. Berthing dolphins are located 111.9 m. and 82.9 m. from the centre of each West and East end dolphin respectively. The dolphins are well constructed with a facing of timber fendering from the wharf decking to low water level.

The depth of water alongside is 11.8 m. at LWOST with a tidal range of up to 10.67 m.

The shiploader consists of a fixed, retractable, luffing conveyor

boom located between the 2 centre dolphins and is capable of loading iron ore at a rate of 1,800 t.p.h.

Due to the fixed nature of the shiploader, ship's Masters are required to bring each hatch in sequence under the boom, by warping the vessel along the jetty. During these operations Company employees are in attendance for handling the shore end of mooring lines only. The vessel's Master is fully responsible for the warping operations at all times.

Loading is normally carried out from 0600 to 2000 hrs. local time. These hours may be extended to complete loading operations. Loading is not carried out on closed holidays such as Christmas Day, Anzac Day, Good Friday, etc.

General cargo is not handled at this jetty.

MEDICAL: There is a resident doctor on Koolan Island and a small medical centre on both islands. However, the nearest hospital facilities are at Derby, 140 km. from Yampi Sound, and all patients are tranferred by aircraft.

SERVICES: Stores, laundry service, fresh water, repair facilities, divers and trading bank facilities are not readily available.

Fresh water can be supplied in an emergency while moderate amounts of stores are obtainable if sufficient notice has been given beforehand. Limited cash can be obtained.

Bunkers are not available, while distillate is available in moderate quantities only after prior arrangement.

The facilities in the townsites of Cockatoo and Koolan Islands are very limited and include a Post Office, Supermarket, Shop, Savings Bank, Open Air Cinema, and a Private Club. There is a swimming pool at Koolan Island townsite.

AIRPORT: There is an airstrip located on both Cockatoo and Koolan Islands and flights by the Company's Charter Aircraft connect with the Australian airline system at Derby, 140 km. from Yampi Sound.

FIRE PRECAUTIONS: There are no fire services available, except the Works Fire Brigade and the safety of the vessel, due to the isolated nature of the berths, remains the responsibility of the Master at all times.

International shore connections are readily accessible at both Cockatoo Island jetty and Koolan Island wharf.

POLICE/AMBULANCE/FIRE: In an emergency the Port Officer should immediately be informed.

Emergency telephone numbers:	*Koolan*	*Cockatoo*
Medical	60	20
Fire Brigade	23	32
Port Officer – Home	48	0–48
Office	72	0–72
Policeman	–	75

TIME: GMT plus 8 hours.

PORT REGULATIONS: Whilst in the Port of Yampi Sound, Masters are respectfully requested to observe the appropriate Quarantine Regulations, particularly in regard to the following matters:—

Garbage, waste oils and tank cleaning compounds should not be discharged into the sea whilst in Yampi Sound.

Rat guards should be used at all times.

SHORE LEAVE: Identity cards are not necessary for shore leave. The townsite on Koolan Island is 10 km. from the wharf and on Cockatoo Island 3.5 km. from the jetty. Transport to the townsite is very limited, and only during working hours. Seamen and visitors are not permitted to walk near the quarry areas, and are cautioned to keep clear of all machinery.

Permission must be obtained before seamen and visitors proceed ashore as blasting in the quarry areas can take place at any time.

GENERAL INFORMATION: The sole export from Yampi Sound is iron ore which is quarried on Cockatoo and Kooland Islands by the Dampier Mining Co. Ltd., a subsidiary of the Broken Hill Proprietary Co. Ltd.

The first shipment of iron from Cockatoo Island was made in 1951, while the first shipment from Koolan Island was made in 1965.

During the year ended November 1975, 3.5 million tonnes of iron ore were shipped from Yampi Sound by 72 vessels. The largest shipments loaded to date have been 105,159 tonnes by the Norwegian vessel "Mosfield" from Koolan Island, and 65,141 tonnes by the Norwegian vessel "Voywi" from Cockatoo Island.

From November to March Yampi Sound is near the Southern extremities of the N.W. monsoonal influence and cyclones can be expected during this period. The effects of cyclones are more prevalent in this area early in this period, however cyclonic conditions have been experienced at Yampi Sound during February/March.

During the season November to March (known locally as the "Wet"), the prevailing winds are Westerly, strong at times, particularly during the afternoon. Rain and thunder squalls are also frequent during the "wet", and Master's are warned to be watchful for storms, as the accompanying winds can be gale force.

The season April to October (known locally as the "Dry") brings a period of very little rain and frequent periods of strong South-Easterly winds during the mornings, giving way to light Westerly sea breezes in the afternoons. No cyclones are likely during this period.

	Koolan Island	*Cockatoo Island*
Depth of Water		
Berth	15.85 m. (52 ft.)	12.80 m. (42 ft.)
Turning Basin	20.10 m. (66 ft.)	16.45 m. (54 ft.)
Channel	20.10 m. (66 ft.)	16.45 m. (54 ft.)
Tide, Rise and Swell		
Spring Rise	10.70 m. (35 ft.)	10.66 m. (35 ft.)
Neap Rise	2.10 m. (7 ft.)	2.13 m. (7 ft.)
Mean Rise	4.63 m. (15 ft.)	4.57 m. (15 ft.)
Swell	Usually Nil	Very little
Keel Clearance	0.91 m. (3 ft.)	0.91 m. (3 ft.)
Draft of Ballast Condition	6.40 m. (21 ft.)	6.40 m. (21 ft.)
Loader Facilities		
Outreach	15.85 m. (52 ft.)	14.63 m. (48 ft.)
Throwing Dist.	4.57 m. (15 ft.)	4.26 m. (14 ft.)
Clear Height From HWOST	45 ft.	48 ft.
Berthing Side	Dependent on tide Portside – ebb Stbd. side – flood	Usually Port-side alongside
Stowage factor	13	13
Angle of Repose	about 25°	approx 25°
Nature of bottom	Mud	Mud
Radio Pratique	Not available	Not available
Time, berthing and unberthing	Anytime	—

AGENT and AUTHORITY: Dampier Mining Co. Ltd., Koolan Island.

Ship's mail and any correspondence should be addressed: c/o Dampier Mining Co. Ltd., Koolan Island, Western Australia, 6733

NOTES

Please also advise Shipping Guides (Services) Ltd.

Azores

HORTA, Faial: 38.32 N. 28.38 W.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
For Customs
Arrival Declaration.
Manifest of Cargo for discharge or in transit.
Provisions List.
Request to commence load/discharge.
For Port Health
Deratisation Certificate or exemption.
Health Clearance from Last Port.
For Port Captain
Seaworthiness Certificate.
Certificate of Registry.
Tonnage Certificate.

PILOTAGE: Can be called by two long and one short blasts on the whistle, or by International Code flag "G". Radio contact with pilot station can be made by VHF channel 16; Phone 2182; via radio station CUG, or in cases of urgency, through the Horta Naval Radio Station CTH.

Pilot launch painted black with "Pilotos" painted on each bulwark. If requested by Master, Pilot will board at entrance of Faial-Pico Channel or Faial-St. George Channel. Otherwise Pilot will board at port entrance. Vessels waiting for pilot must remain 1.5 miles from the breakwater with Ponta de Doca Lighthouse in line with Aeria Larga Lighthouse on Pico Island.

ANCHORAGE: The best holding ground is with the breakwater light in line with the tower of San Francisco church bearing 271°, and with Ilheu Negro in line with Casa Jaoa Catita bearing 208°. Another line of good soundings is in the open Channel dos Ingleses.

MAX. SIZE: For berthing, max. draft 22 ft. Depth in the artificial port is 36 ft. at high water. Depth at buoy moorings: 33 ft. Vessels of any draft can anchor outside the port.

HEALTH: If vessel has not touched any contaminated port, Pilot will haul up signal "TO" and Health Inspector will give free pratique. Master is obliged to send the Maritime Declaration of Health given by the Pilot to shore within one hour together with a Crew List and Cargo Manifest. If vessel has suspected case of fever on board or is coming from a port in a contaminated zone, pratique will only be given after Health Inspector has boarded.

RADIO: Commercial station CUG and Naval station CTH.

TUGS: None available.

STEVEDORES: Gangs are provided by local stevedores syndicate when requested by Master or Agent.

MEDICAL: Doctors and hospital facilities always available.

FRESH WATER: Can be provided by one water barge, capacity 57 tons, cost 38.50 Escudos per ton.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Police Guard or Coast Guard (Cabos de mar).

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ATLOWANCES: Up to 150 grammes tobacco and small allowance wine or spirits for each man.

IDENTIFICATION CARDS: Not required.

CONSULS:

France	Germany	Netherlands
Greece	Italy	Norway

REPAIRS: Machinery and small electronic repairs can be effected.

REPATRIATION: Can be arranged.

TIME: GMT minus 1 hour all year round.

HOLIDAYS: 1st January; 10th June; 24th June; 15th August; Corpus Christi; 5th October; 1st November; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police tel. 22022; Ambulance 22122; Fire 22333.

TELEPHONES: Can be connected on board vessels berthed alongside.

SHORE LEAVE: Allowed.

AIRPORT: Several flights during the week from Faial Airport, 10 km. from the port, to Lajes airport and International Airport at Santa Maria. There is a daily boat service to Pico and several weekly to other islands.

AUTHORITY: Capitao do Porto da Horta.

AGENT: Casa Bensaude, Importacoes e Exportacoes SARL, Horta, Faial, Rua Vasco da Gama 42. Cables "Bensaude Horta". Tel. 23032/40 (9 lines).

PONTA DELGADA: 37.44 N. 25.40 W.

(See Plan)

DOCUMENTS:
1 Store List.
4 Crew Lists.
4 Landing Passenger Lists.
4 In Transit Passenger Lists.
2 Manifests of Cargo Being Landed.
1 In Transit Cargo Manifest.
Ship's Register.
Load-line Certificate.
Safety Equipment Certificates (London Convention).
Deratting Certificate.

PILOTAGE: Good deep approach. Harbour Pilot boards 0.5 mile S.E. of breakwater. Radio Harbour Master direct or through Agent ETA 48 hours notice. ETA message to include draft, reason for calling, type of bunker required, fresh water required, oil products needed, nature of repairs and what cargo, if any, aboard.

Pilot station with visual signals tower and radiotelephony, at entrance of port installations. Telephone number 2 35 50. Pilot's motorboat – Pilotos in capital white letters printed both sides hull, as well as flag "P" hoisted during day or one red, one white light at night.

When necessary, Pilot motorboat will complete identification by flashing word "Pilotos".

Besides usual signals of ICS, Pilots' Station, when necessary, will hoist on main signal tower the following:

By Day – Flag "X" of ICS – Wait outside Harbour (for Portuguese or foreign ships regularly visiting Ponta Delgada); Flags "OG" of the ICS – Wait outside Harbour (for all other ships);

By Night – Two green lights (one above the other) – Wait outside the Harbour (for Portuguese and foreign ships).

ANCHORAGE: Outside artificial harbour, in roadstead and off breakwater, anchorage suitable for all ships whose drafts are too deep for admission into artificial port – over 40 ft. depth. Good holding ground.

RESTRICTIONS: Vessel considered adversely trimmed when more than 10 ft. "by the stern" or 2 ft. "by the head".

MAX. SIZE: Up to 38 ft. draft.

HEALTH: The Pilot requests Master to hoist quarantine flag when vessel comes from an infected port, or when sick people carried on board. Port doctor then boards for inspection and nobody allowed to board or leave vessel before completion of inspection.

Animals: Importation and transit of all birds and small animals allowed but valid health certificate and valid rabic vaccination certificate required. All staff and crew members of vessels arriving from a port officialy declared infected by smallpox, not allowed go ashore, unless in possession of vaccination certificate.

RADIO: San Miguel Radio, call sign CUG. Transmitting on 1663.5 kHz. Receiving on 2182 kHz. Radio telephone frequencies 4415.8, 8792.8, and 13175.5.

TUGS: Two tugs, 1,100 h.p. and 3,400 h.p. operated by Junta Autonoma available for assistance during berthing and unberthing.

BERTHING:
No. 1 – Quay for small craft.
No. 2 – West Quay, 1,069 ft. long, min. depth alongside, LW, 20 ft.
No. 3 – Central Quay, 678 ft. long, min. depth alongside LW, 27 ft.
No. 4 – East Quay, 2,023 ft. long, min. depth alongside, LW, 40 ft.
Mooring buoys in depths ranging from 20 to 30 ft.

RADAR/VHF: Harbour radar covers range of 20 sea miles; controls inside harbour waters. VHF location – main signal tower. Call sign – "Pilotos". Operating 24 hours on Channel 16. Range 20 to 25 miles.

Calls must be made on Channel 16 and then shift to Channels 20 or 22 as indicated by Port Operations Station. Channel 13 used for communications between tug, pilot station, Pilot aboard, during manoeuvres of mooring and unmooring. It should be understood that the Port Operations Station is not to be used for ship's business with Agents or Shippers of cargo.

MEDICAL: Large well-equipped hospital. Santa Casa da Misericordia de Ponta Delgada, telephone number 2 23 22.

TANKERS: Vessels carrying explosives, inflammable liquid or any other dangerous cargoes, before entering port, must hoist International Code Signal "B" at foremast during day and a red light at night. Upon boarding vessel the harbour Pilot enquires from the Master whether there are explosives and any other dangerous cargoes on board. Masters requested to supply accurate information as to quantity and nature in order to enable Port Authorities to select a suitable berth or anchorage for vessel.

Constant Readiness: Vessels carrying dangerous cargoes, while moored, must maintain engines and propulsion machinery in readiness to leave the port under full power, if necessary.

FRESH WATER: Available at all quays ex hydrants.

FUEL: Bunkers are readily available but, for their own convenience Masters should telegraph Agents quantity and type of bunkers required. In order to avoid possible delays to their own and other vessels, Masters are requested to replenish bunkers at the time suggested by their Agents.

GANGWAY/DECK WATCHMEN: Customs Guards are on duty upon the quay and at the entrance of the wharf. Customs guards are also placed on board and those assigned for this duty should be provided with meals (at regular meal times) and sleeping quarters on board.

CUSTOMS ALLOWANCE: Storerooms will be sealed but a reasonable quantity of stores, estimated as indispensable for consumption, may be removed before sealing. This amount should be ready for removal from the storeroom prior to arrival at berth.

CARGO GEAR: Two 10 ton travelling cranes at all quays. Mobile cranes available at all quays. Small slipway for vessels up to 200 ft. long. Tender for passenger vessels.

IDENTIFICATION CARDS: No crew members allowed ashore without landing cards, which are supplied by Agents.

CONSULS:

Belgium	Tel.	2 20 29	Italy	Tel.	2 42 46
Brazil	,,	2 26 38	Mexico	,,	2 27 04
Chile	,,	2 32 26	Netherlands	,,	2 31 94
Denmark	,,	2 28 50	Norway	,,	2 27 83
Dominican Rep.	,,	2 53 90	Panama	,,	2 20 45
Finland	,,	2 35 59	Spain	,,	2 25 02
France	,,	2 41 29	Sweden	,,	2 26 38
Germany	,,	2 39 35	Turkey	,,	2 26 67
Greece	,,	2 41 29	U.S.A.	,,	2 22 16

REPAIRS: Engine or other repairs can be undertaken. Repairs to electric installations, motors and refrigerating systems can also be undertaken as well as repairs to wireless stations (including VHF, radio-telephone equipment, radar, Echo-sounders, direction-finders, gyro-compasses, steering-gear, Sal logs and cinema projectors).

Workshops duly equipped to undertake hull and engine repairs. Divers and equipment also available for some underwater work. Small tugs, motor-launches and lighters. No dry-docking available. A seagoing salvage tug, owned by Junta Autonoma is stationed in the port.

REPATRIATION: Can be arranged.

AIRPORT: 3 km. from Ponta Delgada. Daily flights to Airport of Santa Maria, Lajes Field (Terceira) and Faial by Sata Airlines. Connections with weekly flights of PAA, TWA and Transportes Aereos Portugueses – TAP, to and from Europe and United States or Canada.

TIME: GMT, minus 1 hour. No changes.

HOLIDAYS: 1st January – New Year's Day, June 10th (Portugual Day), Corpus Christi, August 15th, October 5th, November 1st, December 1st, Monday before Ascension Day. Government offices close on afternoon of Maundy Thursday and on afternoon of Christmas Eve. Most firms close on Shrove Tuesday and Good Friday.

POLICE/FIRE/AMBULANCE: Police telephone 22022; Fire telephone 2 23 33; Ambulance telephone 22022.

TELEPHONES: Any ship moored alongside can be connected to the city's telephone network, upon request through the ship's Agent.

GENERAL: Visual storm signals are shown on Main Signal Tower.

SERVICES: Fresh and dry provisions available all the year round.

SHORE LEAVE: Allowed.

REGULATIONS: Ballast: Vessels must arrive with sufficient ballast to permit safe handling.

Ratguards: It is advisable to use ratguards while moored alongside. Scupper Covers: Boards or other suitable devices must be used to cover outlets from lavatory discharges, etc., to prevent fouling of pier or craft alongside.

Garbage: It is absolutely forbidden to dispose of cinders, garbage, or any other refuse inside the harbour or within the territorial waters limit. Non-compliance is subject to heavy fines.

AUTHORITY: Junta Autonoma Dos Portos Do Distrito. de Ponta Delgada.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bahamas

FREEPORT, Bahamas: 26.30 N. 78.45 W.

(See Plan)

DOCUMENTS:

(a) Inwards:

Description	Customs	Immigration	Agents	Total
1. Crew Lists	2	—	1	3
2. In transit Passenger List	2	2	2	6
3. Disembarking Passenger List	2	2	2	6
4. Stores List	2	—	—	2
5. Gift shop inventory	2	—	—	2
6. Crew's Declaration	2	—	—	2
7. Ship's Report Inwards (supplied by Agents)	2	—	—	2
8. Maritime Declaration of Health (supplied by Agents)	1	—	—	1
9. Cargo Manifest for Freeport	4	—	2	6

10. Landing cards supplied by agents to be completed by each disembarking passenger.
11. Baggage Declaration forms supplied by agents to be completed by each disembarking passenger.
12. Clearance from last port will be collected by Customs.
13. Deratisation Certificate should be available for inspection.
    If vessel's previous port of call was in Bahamas items (7), (8) and (13) need not be complied with.
    When vessel requires Consular Despatch to country such as Venezuela, two extra copies items (1), (4) and (6) should be supplied.

(b) Outwards:

Description	Customs	Immigration	Agents	Total
1. Ship's Report Outwards (supplied by Agents)	2	—	—	2
2. List of embarking passengers (if any)	2	2	2	6
3. Outward Manifest Freeport cargo	2	—	2	4

If vessel clearing for another Bahamian port item (1) does not have to be complied with, but copy of next port's manifest required.

PILOTAGE: Compulsory for passenger vessels exceeding 199 gross tons and freighters exceeding 399 gross tons. Pilotage is compulsory for tankers berthing at Borco dock, but vessels calling for bunkers only may anchor and bunker by barge without using pilot services. However, pilotage recommended. Pilot station located in position in which Freeport light bears 050° true, distance 3 miles. Approaching Freeport, particularly from North West, keep at least 3 miles from shore, and, when off port, remain at pilot station until boarded by Pilot. Pilotage area extends from pilot station to offshore refuelling moorings, anchorage to West of harbour entrance and harbour. Pilots available any time of day or night. Harbour signal station maintains a 24 hour watch for visual and radio signals. Borco on VHF Channel 16 only.

Vessels can communicate by RT on 2182 kc/s., and once they have established contact will normally be asked to switch to one of the following frequencies: 2638 or 2738 kc/s. Vessels can also communicate by VHF Channels 16 and 14. Freeport call sign on all frequencies is ZFP 81 or Freeport Harbour Control. Give ETA 48 hours in advance, with subsequent corrections as necessary.

ANCHORAGES: There is a good offshore anchorage approximately 2,500 feet to the North West from the entrance channel for a distance of 1.5 miles (submarine cable in existence) which is sheltered from Northerly winds. The bottom of the sea is lime and coral rock covered by sand and loose lime.

APPROACHES: The following landmarks are prominent when approaching the port: Borco Refinery 3 chimneys. 369 ft. above mean low water. White with red bands showing three sets of four red lights at night. Visible approx. 20 miles. Bahamas Cement Company storage silos just to West of harbour entrance. Visible approx. 15 miles.

Currents in the area are not predictable and are largely wind induced. Harbour is approached through straight channel 1,800 ft. in length, 300 ft. width and with controlling depth of 30 ft. below mean low water. Turning basin, 2,000 ft. by 1,800 ft. Vessels may enter and leave harbour on 24 hour basis, weather permitting.

MAX. SIZE: *Tanker Berths.*

Berth No.	d.w.t.	Max. Draft
No. 3 berth up to	38,000	38 ft.
4 ,, ,, ,,	55,000	50 ft.
5 ,, ,, ,,	90,000	50 ft.
6 ,, ,, ,,	312,000	82 ft.
7 ,, ,, ,,	65,000	38 ft.
8 ,, ,, ,,	100,000	50 ft.
9 ,, ,, ,,	130,000	51 ft.
10 ,, ,, ,,	500,000	85 ft.

HEALTH: Pratique granted by Customs Boarding Officer after Maritime Declaration of Health form completed by Master and Deratisation Certificate examined. Important that vessel should not commence refuelling nor work cargo until cleared. A vessel arriving from another Bahamian port, e.g. Nassau, does not require pratique. Event any suspected disease or fever on board, pratique may be witheld, pending examination by Government Medical Officer.

RADIO: Recommended that radio messages giving ETA, etc., be transmitted via Miami Radio.

Tankers proceeding to Borco Installation should transmit the following information within 6 hours of clearing at last port:

(a) name of tanker;
(b) name of port at which the tanker last called;
(c) date and hour of estimated time of arrival at Freeport.

It is imperative that the Master of each tanker shall establish communications with the refinery at least 72 hours prior to the estimated time of arrival, and that the refinery be notified of any change in ETA. Four hours before arrival at Freeport the Master should establish contact by VHF radio and advise on vessels precise estimated time of arrival. Any berthing instructions will be passed to the Master at this time.

Radio Telephone: A continuous watch is maintained by the Control Tower of Freeport (Bahamas) Harbour on 2182 kc/s. and on VHF Channel 16 (156.80 Mc/s).

Working frequencies are:—

Medium Frequencies:

2638 kc/s. — Ship-to-Shore
2738 kc/s. — Ship-to-Shore
2782 kc/s. — Freeport Harbour (Private frequency).

VHF: Channel 14 (156.70 Mc/s).

In addition, Freeport Harbour can communicate on:

2031.5 kc/s. — Miami Marine.
2118 kc/s. — Miami Marine.
2198 kc/s. — Nassau Marine.
2670 kc/s. — Coast Guard

TUGS: NEPCO provide four tugs for assisting in berthing and unberthing. Two of these are of 4,300 h.p. and 2 of 1,000 h.p. In addition there are 2 chartered tugs of 4,000 h.p.

STEVEDORES: Freeport Harbour Company, Ltd., are sole stevedoring company. Some limitation labour availability and difficult to obtain more than 2 gangs at any one time. Normal discharging rate 10 tons d.w. per hook per hour. Port Authority operate forklift trucks ranging from 2 to 30 tons capacity. First ETA at least 48 hours prior arrival, to ensure labour booked in time.

MEDICAL: No port medical officers. Persons requiring attention must proceed approximately 7 miles to Freeport's hospital and dental clinic, or to Antoni Clinic or Lucayan Medical Group Clinic which approximately same distance from port area. Advance notice to Agent desirable but not essential.

SPECIALISED CARGO-HANDLING FACILITIES: *Cement:* Bahamas Cement Company own and operate the whole of Basin No. 3 (1,365 ft. by 350 ft. by 636 ft. – depth 30 ft. at MLW), with bulk handling facilities.

Roll-on/roll-off: Basin No. 1: 2 ramps for 2 vessels (passenger/car ferry type) at S.E. end. Depth 28 ft. MLW. Both ramps approx.4 ft.above MHW. 1 is adjustable.

Basin No. 2: 2 ramps for 5 landing ship type vessels at S.E. end. Depth 15 ft. MLW. 1 ramp 4 ft. above MLW (4 vls.), the other 0 ft. (1 vl.).

TANKER BERTHING FACILITIES: There are 4 off-shore loading platforms (sea islands) situated between 2,500 and 3,600 ft. from the shore line at Pinder's Point. There are 2 berths on each platform making a total of 8 berths which can accommodate tankers ranging in size from 16,000 to 500,000 d.w.t.

Inside the harbour at Dock 1 are facilities for handling smaller vessels, mainly barge loading and import/export of refined products on a small scale. This is the only mogas import berth for the island.

Borco Dock 1:

The No. 1 Dock area is the centre of Neptow's Operations. Neptow, an affiliated Company of Borco, is responsible for the maintenance and provision of all marine transport associated with the off-shore operation. Neptow provides tug-boats, mooring boats, personnel carriers, pilotage service and bunker barge facilities, the barges being used to bunker and water vessels in the harbour and in the anchorage.

The working length of the dock is 600 ft., it will accommodate vessels up to approximately 18,000 d.w.t. (Deadweight tons) with a maximum draft of 27 ft.

Neptow provide a bunkering service. This service is given to vessels visiting the Port of Freeport, (cruise ships, cargo ships), and to vessels anchoring outside the port solely to purchase, bunker fuel. The barge service is also used occasionally at Borco's marine facilities when it is more convenient to bunker a vessel by barge. Bunker fuel supplied to the above mentioned vessels ranges from diesel oil to heavy fuel oil, blends being made in between to suit individual customer requirements.

Products imported or exported via the No. 1 Dock loading facilities are:—

Imports: 1. Premium Gasoline.
2. Regular Gasoline.
3. Heavy Fuel Oils for Bunkering.
4. Heavy Fuel Oil, to be supplied as bunker fuel to visiting tankships.

Exports: 1. Diesel oil to small craft for inter-island distribution.
2. All grades of fuel oil into barges or tankships when scheduled for delivery to the Out-Islands or the East Coast of U.S.A.

Note: Tankships, except for gasoline imports, normally only use the No. 1 Dock facilities during occasions of extreme bad weather,

Loading Platforms:–The 3 loading platforms which accommodate berths 3 & 4, 5 & 6, 7 & 8 are of fully enclosed, box like type of construction the interiors of which contain equipment for the operation of each respective platform.

The platform serving 9 & 10 Berths is of a slightly different design in-so-much that it is of an open type construction with no between decks storage space.

All of the platforms are situated in an elevated position approximately 40 ft. above sea-level and are supported by piling structures sunk into the sea-bed.

The platforms serving berths 3 & 4, 7 & 8 and 5 & 6, 9 & 10 are interconnected by cat-walks which extend in a Northwest/Southeast direction, in line with prevalent weather conditions. The overall lengths of these structures are approximately 2,040 ft. and 3,000 ft. respectively.

Each loading platform is entirely self-sufficient in that they each have their own power supply, fresh water, office and store-rooms, fire fighting and anti-pollution equipment, slop systems, storm water systems and a host of contributary operating equipment. Communication systems amount to P.B.X. Telephones, Magneto Telephones (inter-Jetty communication) and 2 V.H.F. Radio systems.

Two fresh water lines extend from the shore, one to 9 & 10 berths and the other to 3 & 4 berths. Fresh water is then supplied to 5 & 6 berths via 9 & 10, and 7 & 8 berths via 3 & 4. This water supply can also be used to water tankships alongside the platforms.

To enable tankships to be safely secured alongside the loading facilities, each platform and associated cat-walk unit has mooring dolphins with quick-release mooring hooks and integral capstans.

Berths 3 & 4. Situated approximately 2,500 ft. from the Pinder's Point shore-line with a platform size of 94 ft×100 ft.× 12 ft. in depth. Submarine sea lines available are:

1×30 in.	Diameter	Crude Oil Line.
2×24 in.	,,	Fuel Oil Lines.
1×20 in.	,,	Diesel Oil Line.
1×20 in.	,,	Kerosene Line.
1×20 in.	,,	Naphtha Line.
2×20 in.	,,	Ballast Water Lines.
1×20 in.	,,	Bunker Fuel Line.

These pipe-lines terminate at 10×12 in. Chiksan Marine Loading Arms – Counter balanced and hydraulically powered – 5 loading arms for each berth.

Berths 5 & 6. Situated approximately 3,600 ft. from the Pinder's Point shore-line with a platform size of 100 ft.×144 ft.×12 ft. in depth. submarine sea lines available are:–

2×30 in.	Diameter	Crude Oil Lines.
1×24 in.	,,	Fuel Oil Line.
1×20 in.	,,	Diesel Oil Line.
1×20 in.	,,	Kerosene Line.
1×20 in.	,,	Ballast Water Line.
1×20 in.	,,	Bunker Fuel Line.

These pipe-lines terminate at 8×16 in. Chiksan Marine Loading Arms of the same design as on berths 3 & 4, four arms for each berth.

Also incorporated on berth 6 is a Berthing Approach System which is used by the Pilots as an aid in safely moving vessels on or off the berth.

Berths 7 & 8. This platform was completed and handed over in 1973. Situated approximately 2,500 ft. from the Pinder's Point shore-line with a platform size of 110 ft.×90 ft.×12 ft. in depth.

Submarine sea lines available are:–

2×24 in.	Diameter	Fuel Oil Lines.
1×20 in.	,,	Diesel Oil Line.
1×20 in.	,,	Kerosene Line.
1×20 in.	,,	Naphtha Line.
1×20 in.	,,	Ballast Water Line.
1×20 in.	,,	Bunker Fuel Line.

There is no crude oil facility available at this berth. Crude oils will be handled by berths 5, 6, 9 & 10 under normal conditions and by berths 3 & 4 if required.

The above listed pipe-lines terminate at 8×12 in. and 4×8 in. Chiksan Marine Loading Arms, again similar in construction to the berths mentioned previously. 6 arms service each berth of which 2 are bunker lines and the remaining 4 for product loading.

Berths 9 & 10. This platform, the most recent addition to the marine loading facilities at Borco was completed and handed over in 1974.

Situated approximately 3,600 ft. from the Pinder's Point shore-line with a platform size of 190 ft.×125 ft. (No below deck space) this facility is of a rather different design to the other loading platforms namely:–

The platform is of a completely open design with major operating equipment sited on the top surface. Ancillary equipment such as slop and storm water systems are situated below the platform. Because of its design, equipment is more readily available and build up of hydrocarbon vapours is eliminated.

Other features incorporated within the platform design are:–

1. Weather recording station.
2. Meter (Bunker) proving systems – electronically controlled.
3. Berthing approach system for No. 10 berth which is used by the Pilots as an aid in safety moving vessels on or off the berth.

Submarine sea lines available are:–

1×20 in.	Diameter	Bunker Fuel Line.
1×24 in.	,,	Fuel Oil Line.
1×20 ft.	,,	Ballast Water Line.
1×42 in.	,,	Crude Oil Line.
1×30 in.		Crude Oil Line.

As can be readily seen this platform is a crude oil/fuel oil loading/discharging facility only, white oil products are not available. The above stated lines terminate at 12 Chiksan Marine Loading Arms, again similar in construction to those on other platforms. The service per berth as below:–

No. 9 Berth.	2×12 in.	Diameter	Bunker Fuel.
	2×12 in.	,,	Ballast and Crude Oil.
	2×12 in.	,,	Fuel Oil and Crude Oil.
No. 10 Berth.	2×12 in.	Diameter	Bunker Fuel.
	2×16 in.	,,	Ballast and Crude oil.
	2×16 in.	,,	Fuel Oil and Crude Oil.

BALLAST: Facilities are provided for discharge of dirty ballast at the tanker jetties. Each jetty is connected by a 20 in. ballast pipe-line. These lines have been tested to 350 lb. pressure and are designed for 150 lb. working pressure.

DENSITY: Salt water. Rise and fall of tide between 3 ft. and 3 ft. 6 in.

FRESH WATER: Fresh water available by pipeline in the harbour. Average pumping rate 18 t.p.h. per connection with maximum 2 connections in the harbour. Fresh water also supplied by barge to the tanker berths at the rate of about 30 t.p.h.

FUEL: All grades available. 24 hours notice desirable. Bunkering facilities are provided at each tanker jetty. One 16 in. pipe-line provides "C" fuel and intermediate fuel, and one 16 in. pipe-line provides marine diesel and gas oils. Fuel also available to vessels at anchor by barge.

GANGWAY/DECK WATCHMEN: Not necessary as security guards patrol port area 24 hours a day.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

SHIP CERTIFICATES: Deratisation Certificate required.

CUSTOMS ALLOWANCES: 50 cigars or 200 cigarettes or 1 lb. tobacco and one quart of spirits per man.

CARGO GEAR: Currently no cranes based permanently in harbour area. However, mobile cranes can usually be made available, although essential shipowners consult Agents before accepting heavy lifts requiring shore facilities for discharge

CREW IDENTIFICATION CARDS: Not required.

CONSULS: No foreign Consuls Freeport.

REPAIRS: Only minor repairs.

REPATRIATION: Facilities for crew changes and repatriation by air.

AIRPORT: Approximately 4 miles from harbour, served by following airlines: British airways, Eastern Airlines, Air Canada and Pan American Airways.

TIME: GMT minus 5 hours. Summertime, from April to October, GMT minus 4 hours.

HOLIDAYS: No cargo work in the port on following days: New Year's Day; Good Friday; Easter Sunday; Christmas Day. Work ceases 1700 hrs. on day preceding above holidays and commences 0800 hrs. on day after.

POLICE/AMBULANCE/FIRE: Police tel. 352-8333. Police station approximately two miles from harbour, and operates several radio-controlled vehicles. Ambulance tel. 352-6735. Ambulance based at Rand Memorial Hospital which approximately 7 miles from harbour. Fire tel. 352-8888. Fire Station approximately 7 miles from harbour and at present consists of 2 fire-trucks with auxiliary vehicles.

TELEPHONES: Can be placed on board at certain berths. There is a connecting charge.

AUTHORITY: Freeport Harbour Company, Ltd.

NASSAU, Bahamas: 25.05 N. 77.20 W.

DOCUMENTS:

(a) Inwards:

Description	*Customs*	*Immigration*	*Agents*	*Total*
1. Ship's Report Inwards (supplied by Agents)	2	—	—	2
2. Maritime Declaration of Health (supplied by Agents)	1	—	—	1
3. In transit passenger manifest	2	1	2	5
4. Disembarking passenger manifest	2	1	2	5
5. Crew Lists	2	—	1	3
6. Crew Curio List	1	—	—	1
7. Stores List	2	—	1	3
8. Gift Shop Inventory	1	—	—	1
9. Cargo Manifest	3	—	3	6

10. Derat. Certificate – should be available for inspection.
11. Clearance from last port to be given to Customs.
12. Immigration landing cards must be completed by all passengers. (These are supplied by Agents.)
13. Customs Declaration forms must be completed by all disembarking passengers. (These are supplied by Agents.)
14. Cargo Tally books – two per hatch where Nassau cargo is to be discharged.

If vessel's previous port of call was in Bahamas items 1, 2 and 10 need not be complied with. Item 9 – two cargo manifests supplied to Agents should show freight charges in detail.

Note: All non-Bahamian passengers finally disembarking at Nassau must be in possession of return ticket or have proper Bahamas Immigration Entry Permit.

(b) Outwards:

Description	*Customs*	*Immigration*	*Agents*	*Total*
1. Ship's Report Outwards (supplied by Agents)	2	—	—	2
2. List of embarking passengers	2	1	2	5
3. Manifest covering cargo loaded	3	—	3	6

If vessel clearing for another Bahamian port, item 1 does not have to be complied with, but copy of next port's manifest required.

PILOTAGE: Presently no signal station and Masters requested telegraph ETA at least 48 hours in advance with subsequent amendments as necessary to Agents, who will inform Pilots. Pilot normally boards in approximate position one mile North of Western end of Hog Island (Paradise Island). When port closed due bad weather a red flag will be displayed at Western end of Hog Island by day and red light in same location at night. Vessels may anchor in vicinity of pilot station where depth of water allows. There are four Pilots and boats are clearly marked "Pilot" and display international pilotage signals. Pilots are accustomed boarding by pilot ladder.
ANCHORAGES: Anchorage just off Nassau Harbour extends over area North and East of Western point of Hog Island to approximately half a mile off shore, where it becomes too deep.
RESTRICTIONS: No restrictions apart from adverse weather conditions or excessive draft which may make it advisable to enter on certain state of tide.
MAX. SIZE: No restriction length or breadth but safe draft is considered 35 ft. largest vessel to enter harbour to date is QE II. Safe draft cargo pier 25 ft.
HEALTH: Provided vessel healthy Customs grant free pratique on receipt international declaration of health form completed and signed. If any suspected disease or fever on board Master should advise Agent by cable, who will inform appropriate authorities and advise Master clearance procedure. Once vessel obtained free pratique in one Bahamas Port and proceeds another there are no further procedures at next port.
RADIO: Communications can be directed through Nassau Harbour Control, which came into existence on November 2, 1974, in an effort to control shipping and movements in and out of the harbour of Nassau.

VHF frequencies used are Channels 06, 09, 14, 16, 12, 68, 73, 74, 79, 20, 65 and 66.

Single Side Band frequencies used are 282.5 – 3,300.0 – 4,139.5 – 8,100.0 – 8281.2 – 12,421.0 – 16,565.0 kc/s.

AM Radio Ship-to-Shore frequencies are 2182 Emergency – 2638 and 2738 kc/s.
TUGS: Tugs normally join vessel at entrance to turning basin. Usual for vessels to provide tow line.
BERTHING: No specific requirements but due congestion essential that Agent is kept well informed of ETA.
BRIDGES: No bridges affecting entrance to main berths.
STEVEDORES: Master should include in ETA number gangs required and tons per hatch for discharge, as shipping documents do not always arrive in advance. Discharge rate approximately 10 t.p.h. 135 ton mobile crane available.
MEDICAL: Full medical services available. In serious cases requiring immediate attention Agent should be advised so that doctor may board on arrival.
TANKERS: Limited facilities provided for tankers at Clifton Pier on S.W. side of Island. Vessels moor to dolphins offshore and discharge through submarine pipe-line. Vessels proceeding Clifton Pier (unless otherwise advised) should pick up Pilot off Nassau and clear Customs.Only oil imports are for domestic purposes and there is no oil refinery. Max. draft Clifton Pier 36 ft.
DENSITY: 1025.
FRESH WATER: Available Prince George Wharf on old section but not yet provided on new deep water pier recently completed. Rate 10–15 t.p.h. from hose connections on dock. Public Water Department supplies hose end connections. Price approximately $3.70 per 1,000 gals. depending on amount required. No water barges available.
FUEL: No fuelling facilities available with exception of small quantities diesel which may be delivered by road tanker by prior arrangement – 103,000 gals. per tanker.
FIRE PRECAUTIONS: No special requirements. Vessels carrying explosives should notify Agent in advance so that Authorities may be advised.
GANGWAY/DECK WATCHMEN: Vessel to supply own watchman if required.
OPENING/CLOSING HATCHES: Roller hatches usually opened and closed by vessel's crew but older wooden hatches and tarpaulins handled by stevedores.
SHIP CERTIFICATES: Only certificate normally required for inspection is Derat. Certificate.
CUSTOMS ALLOWANCE: Quantity should be reasonably based on individual requirement and length of stay in port. Actual amount is at discretion of Customs Officer clearing vessel.
IDENTIFICATION CARDS: Not required.
CONSULS:
Based in Nassau
Haiti, Consul-General Alexandre Paul, PO Box N-666, Nassau.
United States of America, U.S. Ambassador for the Bahamas, H.E. Seymour Weiss, PO Box N-8197, Nassau.
Honorary Consuls (situated in the Bahamas)
Belgium, Mr. Michael Ramsey, PO Box N-52, Nassau.
Denmark, Lady Greta Oakes, PO Box N-1236, Nassau.
Ecuador, Mr. Norman Edwards, PO Box N-1262, Nassau.
France, Mr. Michael Ramsey, Consular General, PO Box N-52, Nassau.
Germany, Mr. Henry Kaufmann, PO Box 6225 E.S., Nassau.
Great Britain, Mr. C. J. Treadwell, PO Box N-7516, Nassau.
Greece, Mr. Andrew George Esfakis, Hon. Vice-Consul, PO Box 3248, Nassau.
Italy, Mr. Galliano Vouch, Consular Agent, PO Box N-4074, Nassau.
Jamaica, Mr. Adolph Thompson, Resident Commissioner, Collins Avenue, Nassau.
Mexico, Mr. W. Brunett Gray, Honorary Consul, Beaumont House, Nassau.
Norway, Mr. Bill Petters, Hon. Consul, PO Box N-8168, Nassau.
Sweden, Mr. Anders Wiberg, Honorary Vice-Consul, PO Box N-263, Nassau.
REPAIRS: Only limited repairs and requirements should be passed to Agent in advance of vessels arrival.
REPATRIATION: Crew changes can be arranged but accommodation expensive and not always available at short notice.
AIRPORT: Exremely good air services. At certain periods airlines become fully booked and suggested that reservations be made in advance.
TIME: Local time (Eastern Standard Time) 5 hours behind GMT. Daylight Saving Time 4 hours behind GMT applicable 27th April to 26th October.
HOLIDAYS: New Year's Day (1st January); Good Friday; Easter Monday; Whit Monday; Independence Day; Labour Day; Emancipation Day; Discovery Day (12th October); Christmas Day (25th December); Boxing Day (26th December); Cargo can be worked on all holidays except Labour Day and Christmas Day.
POLICE/AMBULANCE/FIRE: Police 24444; Ambulance 22221; Fire 919.
TELEPHONES: No facilities for placing telephones on board.
GENERAL: *(a)* Bonded Stores only available to passenger vessels regularly calling Nassau. *(b)* Passenger Vessels: Is of assistance to Agent to know how many passengers disembarking and how many in transit.
SERVICES: Most specialised services unavailable, e.g. radar, radio, gyro, tank cleaning, compass adjusting. If Agent given sufficient notice arrangements can be made for technicians to be flown from Miami.
SHORE LEAVE: No limitations.
AUTHORITY: Port Director, Port Department, Nassau.

SOUTH RIDING POINT: 26.37 N. 78.14 E.

OPERATORS: Burmah Oil Bahamas Ltd.
LOCATION: The terminal is situated at South Riding Point on the South coast of Grand Bahama Island, about 35 miles East of Freeport.

At a distance of 4,000 ft. offshore, the Sea Island mooring dolphin extremities are positioned thus:
No. 1 Mooring Dolphin: 26° 36′ 43.7″ N. 78° 13′ 49.5″ W.
No. 6 Mooring Dolphin: 26° 36′ 46.7″ N. 78° 13′ 33.6″ W.
DOCUMENTS: Incoming:
Prepared by Ship:
3 copies of Declaration Form Y14.
3 Crew Lists.
2 Stores Lists.
2 Crew Declaration forms.
4 copies of Bills of Lading.

In addition the ship will have to supply a clearance from last port of call, Deratization Certificate, vaccination lists and the usual ships papers viz: Register, Safety Radio, Safety Equipment, Loadline Certificate. Oil Record Book must be up to date and available for inspection.
Prepared by Agent:
1 Copy of Maritime Declaration of Health.
2 Copies of Inwards Report.
Customs and Immigration: After pratique has been granted, an immigration and customs inspection is carried out. The Master will be required to furnish particulars including:
(a) Name and nationality of vessel.
(b) Last port or ports of call.
(c) Nature of cargo.
(d) Number of crew.
(e) Number of passengers.
(f) Port of destination and name of Agent.
(g) No. of days since departure from last loading/unloading port.

Copies of the crew list and stores remaining on board will be required before clearance is granted.

Masters of vessels must take every precaution to ensure that no drugs, wine or alcoholic liquors are supplied, sold or conveyed to any person at the terminal.
Outgoing:
Prepared by Agent:
4 Copies of Outward Cargo Manifest.
2 Copies of Outwards Report.
Port Clearance Certificate.

In order to comply with Immigration regulations, crews should be checked before sailing and any missing seaman reported to the Agent. In the case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances if any, and instructions for repatriation.
Documentation and Clearance:

On completion of loading/unloading, vessels will normally be unberthed immediately and stand off to await completion of harbour formalities and cargo documents.

If a berth is not required immediately after loading/unloading has been completed, vessels may be allowed to remain alongside the berth until final documentation and formalities have been completed.

Early Departure Procedure (EDP) is available on request.
PILOTAGE: Berthing and operational instructions will be given by Burmah Control on vessel's arrival at South Riding Point.

A vessel will be deemed to have arrived when in a position, 3

miles South of the sea island and in this position the Berthing Master will board from a tug.

Before a vessel is allowed to proceed the Master will be required to sign the following forms:

(a) Conditions of use of sea berths and inner harbour at South Riding Point.
(b) Tug Requisition. The Master will also be provided with copies of the Fire and Safety Regulations and a Ship/Shore Safety Check List Form.

APPROACHES: Vessels approaching South Riding Point from the Eastern entrance of Northwest Providence Channel are recommended to make departure from Great Stirrup Cay Lighthouse Gp. Fl. (4) 15 sec. 14m. and head directly for South Riding Point Terminal.

Preliminary extensive soundings by U.S. Hydrographic Department indicate no underwater obstructions up to 100 fathom line within Northwest providence Channel.

Landmarks: Conspicuous towers are sited adjacent to South Riding Point Terminal in the following positions:

1. Position: 26° 36′ 40″ N., 78° 20′ 51″ W. Steel framework tower painted red and white, 175 ft. above sea level.
   Light: Air Occ. R. 4 sec. 1 F.W. 2 F.R. vert.
2. Position: 26° 36′ 51″ N., 78° 19′ 25″ W. Steel framework tower painted red and white, 407 ft. above sea level.
   Light: Air Qk. Fl. R. 2 F.R. vert.
3. Position: 26° 37′ 06″ N., 78° 18′ 47″ W. Steel framework tower painted red and white, 211 ft. above sea level.
   Light: Air Occ. R. 8 sec. 1 F.R. vert.
4. Position: 26° 37′ 44″ N., 78° 14′ 20″ W. Steel framework tower painted red and white, 241 ft. above sea level.
   Light: Air 2 F.R. vert.
5. Position: 26° 42′ 44″ N., 78° 09′ 27″ W. Steel framework tower painted red and white, 270 ft. above sea level.
   Light: Air Occ. R. 3 sec. 1 F.R. vert.

The F.6M. light exhibited from a white painted wooden mast close East of High Rock Settlement in position 26° 37.3′ N., 78° 16.1′ W. is kerosine lit and is therefore unreliable.

A conspicuous parabolic dish antenna is situated in position 26° 37′ 30″ N., 78° 17′ 58″ W. The antenna has a face diameter of 85 ft. and maximum height above sea level is 134 ft.

The large buff-painted oil storage tanks are visible behind the sea island. The terminal frontage is backed with pine trees and scrub.

Lights:

A light, Fl.R. 3 seconds, is exhibited from a height of 140 ft. above sea level on top of the sea island control building on the central platform, whilst NOs. 1 and 6 mooring dolphins are marked by quick flashing red lights.

The inner harbour breakwater entrances are marked by red and green flashing lights (2 seconds flash, 2 seconds eclipse).

Two leading line (range) towers mark the 300 ft. wide approach channel centre line. Lights with clear lenses, each 2.5 seconds flash, 0.5 seconds eclipse, are exhibited from the top of the towers, whose heights are 25 and 35 ft. respectively.

Buoys:

Red and Black Buoys mark the outer channel entrance to the inner harbour whose light characteristics of red and green respectively are each 2.0 seconds flash, 2.0 seconds eclipse.

Four international orange buoys with quick flashing white lights mark the contour of 50 ft. sea bed between the sea island and the shore, in the following positions:

No. 1 Buoy 26° 36′ 12″ N. 78° 15′ 03″ W.
No. 2 Buoy 26° 36′ 41″ N. 78° 14′ 07″ W.
No. 3 Buoy 26° 36′ 49″ N. 78° 13′ 50″ W.
No. 4 Buoy 26° 36′ 56″ N. 78° 13′ 23″ W.

ANCHORAGES: Three white buoys mark the seaward boundary of a designated anchorage area in the following positions:

West Anchorage Buoy: Quick Flash (Green) 26° 35′ 51″ N. 78° 17′ 27″ W.

Mid Anchorage Buoy: Quick Flash (White) 26° 35′ 57″ N. 78° 16′ 19″ W.

East Anchorage Buoy: Quick Flash (Red) 26° 36′ 00″ N. 78° 15′ 33″ W.

These anchorage buoys are laid in 15 fathoms and vessels wishing to anchor should drop their anchors in the transit line of the buoys which will provide ample swinging room for typical shuttle vessels of up to 100,000 tons d.w.t., in ballast conditions. No attempt should be made to anchor Eastward of the East Anchorage Buoy.

Whilst holding ground is considered good and is of sand, limestone and soft coral, vessels should maintain their engines at short notice readiness, especially during periods of strong onshore winds.

In all cases, vessels wishing to anchor should contact the duty Berthing Master, who will advise on anchorage procedures and whose services are available for pilotage on request and at operational convenience.

Anchorage or the lowering of anchors is prohibited at the sea island berths.

Vessels wishing to stand off until berth readiness are recommended to use the Westerly aerial tower (26° 36′ 40″ N. 78° 20′ 51″ W.) as Westerly boundary of standing off ground in order to avoid congestion with Freeport traffic.

HEALTH: On completion of mooring after the gangway is in place, health authorities will board the vessel and grant pratique, subject to no infectious diseases having been reported on board during the voyage.

RADIO: Vessels loading for South Riding Point should communicate ETA date to the terminal immediately after clearing loading port.

The terminal is linked to Bahamas Telecommunications Company (BATELCO) which in turn is linked to Nassau Marine (Identification VPN2).

Variations of this original ETA date should be communicated throughout the voyage.

72 hours prior to arrival at South Riding Point, Masters are requested to inform the terminal of details of cargo, maximum draft, manifold connections, quantity of ballast and deballasting time when applicable. The Master should also directly inform his agent of medical, repairs and travel requirements.

24 hours prior to arrival, Masters should confirm or amend previous messages.

Circumstances may arise where loaded VLCC's may be requested to arrive at times and dates so as to allow of free and unimpeded access through Northwest Providence Channel entrance direct to a planned berth vacancy at the terminal.

Vessels proceeding to South Riding Point Terminal to load, should communicate their ETA immediately upon clearing departure port and confirm or amend this information 24 hours prior to arrival.

VHF: Station Burmah Control located at the terminal is equipped with VHF radio maintaining continuous watch on Channel 16. After making successful contact, vessels will be required to change to Channel 14, where information will be exchanged regarding berthing, manifold connections, quantity of ballast and deballasting time required.

The terminal is also equipped with approved explosion proof VHF walkie-talkie radio sets and vessels will have this additional communication with the terminal after boarding by the Berthing Master.

TUGS: 4×4,200 h.p. diesel tugs will be stationed at the terminal. Each tug has a bollard pull of 45 tons.

All tugs are equipped for fire fighting and can deliver water at the rate of 2,000 gallons per minute through direct or fan spray nozzles. The tugs have foam making and oil dispersant equipment.

The tugs are owned and operated by Nassau Towing Company.

(Note: These tugs are now building and until they are ready, tugs with equivalent performance will be available.)

Small Craft: The terminal has one diesel engined personnel/general purpose carrier for up to 25 persons and three line handling boats. When not in use by terminal personnel the carrier is available for hire.

Small Craft Landing: A landing is situated on the West side of the platform of the oil berths and there are additional landing stages at mooring dolphins Nos. 1 and 6.

BERTHING/UNBERTHING: *Ballast Water:* Ballast water can be received in the terminal oil and water separation tanks through one of the submarine or onshore lines at rates of up to 5,000 t.p.h. On no account may ballast water be otherwise discharged in territorial waters.

Whilst the amount of ballast carried is at the Master's discretion, vessels are requested to arrive ready for berthing in the following approximate ballast conditions:

30,000 – 50,000 tons d.w.t.: Forward draft 18′ Aft draft 24′
50,000 – 75,000 tons d.w.t.: Forward draft 20′ Aft draft 28′
75,000 – 100,000 tons d.w.t.: Forward draft 24′ Aft draft 32′

During ballast operations at the berths, strict observance of rules and regulations governing the opening of sea valves is necessary and in correct sequence with ballast pump commencement to eliminate the risk of oil spills. Vessels may be required to ballast concurrent with discharge and throughout all cargo operations, maintain draft and trim conditions consistent with prevailing weather conditions, on the advice of Berthing Master.

Tugs: Tank lids and openings should be securely closed before tugs are made fast. Tug utilization in berthing operations will be as required by the Berthing Master who will meet the vessel in position as directed off the sea island.

Masters of calling vessels are reminded of their obligation to comply with statutory Pilot ladder rules and associated safe access regulations.

Mooring System: The Berthing Master will advise the Ship's Master of minimum mooring requirements.

The berths have double and triple quick release hooks of 150 and 100 tons capacity. Mooring and berthing dolphins have electrically-operated capstans with 2 ton line pull at 100 ft. per minute in association with mooring assemblies.

Berthing Limitations: Various combinations of wind, sea and tidal conditions, also the size, length, ballasted trim and handling qualities of the vessel can affect the decision to berth a vessel at the terminal. All these factors have to be evaluated before a berthing decision is made.

Ship Connection: The positioning of the vessel's deck manifold in relation to the loading arms on the berth must be carried out to a close tolerance to the requirements of the Shift Superintendent or his deputy and as directed by the Berthing Master.

Upon completion of berthing, the Shift Superintendent will confirm the crude oil/ballast operations with the Master or Chief Officer and loading arm connection will be made to ship's manifold by the sea island crew.

Oil measurement representatives will attend to ullaging and sampling and/or inspection of cargo tanks in vessels discharging or loading and the Shift Superintendent or Berthing Master will certify that the vessel is ready in all respects for cargo/ballast operations.

Unberthing: On completion of all measurement/inspection

processes by the oil measurement representative in company with the appointed Ship's Officer, the vessel will vacate the berth.

Tug attendance and numbers will be dependent on weather conditions and on the advice of the Berthing Master.

BERTHING FACILITIES: The sea island has two berths interconnected for tanker to tanker transfer and to the shore tanks and inshore berths by 2×36 in. diameter submarine lines.

The island is 1,470 ft. long with a central platform 48 ft. above datum and 3 mooring dolphins 25 ft. above datum on each side.

The berths are equipped with a Sonar Doppler system for docking assistance with clock meter display indicators and associated lights showing distance off berth and speeds of approach. Current meters are sited on the sea island together with meteorological instruments, television surveillance and public address system.

There are 4 fixed and 4 oscillating foam/oil dispersant monitor units on the platform.

The berths have a sacrifical anode cathodic protection system and ships that have an impressed voltage cathodic protection system should it turn off in the vicinity of the sea island.

Berth No. 1: Tankers of 50,000 to 440,000 d.w.t. can dock at this outer berth which is equipped with a self levelling and articulated gangway and 4×16 in. diameter Chicksan loading arms with quick release couplings in sizes 16, 14 and 12 in. diameter.

Water depth at the berth is 100 ft.

Berth No. 2: Tankers of 35,000 to 100,000 d.w.t. can dock at this inner berth which is equipped with a self levelling and articulated gangway and 4×12 in. diameter unloading/loading arms with quick release couplings in sizes 12, 10 and 8 in. diameter.

Water depth at the berth is 85 ft.

Inshore Berths: Two berths are presently under construction in the inner harbour and when completed will each accommodate tankers up to 850 ft. LOA for harbour depth of 42 ft.

Small Boat Harbour: This harbour is at the S.W. corner of the inner harbour and has a water depth of 25 ft. The harbour is used by the Company's tugs and small craft.

LOADING/UNLOADING: *Procedure:* Loading or discharging shall not commence until the Master or Chief Officer has informed the Shift Superintendent or Berthing Master that all necessary valves are open, that the vessel is in a proper condition to discharge or receive cargo and that all regulations are being and will be observed.

Pumping Rates: Very high unloading and loading rates of up to 15,000 t.p.h. and 6,000 t.p.h. respectively at one berth can be achieved at the terminal and in view of these high rates it is absolutely essential that careful supervision is exercised by officers of vessels and by terminal staff while pumping operations are in progress.

Control: A responsible ship's officer is required to be on duty continuously. The Shift Superintendent is responsible for all terminal operations.

The terminal operators in the control buildings offshore and onshore continuously monitor the cargo transfer rates and status of the onshore tanks or shuttle tankers receiving cargoes direct from VLCC's. The Ship's Officer will be advised immediately of changes necessary in the pumping programme.

The Terminal Operator in the offshore control room will activate all cargo movements from the tanker's manifold to or from shore tanks/recieving shuttle tankers.

Mooring Lines: It is the responsibility of the Ship's Master to ensure that all mooring lines are kept tight. Berthing Masters and terminal operators will constantly check a vessel's moorings. Berthing Masters at any time may direct lines to be heaved tighter or slackened off as circumstances warrant.

Tension Winches: When a vessel is fitted with tension winches, the latter must be set to manual operation and the brakes securely applied.

Spills and Pollution: If at any time an overflow of crude oil occurs loading/unloading will be suspended immediately and will not be resumed until the oil is removed from the deck of the vessel and/or from the surface of the sea and any damage is repaired and no further danger exists.

The responsibility for any oil entering the sea due to a burst pipe or hose or overflow on or from the ship must rest with the vessel concerned, which must accept liability for all claims for damage likely to arise as a result of such spillage.

It is stressed that during loading operations the terminal control will immediately slow-down the loading rate on receipt of a request from the Ship's Officer in charge of loading.

Similarly during unloading operations the Ship's Officer must advise terminal control of all changes in offloading rates so that action as necessary can be taken at receiving vessels or shore tanks.

All major spillages of oil must be reported immediately to the Berthing Master or Shift Superintendent either of whom will advise the Control Operator to contact the Fire and Safety Officer who will mobilize men and equipment to take appropriate action.

If the spill is due to faulty equipment or material on the vessel or to negligence on the part of ship's personnel, the terminal shall be indemnified for any expenses incurred in connection with the preventive action taken.

Minor Spills: Spillage trays or other receptacles should be placed under the flange connection at the vessels manifold and under any leaking joints or valves. Oil absorbing material in suitable quantity should be placed at strategic places where leaks or minor spills are liable to occur.

FRESH WATER: Not available.

FUEL: Not available.

Arrangements are in hand for the supply of lubricants on an emergency basis and Masters will be advised when supplies are available.

MEDICAL: The Rand Memorial Hospital in Freeport is open on a 24-hour emergency service and two medical clinics, Lucayan and Antoni are open during regular office hours.

TIME: Bahamian Standard Time is 5 hours behind GMT.

REPAIRS: Facilities for minor repairs to electrical, radio and mechanical equipment are available in Freeport but should these be required Masters should give as much advance notice by radio as possible.

TELEPHONES: The sea berths have a telephone connection to the shore and to the Freeport exchange.

STORES: The terminal cannot supply provisions of any description but it may be possible through local contractors to arrange for small quantities of fresh provisions from cold storage if at least 72 hours notice of requirements is given. Almost all food in Grand Bahama is imported from the United States.

LAUNDRY: Limited services are available in Freeport but because of the distance from the terminal (35 miles) and the relatively short time at berths, Masters are advised not to depend on such services.

WEATHER: From November to May, average temperatures in the 70's Fahrenheit prevail, with low humidity and little rain. From June to October, average temperatures rise into the 80's with relatively high humidity and rainfall of between 5 and 9 in. per month.

SEA CONDITIONS: Prevailing winds are concentrated from N.E. through East to South predominantly up to force 3, whilst winds in excess of force 5 occur in frequency over 10% of the year, are of short duration, usually in association with squalls, and seldom last longer than 24 hours.

Sea and swell conditions in excess of 6 ft. occur on average up to 40 days of the year.

Tidal ranges above Mean Lower Low Water Springs, which is chart datum for Bahamian waters are as follows:

High Water		*Low Water*	
Mean Spring	Mean High	Mean Spring	Mean Low
3.6 ft.	3.4 ft.	0.6 ft.	0.9 ft.

Currents in terminal vicinity run predominantly East and West, seldom exceeding 1 knot.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bahrain

MINA SULMAN: 26.12 N. 50.37 E.

TRAVEL TO SAUDI ARABIA: See "Sitra".

REGISTRATION: A scheme of registration of vessels arriving in Bahrain for discharge of cargo has been introduced.

Agents should indicate to the Harbour Master prior to arrival whether or not an expected vessel wishes to avail itself of the registration scheme.

Should the vessel wish to register her turn it will be boarded by a representative of the Directorate who will inspect the cargo plan, and may inspect the cargo in the vessel's holds, to ascertain that all the regulations are complied with. On being satisfied that all conditions have been complied with the vessel will be registered as having arrived and will be given an estimated date and time of berthing at Mina Sulman. The vessel may then proceed to an alternative port or ports until required for berthing at Mina Sulman.

The following registration regulations must be complied with by all vessels wishing to register at the port of Mina Sulman:

1. No vessel will be considered for registration unless all Bahrain cargo is clear for discharge at time of registering.
2. If a vessel proceeds to another port after registration for discharge of cargo, no Bahrain cargo may be shifted to facilitate the discharge of cargo in the alternative port.
3. Registration may take place at Sitra Anchorage within Mina Sulman port limits between 0600 hrs. and 1800 hrs. Vessels arriving outside of those hours will be listed and registered in order of arrival. Note: Arrival shall mean time of passing Sitra Beacon inwards.
4. A fee of B.D. 100 will be charged on every vessel registered.
5. Any false declaration of stowage of cargo will result in loss of privilege of registration and may also incur a heavy fine for false representation.
6. Failure of any registered vessel to be present within Mina Sulman port limits and in all respects ready to proceed alongside the allocated berth at the time when the berth is allotted will result in cancellation of the registration. The next on turn vessel will then be allocated the berth and the defaulting vessel will be required to re-register.
7. The anticipated berthing date given to the vessel at the time of registration is to be considered only as an estimated date and time and may be liable to change. The Directorate will not be responsible for any loss incurred by alteration of such dates.

DOCUMENTS:

International Declaration of Health.

5 Crew Lists.

Ship's Report (given by Customs on arrival).

Valid Smallpox Vaccination for all crew members.

Agents to submit cargo manifest 3 days before vessel's arrival.

Exports to Bahrain: Shipping documents for exports to Bahrain should include a certificate of origin bearing the stamp of a Bahrain embassy or consulate, where such representation does exist. Alternatively the stamp of any other Arab embassy or consulate will be acceptable.

Abeyance with the above regulation will help process the clearance of goods without delay.

PILOTAGE: Mina Sulman Pilots board either at Sitra Anchorage (see "Sitra") or by special arrangement at Outer Middle ground buoy. Pilotage compulsory except for Naval vessels and small locally-owned craft whose Masters are familiar with the port and control.

Port equipped with 3 tugs, each of 800 h.p., 3 pilot cutters and a number of mooring launches and work boats.

Pilot cutters mostly black with white-painted wheel-house and cabin accommodation.

ANCHORAGE: Sitra Anchorage, where Pilot boards, approx. location 26° 10.5′ N,, 50° 41.25′ E. Depth of 42 ft.

MAX. SIZE: Vessels up to 550 ft. in length commonly handled, max. safe draft alongside, 27 ft. Depth in Mina Sulman Harbour, 31 ft.

Vessels with draft up to 29 ft. 6 in. able to enter Mina Sulman dredged channel near time of high water and on a few occasions vessels with a draft of 30 ft. have been handled. Vessels of less than 25 ft. draft may generally enter or leave at any state of tide and also during dark hours unless there are factors detrimental to safe navigation.

Also see "Developments".

HEALTH: Port Health Authorities board vessel on arrival at berth alongside Deep Water Jetty and grant pratique.

RADIO: Vessels intending call Mina Sulman should advise Agents via Bahrain Radio, call sign A9M, their ETA, draft, hatch distribution and any other requirements, giving as much notice as possible.

VHF: Vessels equipped with VHF should, when within range, contact Mina Sulman Harbour Office on Channels 6 or 16 which have frequencies of 156.30 and 156.80 respectively.

TUGS: Will usually join vessel between Nos. 7 and 8 Channel Buoys during final approach to Deep Water Jetty.

BERTHING: Arrangements are made with Harbour Master by ship's Agents for necessary berthing as required. Six berths available, of which one berth reserved for Navy vessels.

Generally, vessels berth during daylight hours only, but may leave at any time between 0600 and 2300 hrs.

GRAIN HANDLING: Two portable pneumatic suction/blowing units are used. Capacity 75 t.p.h. each. Wheat is discharged into 20-ton trailers, which takes about 8 to 12 minutes for each trailer.

MEDICAL: Upon application to ship's Agent, the medical examination of crew members can be arranged. Personnel will either be sent to private doctor or to Public Health Department as circumstances dictate. Serious cases will be referred to government hospital doctor.

FRESH WATER: Well water available and can be delivered on berths at Deep Water Jetty at rate of approximately 20 t.p.h. per hose. Fresh water also available by barge with capacity of 300 tons.

BUNKERS: Bunkers available Mina Sulman and provided by barge of 8,700 barrels capacity, which is owned by the Bahrein Petroleum Company. All usual grades of commercial oil available.

GANGWAY/DECK WATCHMEN: Not customary to employ deck watchman.

IDENTIFICATION CARDS: These cards necessary for any crew member wishing to proceed ashore. Identification card is surrendered to Immigration Authorities at main entrance to port in return of a pass. On return to port, the pass is surrendered and seaman's identity card returned to him.

REPAIRS: Good facilities for both hull and engine repairs which can be effected by the two principal slipway companies. Facilities exist to receive single vessels of 1,000 d.w.t., and a tower crane capable of a 15 tons lift at 40 ft.

REPATRIATION: It is possible for whole crews or just individual crew members to join or leave vessels at Bahrain. As much notice as possible should be given to Agents to enable arrangements to be made for their reception, hotel accommodation and transportation.

AIRPORT: Bahrain International Airport regularly served by main international airlines, with frequent services to Europe, U.S.A., Far East, and Australia. Also frequent inter-Gulf flights.

TIME: GMT plus 3 hours.

HOLIDAYS: Public holidays in accordance with Muslim calendar as follows: 3 days during led Al Fittr; 3 days during led Al Adha; 3 days during Muharram; 12th R'Awal Prophet's Birthday; Accession of H.H. The Ruler, 16th December; 25th December; 1st January. Apart from 6 days, two during each of the religious anniversaries, all holidays will be worked in the port as on Fridays, the Sabbath day.

TELEPHONES: Can be provided at each berth on Deep Water jetty at charge of BD's 1,200 fils per day per phone (approx.). In case of emergency, dial 79 for ambulance; 77 for Duty Police Officer; 75 for Fire Brigade.

SERVICES: Bahrain well provided for services including repairs, stores and supplies, fumigation surveys, adjustments, radar and gyro compass repairs, professional diving, and underwater brushing.

SHORE LEAVE: Permitted.

DEVELOPMENTS: Dredging and reclamation in progress in preparation for building a dry-dock, (Arabian Gulf Repair Yard).

The dock is expected to be completed in 1977 and will handle tankers up to 450,000 d.w.t.

Area of Working: In shoal waters from 26° 11′ N., 50° 40′ E. to 26° 14′.5 N., 50° 39′.4 E.

Six new deep-water berths under construction.

Mina Sulman has been engaged in a programme of re-designing its operational methods and preparing for the Port development programme which will be completed in 1979. By September 1977 it is expected that two more deep-water berths will be in operation, allowing vessels up to 20–25,000 tons with a draft of 36 ft. to occupy these berths.

The other two similar berths will be commissioned by September 1978, and the last two berths will be ready by September 1979 to make a total of six more berths provided with all facilities.

A small ship harbour will also be in service taking small craft up to a draft of 18 ft.

Dredging is taking place at the end of the existing jetty for the installation of 2×250 ft.×100 ft. portable jetties. These jetties will be in position and in service by the end of October 1976, and will accommodate two vessels up to 15,000 tons with a draft of 30 ft.

In addition to the present "jack up" berths already in operation, another two similar berths will be operational mid 1977.

AUTHORITY: Director General of Customs and Ports, Bahrain.

AGENT: See "Sitra".

SITRA: 26.09 N. 50.40 E. **(See Plan)**

TRAVEL TO SAUDI ARABIA: Travellers are permitted to travel from Bahrain to Saudi Arabia, *provided: (a)* They hold a valid International Vaccination Certificate showing that the holder was immunised at least 5 days before travelling to Saudi Arabia, but not more than 6 months previously; *(b)* that any traveller proceeding to Saudi Arabia from Bahrain should have taken the prescribed doses of Tetracycline over the 48-hour period immediately before travelling. The fact that the passenger has taken the Tetracycline should be certified by the Bahrain Health Department.

PORT LIMITS: A vessel is normally considered to be an "arrived vessel" when the vessel passes due South of Sitra Beacon, unless, in the case of large vessels, she has been instructed to anchor by company officials in the deep water S.E. of No. 27 Buoy.

The Port of Sitra is an open roadstead situated on the N.E. side of Bahrain. Some protection is afforded to the anchorage during the prevailing N.W. wind by Muharraq Island and outlying reefs which lie to the North of the anchorage.

During Southerly winds some protection is also afforded by outlying reefs and sandbanks which lie to the Eastward of Bahrain Island. Prolonged winds from an Easterly or S.E. direction make the anchorage uncomfortable for small vessels.

OPERATORS: The Bahrain Petroleum Co. Ltd., Awali, Bahrain. Cables "Bapco Bahrain".

DOCUMENTS: Crew list 3 copies. Passenger list 3 copies. Customs Declaration 2 copies. Health Declaration 2 copies. Log Book for Inspection by Customs Officers.

Cargo and bunker documents are delivered to the vessel as soon as possible after the vessel has been cleared on quantity and quality. Delays are sometimes incurred. As a result, the Company reserves the right to unberth a vessel and deliver documents by launch so as to minimize berthing delays to subsequent vessels.

Early Departure Procedure (E.D.P.) is available on Master's request.

PILOTAGE: Not normally provided between Bahrain Light Vessel and Sitra Anchorage. For vessels navigating Sitra Deep Water Channel with drafts in excess 40 ft. Mooring Master boards vessel on arrival Sitra Beacon if berth available. If Pilot does not approach vessel arriving, vessel should anchor in anchorage. Pilot will board from a tug or launch exhibiting International Pilot flag by day and lights by night.

Company Mooring Masters will advise and assist vessels in berthing, unberthing, mooring and navigating in the port of Sitra, and shall, in all cases, be present on board vessels coming alongside or leaving Company and Alba wharves.

The services of the Company Mooring Masters are mandatory for berthing and unberthing, and are provided without charge.

If no berth is available, vessels should anchor in the prescribed anchorage until such time as a berth is available. Every endeavour will be made to give the Master berthing instructions prior to the boarding of the Mooring Master, and to this end, Masters are requested to maintain a continuous watch on the VHF. In cases where it is impossible to give prior berthing instructions, the Master and Chief Engineer are requested to co-operate with the Company by getting the vessel's engines ready for use with the least possible delay.

APPROACHES: Without accepting any responsibility, following suggestions made by Bapco marine staff, for Masters not familiar with approaches to Sitra. Courses inbound will depend upon draft. Vessels wishing utilise "Deep Water Departure Channel" should follow reciprocal of courses described for "Deep Water Departure Channel". Vessels with drafts less than 30 ft. requested to *Keep Clear* of this channel, and use "Sitra Inward" Buoy as follows.

(a) *Under 30 ft. Draft*

(i) From position (Lat. 26° 27.8′ N. Long. 51° 00′ E) 2.5 iles S.E. of No. 3 Beacon (Lat. 26° 28.5′ N. Long. 50° 57.4′ E) course should be set to position 0.75 mile North of "Sitra Inward" Buoy (Lat. 26° 21.2′ N. Long. 50° 49.7′ E) leaving "Caisson Wreck" Buoy (Lat. 26° 24.2′ N. Long. 50° 52.7′ E) at least 0.5 mile to starboard.

(ii) From position 0.75 mile North of "Sitra Inward" Buoy course should be set towards No. 16 Buoy (Lat. 26° 12.9′ N. Long. 50° 46.3′ E).

(iii) When vessel has reached a position with No. 16 Buoy, 1.5 miles ahead, course can be adjusted to due South, passing westwards of "Vidal" Buoy (Lat. 26° 14.1′ N. Long 50° 47.2′ E) until "Sitra Beacon" bears due West. Course can then be altered to pass South of No. 18 Buoy (Lat. 26° 10.3′ N. Long. 50° 43.9′ E), and thence to Sitra Anchorage, thus keeping clear of the deep water channel.

(iv) "Sitra Beacon" located at South end of North Shoals (see "Pilotage" and "Anchorage").
If a Company Mooring Master has not met the vessel, proceed to an anchorage North of an imaginary line between "Sitra Middle Ground Buoy" and "Sitra Beacon". This line delineates the Southern limit of the anchorage, the departure channel is then kept clear for deep-drafted vessels entering or leaving the port.

(v) The Northern extremity of the South Shoals is marked by "South Shoals Beacon" which should be passed on the vessel's port side. This beacon lies approximately 1.4 miles S.W. from Sitra Beacon.

(vi) The colours of Beacon structures and buoys are often obliterated by guano.

(b) *Deep Water Departure Channel*

(i) Following "Alteration of Course" Positions, based upon radius of turn of 5 cables. This may necessitate an increase in Engine Revolutions, together with Full Helm, in some vessels.

(ii) The Company Mooring Master unberthing the vessel will normally leave vessel after having crossed Sitra Middle Ground Bar; and with the vessel proceeding to pass 2 cables South of "Sitra Beacon" (Fl. 3.3 sec.) and close North of No. 18 Buoy (Qk. Fl. R.).

(iii) When No. 18 Buoy comes abeam, course should be altered to 090° (T) which will bring Sitra Beacon dead astern, bearing 270° (T).

(iv) As No. 27 Buoy (Qk. Fl. W.) comes abeam to port, course should be altered to 022° (T), until Buoys 21, 23 and 25 are sighted in line, bearing 344° (T), whence course should be altered to 344° (T).

(v) On course 344° (T) Buoy No. 25 (Fl. 5 sec.) and Buoy No. 23 (Int. Qk. Fl.) will be passed close on the port side and Buoy No. 16 (Fl. R. 6 sec.) a "Middle Ground Mark" on the starboard side.

(vi) As No. 21 Buoy (Gp. Fl. (3) 5 sec.) comes abeam to port, course should be altered to 015° (T), which should bring Buoy No. 12 dead ahead and Buoy No. 21 dead astern. The bearings of these buoys should be watched closely to gauge and correct for cross set which is sometimes quite strong on this course and the next. On this course No. 14 Buoy (Fl. R. 10 sec.) will be left to starboard.

(vii) On No. 19 Buoy (Fl. 3 sec.) coming abeam, course should be altered to 002° (T) bringing Buoy No. 15 (Occ. 5 sec.) dead ahead. Buoy No. 12 (Fl. R. 2 sec.) will then be left close to starboard and No. 17 Buoy (Qk. Fl. W.) will be left to port.

(viii) In order to pass over a cable eastwards of Buoy No. 15, course should be altered to 016° (T) as Buoy No. 10 (Gp. Fl. (3) R. 10 sec.) comes abeam to starboard and then altered to 356° (T) as Buoy No. 15 comes abeam to port. This course would pass 3.5 cables West of Bahrain Approach Beacon (Gp. Fl. (2) R. 10 sec.). It may be advisable to reduce engine revolutions shortly after steadying on course 356° (T), in order to be able to increase if required to provide better steerage on rounding the beacon.

(ix) When the Bahrain Approach Beacon bears 051° (T) course should then be altered to 051° (T). As this heading is approached, it should be found that Buoys No. 8 (Fl. R. 2 sec.) and No. 6 (Gp. Fl. (3) R. 6 sec.) are in line to starboard, as Bahrain Approach Beacon comes abeam at 2.5 cables, and then should commence to open. Buoys No. 13 (Int. Qk. Fl.) and No. 11 (Qk. Fl.) are parallel to the course on the port side of the vessel, give clearance on the 43 ft. patches and give the extent of the bar which should be traversed at Slow Speed.

(x) On No. 11 Buoy coming abeam to port, course should be altered to 054° (T) passing between No. 9 Buoy (Fl. 10 sec.) and Buoy No. 4 (Qk. Fl. R.), followed by Buoy No. 7 (Fl. 5 sec.) to port.

(xi) When Buoy No. 2 (Gp. Fl. (2) R. 10 sec.) bears East, course should be altered to 071° (T) to pass close South of Buoy No. 5 (Fl. 3 secs.).

(xii) Buoy No. 5 should be close abeam to port, when the course is altered to 057° (T) and speed reduced to cross the spit which extends in a southerly direction from No. 3 Beacon (Fl. 6 sec.) in a minimum depth of 44 ft. at Chart Datum.

(xiii) When Buoy No. 1 (Fl. 1 sec.) bears 040° (T), course should be altered to 040° (T) bringing the Bahrain Light Vessel (Gp. Fl. (3) 20 sec.) on the starboard bow. One and a half miles after Buoy No. 1 has been left to port, the minimum depth of water is greater than 50 ft., and it is safe to go Full Ahead.

(xiv) Masters can expect to have to make adjustments from time to time, to the recommended courses, due to set. Effects of tide and current should be watched for at all times.

ANCHORAGE: Within Port of Sitra vessels must anchor North of imaginary line between Sitra Beacon and Sitra Middle Ground outer buoy, order keep departure channel clear. Good holding ground in about 8 fathoms. Vessels *must not* obstruct fairway or approaches to wharves by anchoring South of above-mentioned imaginary line. Northern limit of anchorage marked by North Shoals Beacon on 5-fathom line. Due presence of pipes and power lines, anchoring or use of anchors prohibited in vicinity of or between No. 1 (Island) Wharf and No. 2 Wharf except upon advice of Company Mooring Master.

If the anchorage is congested or with vessels over 100,000 d.w.t. they should anchor in the area to the South of No. 27 Buoy.

RESTRICTIONS: Berthing carried out night and day. Merchant vessels carrying explosives not permitted entry Sitra Anchorage unless permission has been granted and anchorage allocated. Such vessels advised anchor in position 2 miles S.E. of South Shoals Beacon.

The Deep Water Channel between Sitra Anchorage and Bahrain Light Vessel has minimum depth of 44 ft. below Chart Datum. This permits unrestricted use of channel for vessels drawing up to 40 ft. Drafts up to 44 ft. permitted by utilisation of tidal range over shoaler areas. Additional channel for drafts up to 30 ft. provided to S.E. of main Deep Water Channel. The purpose of this channel is to keep main deep-water channels free for deep-drafted vessels.

Masters who intend to utilise Deep Water Departure Channel with drafts in excess of 40 ft. are requested to advise port Captain, Sitra, not later than 48 hours in advance.

Masters of departing vessels requiring utilise rise of tide, to cross bar N.E. of Bahrain Approach Beacon, and that South of No. 3 Beacon, should be under way, passing Sitra Beacon not later than 3.5 hours before next predicted *High Water Mina Sulman*, or at a time not later than that which would allow vessels to make the passage between Bahrain Approach Beacon and No. 3 Beacon at reduced speed of 8 knots, having full benefit of tide, and passing first Beacon 1.5 hours before predicted *High Water Mina Sulman*.

MAX. SIZE: *Bapco Terminal:* Vessels up to 40 ft. draft, under normal circumstances, or up to a maximum of 44 ft. draft, making use of the tide.

Alba Marine Facilities: Up to 35,000 tons d.w.t., up to 35 ft. draft.

HEALTH: Bahrain Port Health Regulations based on International Sanitary Regulations adopted by World Health Organisation, May 1951. Quarantine signals must be prominently displayed approaching Sitra. Pratique normally granted by Bahrain Government Port Health Officer or Agent's representatives. If neither available, Company Mooring Master also authorised grant Pratique to healthy tankers scheduled for immediate berthing.

No person, excepting Agent's representative or, in the case of healthy tankers, Mooring Masters, is permitted to leave or board a vessel until pratique has been granted.

Rat guards should be properly placed on all mooring ropes as soon after berthing as practicable.

The gangway or other access should be lighted at night.

The port of Sitra is not classed as a "Plague Port" but all Crew members must have in their possession valid certificates of

vaccinations and inoculations in accordance with current Health Regulations.

The Bahrain Government Port Health Officer has an office on Sitra Causeway Pierhead and is available from 10.30 hrs. to 12.30 hrs. daily except Fridays. By arrangement through vessel's Agent the Port Health Officer, in addition to official duties, will provide consultation and treatment for other than quarantine purposes.

Deratisation and Deratisation Exemption Certificates are obtainable in Bahrain. Requests should be made through the vessel's Agent.

RADIO: All incoming vessels scheduled to load or discharge at either BAPCO or ALBA facilities should establish radio contact with BAPCO via "Cable & Wireless" at Manama, Bahrain, at least 48 hours prior to arrival giving a firm ETA, arrival draft and the requirements if any for bunker fuels.

The Company does not operate a coast radio station, long-distant radio communication being routed through Cable and Wireless Coast Station "Bahrain Radio" "A9M" of Manama, Bahrain, upon which a regular watch should be maintained. The cable address is "Bapcoship Bahrain". When within 50 miles of Bahrain, communication should be established with "Sitra Port Control", by VHF.

All communications to the Company should be quoted in GMT, and the appropriate letters, GMT, inserted after the time.

W/T Medium Frequency

Continuous watch 24 hours a day for calling and safety 500 kc/s.
for working 442, 487 kc/s.

W/T High Frequency

Time	*Transmitting Frequency*	*Searching*
17.00–20.00 GMT	4,302 kc/s.	4,178–4,187 kc/s.
03.00–05.00 GMT 07.00–09.00 GMT 15.00–17.00 GMT	8,710.4 kc/s.	8,356–8,374 kc/s.
05.00–07.00 GMT 11.00–15.00 GMT	12,709 kc/s.	12,534–12,562 kc/s.
09.00–11.00 GMT	17,175.2 kc/s.	16,712–16,748 kc/s.

Traffic lists are broadcast at the beginning of each of the HF schedules.

R/T High Frequency

Continuous watch 24 hours a day for calling and safety 2,182 kc/s.
working 2,607 kc/s.
" 2,656 kc/s.
HF working 4,422.2 kc/s.
" 8,732.1 kc/s.
Listening 4,136.3 kc/s.
" 6,204.0 kc/s.

Radio telephone calls on high frequency may be made at any time, if arrangements are made by W/T, during W/T schedules.

R/T Very High Frequency

Continuous watch 24 hours a day for calling and safety Channel 16
for traffic Channel 26/27
"Sitra Port Control"
Continuous watch 24 hours a day for calling and safety Channel 16
for normal working Channel 9
for alternative working Channel 6, 8, 12 & 14

All vessels are requested to keep "Bapcoship Bahrain" fully advised regarding estimated times of arrival. It is requested that vessels provide "Bapcoship Bahrain" with an ETA and arrival drafts, not later than 48 hours steaming time from the port of Sitra.

A separate radio message should be sent to the Government Port Health Officer, Bahrain, advising last bill of health and present health conditions on board.

The Wireless equipment of any vessel must *not* be operated whilst alongside Company wharves.

OIL WHARVES: *No. 1 (Island) Wharf:* No. 1 (Island) Wharf consists of one main central platform supported on steel piles with four inter-connected mooring dolphins, two positioned to the North-west, and two to the South-east; giving the wharf an overall length of 923 ft. This wharf, which is supplied by submarine pipe-lines, provides two berths protected by berthing beams.

Depths at this wharf are as follows:

Berth No. 5 45 ft. at Chart Datum (13.700 m.)
Berth No. 6 45 ft. at Chart Datum (13.700 m.)
Max. draft at these berths 44 ft.

No. 2 Wharf: No. 2 Wharf is a pile driven "T" head structure with 3 inter-connected dolphins, 2 mooring dolphins, positioned to the N.W., and a warping dolphin positioned to the S.E., giving the wharf an overall length of 1,666.5 ft. and provides 4 berths, 2 on the outside and 2 on the inside. Both outside berths No. 1 and 2, and the N.W. inner berth No. 3, are protected by berthing beams. This wharf is connected to the mainland by a causeway, 3 miles in length.

Depths at this Wharf are as follows:

Berth No. 1 43 ft. at Chart Datum (13.100 m.)
Max. draft 41 ft.
Berth No. 2 44 ft. at Chart Datum (13.100 m.)
Max. draft 42 ft.
Berth No. 3 38 ft. at Chart Datum (11.600 m.)
Normal max. draft 34 ft.
Berth No. 4 38 ft. at Chart Datum (12.200 m.)
Normal max. draft. 34 ft.

There are length limitations as follows:

Berths 1 and 2 normally 820 ft., but may be exceeded depending upon the configuration of the vessel, and the vessel utilising the other berth.
Berth No. 3; 560 ft. (170m.)
Berth No. 4; 550 ft. (167m.)
Berths 5 and 6 normally 825 ft., but may be exceeded depending upon the configuration of the vessel.

Coastal Tanker Wharf: This wharf which lies 023° to 203° is limited to vessels of under 240 ft. in length and less than 16 ft. (4.90m.) draft. The wharf is a pile driven structure connected by a catwalk to the causeway.

BALLAST: The discharge of dirty ballast within the territorial waters to Bahrain is strictly prohibited. As a further measure to avoid pollution by oil of the Marine environment, Masters of tankers are requested not to pump any oil overboard within the Gulf area.

There are limited facilities for the receipt of oily residues at Sitra Wharves. Vessels, which require to discharge ballast at Sitra Wharves after berthing, must, therefore, ensure that the ballast is clean prior to arrival in the Gulf Area.

In the event of a vessel spilling oil in Sitra harbour the Company will, at its discretion, clean up the oil and recover costs by charging the vessel.

BERTHING: Vessels required be sufficiently ballasted with clean ballast water before coming alongside. Minimum tanker drafts normally acceptable are:

Deadweight-tonnage	*Feet*		*Metres*	
	F.	*A.*	*F.*	*A.*
16,000 to 20,000	12 ft.	20 ft.	3.60	6.00
20,000 to 30,000	14 ft.	22 ft.	4.20	6.70
30,000 to 40,000	15 ft.	24 ft.	4.60	7.30
40,000 to 50,000	16 ft.	25 ft.	4.90	7.60
50,000 to 60,000	19 ft.	26 ft.	5.30	7.90
60,000 to 70,000	21 ft.	27 ft.	6.40	8.20
70,000 to 90,000	23 ft.	28 ft.	7.00	8.50
Over 90,000	25 ft.	29 ft.	7.60	8.80

Mooring Masters may decline berth vessels if not sufficiently ballasted. Berthing operations conducted on 24-hour basis at discretion of Mooring Master; wind, weather, tide and other circumstances permitting. Mooring Masters will decline berth vessels if not properly equipped with satisfactory mooring lines, or if deck appliances inoperable, or if steering gear, telegraphs and whistles not in an efficient condition. Anchors and cables should be cleared ready for letting go. Master should notify Mooring Master of any defects or peculiarities pertaining to vessel. Masters requested maintain continuous watch on VHF for berthing instructions. Vessels must be equipped with *at least* five lines forward and four lines aft. These lines must be sufficient length enable moorings to be "doubled up" in bad weather. Method of mooring at discretion of Mooring Master. The "offshore" anchor should be cleared and lowered to the waterline, ready for letting go, before approaching the berths.

Anchor buoys are *not* to be used whilst moored alongside.

ALBA MARINE FACILITIES: The Alba marine facilities consist of an artificial island built in shallow water, approx. 2.75 miles off the coast of Sitra Island, and a jetty in deep water, which is connected to the island by a roadway 560 ft. long, above which runs a conveyor which carries raw materials from the jetty to the coke and alumina store situated on the island. The jetty is 562 ft. long and 47 ft. wide. The seaward berth, depth 35 ft., provided with berthing heads, to accept vessels up to 35,000 d.w.t. The landward berth is provided with fendering to accept vessels up to 12,000 d.w.t. Mooring dolphins at each end of the jetty.

Loading and Unloading Facilities: Bulk carriers unloaded at seaward berth by two 10-ton capacity grab cranes. Metal exports loaded at landward berth, using ship's gear, or possibly at seaward berth when the jetty cranes may be used.

Services: Vessels using Alba Marine facilities are assisted by Bahrain Petroleum Company Limited Mooring Masters and tugs. Only transportation between the Alba jetty and mainland is by launch which must be provided by Agents. No fresh water available at Alba jetty.

Operators: Company cable address is "Metalba Bahrain".

TUGS: Tugs normally join in Sitra Anchorage after Pilot has boarded. Tugs lines used during berthing operations. During unberthing ship's lines used for forward tug, and tug's line for after tug. Mooring Master will decide number of tugs.

Normally two diesel-electric tugs on station. Each tug is fitted with fire-pumps and monitors to assist fighting fires.

MEDICAL: Advance notice to Agents preferable. Good hospital and medical facilities.

Emergency hospital cases will be treated as such, and will be handled by the vessel's Agent or by Company facilities, whichever is first available. Under normal conditions, the vessel's Agent should handle all personnel from vessels other than "Company" vessels.

Heat exhaustion. Experience over many years has shown incidence of heat stroke and heat exhaustion cases among the crews of vessels visiting Bahrain during the hot season, with some fatalities. The Company medical authorities have prepared notes on this subject which may be of assistance to Masters, but skilled medical assistance should be called for immediately a case of heat exhaustion or heat stroke is observed.

To enable heat exhaustion cases to be treated expeditiously a Heat Exhaustion Unit is located in the Port of Sitra shipping offices at the Wharf gate.

RESIDUES: Limited slop tank facilities for oily residues at all berths.

LOADING/DISCHARGING: *Readiness:* The following will apply in regard to Notice of Readiness.

Notice of readiness to load is a warranty on the part of the Master that the vessel is in all respects ready to load and that the tanks, pipes, pumps and accessories of the vessel are fit to receive the cargo to be loaded.

The Master or his representative is required to hand to the Company, within normal business hours, a written Notice of Readiness to load. Receipt of such Notice of Readiness by the Company does not necessarily imply acceptance.

The Company will make every effort to accept Notice of Readiness when tendered on arrival, provided vessel is in all respects ready to load. The Company will endeavour to load vessels upon arrival and/or as promptly as a berth is available.

Arrival, where used above, means when the vessel passes "Sitra Beacon" when proceeding either straight to the berth or to anchor in Sitra Anchorage. In the case of vessels coming from Mina Sulman it is the time when passing North range beacon. In cases where vessels are required to anchor in the area South of No. 27 Buoy, then the time of anchoring will be used providing that the presence of the vessel is made known to Sitra Port Control by VHF or BAPCOSHIP via Bahrain Radio on radio telephone, Awali 2662 at the time of anchoring.

Responsibility: Loading will not start until the vessel's loading officer reports the vessel is ready to receive cargo and the Company's Loading Master is satisfied with the preparations for loading. Any inspection made by the Company's Loading Master in this regard is performed without the Company assuming any liability.

All operations on board the vessel in connection with loading and discharging are the responsibility of the vessel.

A Company Loading Master will be available throughout the loading to offer advice to the Master on loading procedures and loading hazards.

Warning is given of the danger of closing a valve against an incoming oil stream. This procedure will create excessive pressures which may result in damage to the loading hoses, vessel's pipelines or Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Hose handling: Without assuming any liability on behalf of the Company, Company employees will assist in connecting and disconnecting hoses to vessels. A ship's officer must be present, and the ship's deck officer on duty must approve the hose connection on board.

The Company has modern air-operated hose-handling equipment on all berths at the No. 1 (Island) Wharf and the No. 2 Wharf, except No. 4 Berth. However, the vessel's hose rigging derricks should always be in a constant state of readiness to give additional assistance as necessary. Company employees will not operate ship's derricks or winches.

Cargo inspection service: The service of the Bahrain Government Petroleum Inspectors are available for the inspection and certification of the condition of a vessel's tanks, pipes, pumps and appurtenances. the Agent will, upon request, arrange for the services of this Inspector.

The Company will not issue any certificate purporting to state that vessel's tanks, pipes, pumps and appurtenances are clean or acceptable for receiving cargo. In the event a Company representative either alone or accompanied by the Bahrain Government Petroleum Inspector, inspects the vessel, the Company will make no representation nor assume any responsibility in connection with the condition of vessel's tanks, pipes, pumps and appurtenances, nor will the Company assume any liability for contamination of cargo aboard ship caused by the condition of the ship's tanks, pipes, pumps or appurtenances.

Loading rates: This table prescribes the approximate average loading rates of products available at the Wharves:

Product		*Barrels per hour*	
Motor gasoline	up to	7,000	on 2 S/Ls
Jet fuel	,,	10,000	on 3 S/Ls
Naphtha (JP4)			
Kerosine	,,	5,000	on 2 S/Ls
White diesel	,,	12,000	on 2 S/Ls
Black diesel	,,	2,500	on 2 S/Ls
Fuel	,,	25,000	on 3 S/Ls

Loading rates of kerosines and jet fuels are restricted due to static electricity hazards. These rates will be made available by the Company Loading Master.

A maximum pressure of 150 lb. is allowed on the loading hoses.

Discharging Rates: The discharge rates will be governed by the vessel's pumps, which must be limited to 150 lb. pressure.

DENSITY: Average 1030.

FRESH WATER: Limited quantities of well-water available at Sitra Wharves is saline and mainly used for washing purposes, although can be used for drinking. Delivery rate about 15 tons per hour. Nominal delivery charge. Vessels berthed for water only in emergency and additional fuels charge. Drinking water available at Sitra Anchorage from barge, capacity 300 metric tons.

FUEL: Bunkers available all berths and by Lighter. Fuel Oil maximum 1,500 secs. Redwood. Marine Diesel. Diesel Gasoil. Vessels should give at least 24 hours notice.

Facilities: Bunkers can be supplied at all oil berths and can be loaded simultaneously with bulk cargo.

Bunker quantities are measured by "Brodie" positive displacement meters.

Chief Engineers, on request to the Company's Loading Master, can avail themselves of the opportunity of checking the opening and closing counter readings on the meters supplying bunkers to the vessel.

Product	*Bunkering Rates are approximately*	
	Bbls/hr	*Tons/hr*
Fuel oil	up to 2,500	up to 360
Marine diesel	up to 1,500	up to 200

Bunker Barge Service: The Company operates a bunker barge service principally to supply bunker fuels to vessels at Mina Sulman. This service is also available to vessels in the Sitra Anchorage and Alba wharves, but may be temporarily suspended due to adverse weather conditions.

The service is maintained by the barges "Bapco 1" and "Safala".

"Bapco 1". The barge with a loaded deadweight of 1,200 L.T. has a cargo capacity of approximately 8,900 barrels. Its approximate maximum capacities are as follows:

Marine diesel 1,800 bbls (240 tons) + Fuel oil 6,350 bbls (950 tons) } or { 5,200 bbls (720 tons) + 2,800 bbls (425 tons)

The discharge rates for the "Bapco 1" are:

Marine diesel 50– 750 bbls/hr. (10–100 t.p.h)
Fuel oil 100–1,500 bbls/hr. (30–200 t.p.h.)

"Safala". The barge has a capacity for 1,300 bbls (170 tons) of diesel gas oil which it can discharge at rates between 50–760 bbls/hr. (5–100 t.p.h.).

Application for the use of the bunker barge service should be made to the Company via the vessel's local Agent and it is desirable for the vessel to give as much advance notice as possible.

Lubricating oils and greases: A full line of Caltex Marine lubricants and greases is available at Bahrain.

In order that lubricating oils may be promptly delivered, Masters of vessels are requested to radio "Bapco Bahrain" their requirements at least 48 hours prior to their arrival at the port of Sitra.

Empty lubricant containers are not accepted at Bahrain.

Drummed products: Limited quantities of gasoline, kerosine and diesel gas oil in drums are available at short notice.

To facilitate prompt delivery Masters are requested to radio "Bapco Bahrain" at least 48 hours prior to their arrival for orders exceeding ten drums.

All supplies are in non-returnable steel drums.

FIRE PRECAUTIONS: Vessel receives full details/regulations on berthing. Vessels must have firewires, and engines must not be immobilised whilst alongside.

GANGWAY/DECK WATCHMEN: An officer must be on deck during all loading or discharging operations. A deck watch must be maintained for moorings and hose connections.

TOBACCO ALLOWANCE: No restriction.

WINE AND/OR SPIRIT ALLOWANCE: Ship's requirements. Bond sealed but can be re-opened upon application. Liquor trafficking between vessels alongside Wharves or between vessels and shore strictly prohibited.

IDENTIFICATION CARDS: Discharge Book or Passport to be deposited with Immigration when going ashore.

CONSULS: British Embassy at Manama. United States Consul at Ras Tanura can come to Bahrain if requested by Agent.

REPAIRS: Local marine repair companies can undertake limited repairs of general nature.

REPATRIATION: Facilities for crew change and repatriation by sea or air.

AIRPORT: Served by regular Airlines located about 15 miles from Sitra.

TIME: GMT plus 3 hours. No changes during year.

HOLIDAYS: Numerous holidays do not affect operation of Port, which operates 24 hours a day, 7 days a week. Local Sabbath is Friday.

TELEPHONES: No facilities for placing telephones on Ships.

NAVIGATION: Port Captain will be available for advice concerning navigation of channel.

Navigation warnings: Attention is drawn to the service provided by the Middle East Navigational Aids Service (MENAS) in promulgating navigation warnings covering the whole of the Gulf area.

Mariners are requested to report any hazard/obstructions encountered, observed failure of or alterations to navigational aids, etc., to:

Middle East Navigational Aids Service,
Post Box 66, Bahrain,
or if the information is urgent, radio/cable to
Megulite, Bahrain.

Printed navigation notices:

(a) The notices, promulgate all navigational information of a permanent or semi-permanent nature.
(b) Each notice, which is serially numbered, in sequence each year, remains in force until specifically cancelled by a later notice, when the information in the notice is:
(i) Known to have been promulgated in British Admiralty Notice to Mariners.
(ii) No longer valid.
(iii) Considered sufficiently promulgated.
(c) These printed notices are distributed to various Agents, Port and Harbour Authorities, where they can be viewed.

Radio navigation warnings:

(a) The warnings relate to navigational information which may immediately effect the safe navigation of ships at sea.
(b) These warnings are serially numbered, with the prefix "NAV" and authenticated by the signature "Megulite".

(c) The warnings are broadcast by Bahrain Radio (A9M) on 487 kc/s. at 0518, 0918, 1318 and 1718 GMT. For further details consult the latest edition of "Admiralty List of Radio Signals" Volume V.

(d) Each radio warning is rebroadcast for a period of from 24 hours to one month, depending upon the nature of the information it contains. At the end of which period it is either self-cancelling or superseded by a new warning.

SHORE LEAVE: *Permitted under following conditions:*

When persons going ashore are in possession of valid Vaccination Certificates, and inoculation against cholera certificates, if these required by Port Health Authority.

Persons going ashore must be in possession of valid passport, or Seamen's Discharge Book, which must be handed to the Immigration Officer, and recovered before returning on board.

No smoking is allowed on the wharf, or on board any launch between the wharves, or by any person within 900 ft. of the wharves.

Crew members are warned that it is an offence to bring ashore fire-arms or drugs, and any traffic in intoxicating liquor is strictly prohibited.

GENERAL:

Anchors: The offshore anchor should be cleared and lowered to the waterline, ready for letting go, before approaching the berths. Anchor buoys are not to be used.

Rat guards: Must be fitted. They are available for hire at a nominal rate.

Gangway: Every vessel shall provide a gangway, which shall be adequately lighted during the hours of darkness.

Swimming: Not permitted in the vicinity of the wharves.

Provisions: Available.

Laundry: Available.

PORT REGULATIONS: Port Captain should be contacted for any queries not covered by lists of regulations provided on arrival.

PORT AUTHORITY: Port Captain. The Bahrain Petroleum Company Limited.

AGENTS: Gulf Agency Co. (Bahrain) Ltd., P.O.B. 412, Manama, Bahrain. Cables: "Confidence". Tel. 54228, 54938. Telex: 8211 (A/B "Gac GJ"). After office Tel. 52011, 69758.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bangladesh

CHALNA (Khulna): 22.35 N. 89.32 E.

PORT LIMITS: The limit of the port extends on a line drawn East/West across the Pussur River at Lat. 22° 34′ in the North to line drawn across East West on the Pussur River at Lat. 22° 20′ 30″ in the South. The northern limit of the port area is approximately 24 miles from the town of the Khulna.
DOCUMENTS: See "Chittagong".
ARRIVAL ADVICE: Inward ships must present themselves at Pussur fairway buoy at least 24 hours before high water to enter on a particular day.

The Master should send the following information to port via Khulna Radio call sign S3E and to duty pilot vessel call sign SZVS and pilot station call sign ASVI 24 hours prior to arrival at Khulna fairway buoy.

1. ETA Pussur fairway buoy.
2. Fresh water draft.
3. Speed available.
4. Vessels length.
5. Vessels gross tonnage.
6. Fresh water requirements.

PILOTAGE: Compulsory. Master should in addition to usual ETA to Agents keep in touch with pilot vessels stationed at Hiron Point about 45 miles from the base calling ASVI, depending on which vessel is stationed at the time. Pilot vessels are equipped with radio and maintain regular watches on 500 m. from 0600 to 0800, 1000 to 1200, 1400 to 1600 and 1800 to 2000 hrs. local time. If a message is not being picked up, by Khulna Radio call sign ASV, it should be relayed through Chittagong Radio or the pilot vessel.

Ships over 17 ft. draft are usually piloted on the flood to cross the bar and the pilot vessel, which has been in contact with the incoming ship leaves from Hiron Point, in time to coincide with the arrival of the vessels at the pilotage ground, situated about 7 miles Northwest of the Fairway "Lighted" buoy where ships can anchor in 9 fathoms of water. The channel from Fairway up to the Anchorage has been marked with lighted buoys and pilotage is done in daylight.

In rough weather and especially during the monsoon, ships are led into calm waters by the pilot vessel, which maintains close radio contact, and Pilots board inside the river.
ANCHORAGE: Chalna port consists of a sheltered deep-water anchorage at Mongla on Pussur River.

Depth of water 19 ft. to 45 ft. at LLWD. Distance from sea 65 miles.
RESTRICTIONS: Entrance to the Pussur River is about 6 miles wide at the mouth and has a bar over about 5 miles where the depth is 3 fathoms.
MAX. SIZE: Ships drawing up to 23 ft. can cross the bar in all seasons. In S.W. monsoons vessels up to 25 ft. 6 in. can be accommodated on spring tide.
HEALTH: On arrival at the mouth of the Pussur River, vessels are required to wireless "Quarantine" Khulna, giving health report, to avoid difficulties with Port Health Authorities.
RADIO: At present coast station at Khalishpur (Khulna Radio) of Telegraph and Telephone dept. maintain 24 hours W/T watch on 500 kc/s. call sign (S3E). In addition to the T & T system, the port has harbour control station (call sign AQBC) at Mongla and pilot station (call sign AXVI) at Hiron Point to maintain 24 hours W/T watch on 500 kc/s. The station at Hiron Point guides incoming and outgoing vessels from fairway to pilot grounds and vice versa and remains in touch with Khulna Radio, Mongla AQBC and ships anchored at Hiron Point for movement of Pilots, mooring of vessels etc. the *Sarothi II* is equipped with W/T and VHF system and is kept standby for emergency work.
VHF: At present there is no VHF Communication system owned by the port but ships lying in port may contact shore station through VHF owned by T & T. The port maintains two W/T stations. One at Hiron Point pilot station call sign ASVI and the other at Mongla call sign AQBC in addition to the above mentioned. W/T station coastal W/T station Khulna Radio call sign S3E owned by T & T remain in operation for maritime shipping. These three stations maintain round the clock watches.
TUGS: Two powerful tugs available to assist in emergency. Not required for berthing.
BERTHING: Fifteen swinging moorings and unlimited anchor berths.
CRANES: These facilities are not available at present. But will be available after completion of permanent port facilities.
STEVEDORES: Plenty of labourers available.
TANKERS: Oil is not handled at the port at the present time.
DENSITY: The density of water at the Outer Bar varies from 1005 to 1025 and at Mongla from 1002 to 1020.
FRESH WATER: Available by barges. Cost Tk. 40 per ton.
FUEL: Coal and fuel oil can be arranged in limited quantities if sufficient advance notice given.
FIRE PRECAUTIONS: One buoy tender fitted with powerful fire fighting appliances can be made available to meet emergency at very short notice.
CONSULS: none.
REPAIRS: Minor repairs can be arranged through Khulna shipyard. Repair facilities are being constructed along with the permanent facilities.
DRY DOCKS: A dry dock for sea-going vessels is under construction at Chittagong.
SURVEYORS: Lloyds/NKK. Surveyors are available at Khulna.
TIME: Six hours difference exists between GMT and local time.
HOLIDAYS: Eid-ul Azha, Moharram, Eid-I-Miladun Nabi, Independence Day, Jamat-ul-Bida, Eid-ul-Fitr, depending on the sighting of moons calculated in the basis of moon months.
POLICE/AMBULANCE/FIRE: Police telephone number 7 and for other purposes port telephone No. 3115 is available.
TELEPHONES: No arrangement is available at the anchorage for placing telephones on board the vessels.
SHORE LEAVE: Crew members of Foreign vessels are allowed to disembark ashore as per master's request.
GANGWAY/DECK WATCHMAN: On receipt of orders from the Master the Stevedores will arrange to supply Watchmen by day and night.
HATCHES: opening and closing of hatches is normally carried out by the stevedores.
CARGO GEAR: Goods loaded and unloaded by the ships gear, no handling equipment available at the port.
REPATRIATION: Local shipping agents are responsible for arranging repatriation of the Crew.
AIRPORT: Jessore, which is 70 miles from the port.
IDENTIFICATION CARDS: Seaman's book is sufficient for identification.
REGULATIONS: Crew members are not allowed to undertake chipping/painting of vessels whilst in the port. This is to be done by licenced constructors.
DELAYS: No unusual delay in the port.
DEVELOPMENTS: Permanent port facilities with 7 jetties, transit shed and warehouses including 2 feeder container jetties are under construction on the East bank of the Pussur River adjacent to the present anchorage. These will be ready by the end of 1978. A scheme is under preparation to deepen the channel to allow vessels with deeper drafts to enter the port.
AUTHORITY: Port Director, Chalna Anchorage..
AGENT: See "Chittagong".

CHITTAGONG: 22.18 N. 91.48 E.

DOCUMENTS: *Before vessel's arrival:*

2 copies Freight Manifest.
2 sets Bill of Lading.
3 copies Stowage Plan.
15 copies Passenger List.
4 copies Cargo Manifest.
3 copies Hatch Lists.
1 copy Exception Lists.
2 copies Passenger Money Manifest.
2 Copies Special Cargo List.
2 Copies Hazardous Cargo List.
2 Copies Heavy Lift Cargo List.

With vessel:

1 set Arrival Papers as per booklet available with Agent.
2 Copies Cargo Manifest.
Last Port Clearance.
Passenger Lists, disembarking and transit — 6 copies each.
Crew List 8 copies plus 2 for immigration police.
List of Favour Parcels 2 copies.
Currency declaration of ship's money, officers and crew, together with the personal property list.
Ships Stores Lists on local Customs forms – 3 copies.
Cargo Clearance Certificates.
Deratisation Exemption Certificate.
International Load Line Certificate.
Radio Safety Equipment Certificate.
Safety Equipment Certificate.
Record of Safety Equipment Certificate.
Load Line Certificate.
Ship's Article.
Ship's Register.
Light Dues Receipt.
Radio Telegraphy Certificate.
Safety Construction Certificate.
Deratting Certificate.
Voyage Licence.
Exemption Certificate of Crew Members.
I.P.B. Permission of Foreign Nationals.
Gear Register Book with Annealing Certificate
Authority Letter of Supernumery.
Store List.

PILOTAGE: Pilotage is compulsory. Pilots board and leave vessels at the outer anchorage.

Inward ships must present themselves at Fairway Buoy at least three hours before high water to enter on a particular day.
APPROACHES: Since South Patches lightvessel is missing, it is advisable to make for Elephant Point/Cox's Bazaar, and then shape course to pass West of South Patches. Due allowances must be made for the state and rate of tide. In this area, the tide runs in a North–South direction.

Once it is ascertained that the vessel is West of South Patches, course can be shaped to pass 8–9 miles off Kutubdia Lighthouse. The buoys indicating the channel to Chittagong outer anchorage are mostly out of place or missing and cannot be relied upon. The buoys are unlit and without radar reflectors and navigating in their vicinity during hours of darkness can be hazardous.

Vessels must reach pilot grounds at mouth of River Karnaphuli 3 hours before high water during daylight hours. No berthing after sunset.

ANCHORAGE: The Anchorage is considered safe and the holding ground is good. The bed of the river is soft mud and is harmless in case of grounding.

Holding ground off Kutubdia fairly good but strong tides render it necessary to pay-out extra length of cable.

Spring tides at outer anchorage are very strong (6 to 8 knots) and at times of freshets the rate may be more. It is advisable to keep engines ready at all times during Spring tides, and maintain continuous and efficient anchor watches.

RESTRICTIONS: Night entry not permitted. Though a river port, Chittagong is tidal harbour, and presently ships enter and leave only on the day tides, therefore ships should endeavour to arrive at least 3 hours before high water of the day's tide. Ships of length upto 575 ft. enter the main berth, day's draft permitting. Ships of 605 ft. (LOA) brought inside the harbour on experimental basis. During Spring tides vessels under 7 knots will not be handled.

MAX. SIZE: Anticipated safe drafts are predicted three months in advance. The depth of water over the Outer, Inner and Gupta Bars is maintained at 14.5 ft. at low water throughout the year. The bars are situated at distances of half, one and 4.75 miles from the entrance. In order to calculate the draft for entering and leaving port, the depth of 14.5 ft. over the bars is added to the height of water in the tide tables for day tides. Also see "Tankers".

HEALTH: All vessels must send the standard quarantine messages by radio. Vessels which have touched ports between Port Sudan and Durban, on the East Coast of Africa including these two ports, or any other yellow fever port or other port on the continent of Africa, or ports which are declared from time to time as quarantine areas, are suspected vessels on account of yellow fever or jigger, or other infectious disease as the case may be and may not have communication with the shore till declared by the Port Health Officer, who attends only between sunrise and sunset, except in special circumstances. The incubation period for yellow fever is 9 days, but vessels arriving later than 9 days are still not free from quarantine because there is no incubation period for jigger.

RADIO: Khulna Radio (ASD).

VHF: "Port Radio Control" call sign "S2YA" Channel 16, and Channel 12. Four fixed shore and 10 mobile stations.

TUGS: Available, under direction of Pilot. None available at outer anchorage.

BERTHING: 4 jetties including 2 Pontoon jetties ranging in jetty face length from 435 ft. to 630 ft. Seven are provided with shore cranes, 10 with transit sheds and 8 with railway tracks. Additional 4 jetties for cargo in bulk like foodgrain, cement clinkers, etc.

Also 6 moorings for oil tankers of various lengths, 4 moorings for dry cargo, 2 moorings for lighterage, and 1 mooring for laid up vessels.

CRANES: Variety of cargo handling equipment, maximum lifting capacity 125 tons.

TANKERS: Crude oil tankers up to a draft of 34 ft. can be handled at off-shore oil terminal. A special Pilot is required to place the tanker alongside the buoy. Submerged pipe-line to petroleum buoy (fl. (2) every 10 seconds in position 22° 15′ W. 91° 45′ E.) exists but not used as reported leaking. Tankers anchor off the buoy and lighten into other tankers. If under max. length permitted in the river, can proceed upstream and discharge at the tanker berth in the vicinity of the Esso Jetty.

Clean tankers enter the river and berth at petroleum jetties inside the port, restricted to length of 550 ft. overall, and subject to published river draft.

Tankers up to 60,000 d.w.t. discharge into lighters at Kutubdia anchorage where depth is 6 fathoms.

MEDICAL: Doctors and Hospital facilities available.

DENSITY: From 1000 to 1004.

FRESH WATER: Available from quays. Also available at outer anchorage. Require 3–4 days notice. Capacity of water barge about 300 tons. Supply daylight hours only.

FUEL: All grades available at oil berths. Otherwise supplied by barge.

REPAIRS: Facilities for repairs available. No dry docks. Ships' engines may not be dismantled or immobilised whilst at berths or moorings without the prior sanction of the Port Authority. Construction of a Dry dock is in progress.

HATCHES: Opened by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes or 0.5 lb. of tobacco and 1 bottle of wine/spirit per week per man or 2 pints of beer per day.

REPATRIATION: Possible.

STEVEDORES: Available through Agent. Working hours, Monday to Thursday and Saturday day shift, 0730–1200 and 1330 to 1700 hrs. Night shift, including Friday 2000–2400 and 0000–0400 hrs. Friday, day shift, 0700–1200 and 1400–1700 hrs.

HOLIDAYS: Eid-ul-Azha (27/28th February); Muarram (29th March); Eid e Miland un Nabi (29th May); Independence Day (14th August); Defence Day (6th September); Death of Quaid-e-Azam (11th September); Revolution Day (27th October); Jamat-ul-Wida (5th December); Eid-ul-Fitr (11th/12th December); Christmas Day (25th December).

POLICE/AMBULANCE/FIRE: Call "Port Control" Channel 12 and 16 call sign, "S2YA" or tel. 87011.

CARGO GEAR CERTIFICATES: International Cargo Gear Test Certificates not more than 12 months old must be presented to the Dock Labour Inspector before a vessel is allowed to use derricks/winches. Annealing and testing of gear at Chittagong is an expensive process. In certain cases dispensation can be obtained at the discretion of the Dock Labour Inspector.

AIRPORT: Patenga Airport about 5 miles from city.

SHORE LEAVE: Allowed, prior permission from Immigration arranged by Agent.

DEVELOPMENTS: More berths to be constructed.

TIME: GMT plus 6 hours.

AUTHORITY: Chittagong Port Trust.

AGENT: Maritime Agencies Ltd., Third Floor, Eastern Federal Building, Quaid-e-Azam Road. PO Box 387. Tel. 84029. Cables: "Maritime Chittagong".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Barbados

BRIDGETOWN: 13.05 N. 59.36 W. (See Plan)

DOCUMENTS:
8 copies Crew Lists.
5 copies Passenger Lists.
1 copy Health Certificate.
3 copies Ship Particulars.
1 copy Vaccination Report on Crew.
1 copy Vaccination Report on Passengers.
Deratisation Certificate.
2 copies Manifest.
1 copy Bill of Lading.
1 copy Clearance from Last Port.
2 copies Ship Stores List.
2 copies Crew's Declaration List.
1 copy Animal Declaration List.
Ship should be entered within 24 hours and articles deposited in Shipping Office if staying longer than 48 hours.

PILOTAGE: Pilotage compulsory for all vessels entering Bridgetown Harbour. Agents of vessels intending visit port required give ETA as early as possible on Form A. 4 hours notice weekdays and 8 hours Saturdays and Sundays are min. requirements.

Watch kept on VHF Channel 16, 156.80 Mc/s. Working frequency VHF Channel 12, 156.60 Mc/s. Pilotage vessels power-driven launches approximately 40 ft., painted grey. Signals for Pilot Boat: International.

Pilotage Station: 1 mile West of Breakwater Head. No alternative station in bad weather. Usual pilotage ladder in good condition should be rigged on port side when approaching harbour.

ANCHORAGES: Quarantine anchorage as indicated Admiralty Chart 502. Explosive anchorage as indicated on chart. Carlisle Bay anchorage see Chart 502.

RESTRICTIONS: Bridgetown Deep Water Harbour offers 24 hours service to ships with draft up to 31 ft. 6 in. A harbour for small craft (careenage) caters to ships up to draft 13 ft. 6 in. high water.

TANKERS: May enter and leave any stage of tide, day or night, except Needham's Point where daylight berthing only.

MAX. SIZE: Max. length permitted in Deep Water Harbour 800 ft., draft 31 ft. 6 in. Oil Carriers Pier outside Deep Water Harbour max. draft 38 ft. Also see "Tankers".

HEALTH: Pratique may be obtained by radio or from Pilot or Health Officer on arrival. In case of suspected disease Port Doctor should be notified by radio through Agents.

Procedure for Granting of Pratique:

(1) The radio request should be sent not more than 18 and not less than 4 hours before the expected time of arrival.
(2) The message should be addressed to the Shipping Agent, who will inform the Medical Officer of Health (Port) of the contents of the Message.
(3) The Medical Officer of Health will inform the Shipping Agent whether or not pratique is granted, and the Shipping Agent will inform the Master, by radio, of the decision.
(4) The Medical Officer of Health will inform the officer on duty at the Signal Station whether or not radio pratique has been granted, and the officer on duty at the Signal Station will inform the Berthing Master and the Public Health Inspector of the decision of the Medical Officer of Health.
(5) The Berthing Master on boarding a ship which has been granted radio pratique will authorise the lowering of the Q flag, if still flying.
(6) The Berthing Master on boarding a ship which has not requested radio pratique will inquire as to the presence of any illness in the ship; if there is no illness, he will grant pratique in his capacity of Visiting Officer, *and will ensure that the Q flag is lowered.*
(7) If radio pratique has been refused or if the Berthing Master is informed that there is illness in the ship, the Q flag *must* be kept flying and the Public Health Inspector will board the ship, and if satisfied will grant pratique; if he is not satisfied he will refer the matter to the Medical Officer of Health (Port).
(8) Disembarking passengers (not passengers intransit) and any Crew members being signed off will be kept segregated on the ship until their vaccination Certificates have been inspected by the Public Health Inspector.
(9) No person except the Berthing Master, the Public Health Inspector, the Medical Officer of Health or the Immigration Officer will be permitted to board a ship before pratique has been granted. The granting of pratique is indicated by the lowering of the Q flag.

Notes: I. From the foregoing it will be seen:

(i) that healthy ships will be granted pratique either by radio or by the Berthing Master;
(ii) that ships with any illness on board will be granted pratique by the Public Health Inspector or the Medical Officer of Health;
(iii) That the Public Health Inspector will board a ship for the following reasons only:
  a. when radio pratique has not been granted and the Berthing Master cannot grant pratique;
  b. to inspect Vaccination Certificates of disembarking (not intransit) passengers and signed off Crew members.
(iv) that to avoid misunderstanding and delay the Q flag must be lowered as soon as pratique is granted.

(10) A ship with disembarking passengers may be granted pratique and permitted to work e.g. load or unload cargo, *provided* that disembarking passengers are kept segregated *on the ship* until Vaccination Certificates have been inspected and immigration formalities completed.

RADIO: Cable and Wireless, Barbados Radio: Call sign 8 PO. 24 hours watch is maintained on 500 kHz. ETA to include name and nationality of Master, number and nationality of Crew. Name of last and following ports of call and quantity and grades of cargo to be discharged, if any.

VHF: Barbados Radio VHF Channels 16 and 26. Barbados Port Department VHF Channels 12 and 16.

TUGS: Compulsory. Three tugs available, *Pelican, Culpepper* and *Barbados*, 1,100, 1,500 and 1,700 h.p. respectively. Tugs join ship at entrance to basin of the harbour; two tugs are compulsory for vessels over 10,000 tons or 600 ft. in length. VHF and ship's radar installed on tug *Barbados*.

BERTHING: Harbour is situated on the North-Eastern side of Carlisle Bay, approximately 0.75 mile North-West of the Molehead of the careenage. This harbour is dredged to 32 ft. LWOST and was constructed by joining Pelican Island to the Mainland by reclamation, providing 1,700 ft. of quay space and 2,700 ft. approx. of protective breakwater, and offering berths for eight ocean-going vessels. All berths are equipped to supply water and telephone. Plans for expansion under active preparation.

BULK HANDLING FACILITIES: Inner arm of breakwater, 980 ft. long, carries three sugar loading towers, with total loading capacity 500 t.p.h.

Delivery points on breakwater for loading molasses.

Other cargo handling is by ship's gear to apron where removed by fork-lift trucks to transit sheds. One mobile crane 5 tons capacity and one of 20 tons. Management must be notified prior acceptance of lift in excess of 5 tons.

STEVEDORES: Gangs must be ordered before 1500 hrs. on day preceding date of arrival and 1000 hrs. on Saturday for Sunday or following Monday. Average rate of cargo discharged:

Bag Stuff, 22 tons (weight) per hour.
General Cargo, 12 tons (weight) per hour.

Ships specially equipped for handling palletised cargo, 30 tons per hour.

Average rate of loading of cargo: General cargo 12 tons; Bag Stuff 18 tons.

MEDICAL: Agents should receive advance notice of required medical attention as soon as possible. Modern 800 bed hospital. Private clinics and usual medical facilities available.

TANKERS: Vessel's arriving during darkness for Needham's Point Terminal should anchor in Carlisle Bay. Services of a Pilot are not compulsory but a Pilot must be taken to berth and unberth.

Needham's Point: Mobil Oil Barbados Ltd. Multi-buoy-mooring Max. LOA, 600 ft. Max. draft, 33 ft. Depth at MLW, 40 ft. Nature of bottom, sand on coral. Daylight berthing only. Vessels may berth and unberth any stage of tide. No fuel or dirty ballast facilities. Fresh water available by tug. Product handled, crude oil. Sealine taken aboard on starboard side. One 12 in. pipe-line, length 1,635 ft. connected to 1×10 in. hose. Pumping rate 300 t.p.h. max. pressure, 50 p.s.i.

Esso Standard Oil S.A. Ltd.: 2 berths. Esso Jetty outside breakwater. "T"-Head finger jetty. Max. LOA, 800 ft. Max. draft, 38 ft. Depth at MLW 55 ft. Vessel berths port-side alongside.

Departure Harbour Oil Pier: Max. LOA 800 ft. Max. draft 30 ft. Depth at MLW, 32 ft. Vessels berth either side alongside.

Fuel and fresh water available. No facilites for receiving dirty ballast.

Berth	*Grade Handled*	*Pipe-line ins.*	*Length (ft.)*	*Load/ Discharge Rate (t.p.h.)*	*Hoses ins.*
Esso Jetty	Bunker C	1×16	2000	400	1×8
	Marine Diesel	1×12	2000	270	1×8
	Light Marine Diesel/gasoil	1×8	2000	150	1×8
Max. Pressure 100 p.s.i.					

DENSITY: 1025

FRESH WATER: Easily available. Delivery 50 t.p.h. Delivery by hose-pipe through hydrants installed in each berth.

FUEL: Bunker C, marine diesel, marine diesel medium (gas oil). Intermediate fuel, all grades available at all berths. 12 hours notice in advance of ETA.

DEVELOPMENTS: The Port is undertaking an expansion project and with its implementation, activities will be concentrated in the Port. The project includes land reclamation, the construction of a container shed, a shallow draft facility and a bulk handling facility. Provision is also made for the construction of a new administration building and the installation of ancillary services.

GANGWAY/DECK WATCHMEN: Watchmen's services necessary.

OPENING/CLOSING HATCHES: By stevedores.

SHIP CERTIFICATES: Load Line Certificate, Certificate of Registry.

TOBACCO ALLOWANCE: Two packages or 100 cigarettes per person.

WINES AND SPIRIT ALLOWANCE: At discretion of Customs Officer.

IDENTIFICATION CARDS: Desirable for entrance to port from shore leave.

CONSULS: Following countries are represented at Bridgetown:

Austria	Germany	Norway
Belgium	Great Britain	Sweden
Dominican Rep.	Mexico	U.S.A.
Finland	Netherlands	Venezuela
France		

REPAIRS: Minor repairs can be carried out by Central Foundry Ltd.
DRY DOCK: One small dry dock length 240 ft., breadth 46 ft., depth 13 ft. Lifting capacity 930 tons displacement.
REPATRIATION: Facilities for crew changes available.
AIRPORT: Served by regular lines. Distance from harbour about 13 miles. Island is served by flights from Europe and from N. America.
TIME: GMT Minus 4 hours (permanent). No alteration in clocks during the year.
TELEPHONES: All berths equipped with telephones.
AUTHORITY: Government of Barbados, Port Department.
AGENT: C. F. Harrison & Co. (Barbados) Ltd., PO Box 304, Barbados, West Indies. Cables "Harrison Barbados".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Belgium

ANTWERP: 51.14 N. 04.23 E. (See Plan)

DOCUMENTS:
Ship's Register.
2 Lists Passengers in Transit.
2 Lists Passengers Disembarking.
2 Personal Effects Lists.
3 Crew Lists indicating full date of birth.
2 Store Lists indicating alcoholic beverages in bottles and size of bottles.
International Health Declaration.
Manifests and usual ship documents.

PILOTAGE: Access to River Scheldt is:

(*a*) Via Wielingen Channel (West) (Wandelaar Station) where Belgian sea pilot cutter is stationed near A.1. Buoy. Cutter has black hull with a white number on bow, yellow funnel with black top, red flag with white letter "P".

(*b*) Via Oostgat Channel (North) (Steenbank Station) where Dutch sea pilot cutter is lying near the Middelsteen – bank buoy.

The pilot cutters of both cruising stations can be called by the signals of the international code. They can also be contacted on VHF Channel 6.

ETA: Pilot cutter Wielingen or pilot cutter Oostgat should be given at least 4 hours notice before arrival at the pilot cutter, respectively via Ostend Radio (OST) to "Pilotage Ostend" or via Scheveningen Radio (PCH) to "Pilotage Flushing".

In case pilot service is suspended because of weather conditions, Flushing Pilot Station can be contacted on VHF Channel 14. At Flushing, the sea Pilot disembarks and the river Pilot boards the vessel and pilots her to the riverside berths or to the locks. For vessels bound for a berth in the docks, the dock Pilot takes over in the lock until the vessel is moored in berth.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg".

ANCHORAGE: There is sufficient anchorage for deeply loaded vessels at all times around the A.1 buoy, and for smaller vessels around the MSB buoy. There are unlimited possibilities for anchoring at Flushing roads. Anchorage on the river is limited.

RESTRICTIONS: No restrictions on night entry. Tankers larger than 2,000 g.r.t. destined for berths on the river upwards of Baudouin-Van Cauwelaert-locks are not allowed to transit during hours of darkness.

LOCKS: Royers Lock, length 590 ft., width 72 ft. 2 in., depth at high tide 36 ft. 4 in.

Van Cauwelaert Lock, length 885 ft., width 115 ft., depth at high tide 49 ft. 2 in.

Boudewijn Lock, length 1,180 ft., width 147 ft., depth at high tide 50 ft. 10 in.

Zandvliet Lock, length 1,639 ft., width 187 ft., depth at high tide 60 ft. 8 in.

Kattendijk Lock, Length 360 ft., width 81 ft. 4 in., depth 20 ft. 7 in.

Kallo Lock under construction (to be put in operation in 1977) length 480 ft., width 165 ft., depth 52 ft. 6 in.

MAX. SIZE: At high water under normal weather circumstances and depending tidal conditions vessels up to 820 ft. in length may enter on a max. draft of 44 ft. 6 in. (F.W.). Depending on a reduction of the allowed draft, larger vessels up to 900 ft. L.O.A. are accepted and providing a special permit vessels up to maximum 1,000 ft L.O.A. and 145 ft. beam can be admitted under certain conditions. It is however advisable to check in each case what maximum draft will be allowed for a specific vessel.

Vessels with less than 27 ft. draft can enter on all stages of the tide.

HEALTH: No special requirements to obtain free pratique. Vaccination Certificates must be valid. Recent Derat Certificate required. In case of contagious illness aboard, advise Agent.

RADIO: Cable Agents ETA Flushing, max. fresh water draft, and requirements via Ostend Radio-OST or OSU (radio telephone). Radio Antwerp-OSA operates only on medium frequency.

RADAR/VHF: A radar chain established from Hansweert to Kruisschans Roads, but only used to help Pilot determine position. In dense fog, vessels do not normally proceed. Masters can keep close contact day and night on VHF on the following channels: Pilot cutter, Channel 6 (156.30 mHz); Flushing Radio, Channel 14 (156.30 mHz); Zandvliet Radio, Channel 12 and Kruisschans Radio, Channel 12 when in appropriate sector. Harbour Office, Channel 18.

Vessels not equipped with VHF can rent a portable portaphone. The Scheldt information service gives information by VHF within an area extending from the sea to the mouth of the river Rupel, situated upstream of Antwerp. On every full hour plus 5 minutes until that hour plus 10 minutes, vessels should switch to Channel 16 to listen to the traffic list and navigation reports, issued by Antwerp Radio.

On every full hour plus 35 minutes, Flushing Radio (Channel 14) and Kruisschans Radio (Channel 12) transmit information regarding visibility, water level, hindrances, anchorages, etc.

As soon as one of the stations reports a decrease of visibility under 3,000 m., visibility reports are transmitted by Antwerp Radio on every hour plus 48 minutes.

TUGS: Tugs for berthing at a riverside berth or entering the lock are ordered at river Pilot's request according to weather conditions and tide. Generally at Lieftkenshoek for Van Cauwelaert and Baudouin Locks and between Saftingen and N. Ballast Fort for Zandvliet Lock. For super-tankers, tugs may join at Bath. Ship's lines are usually used for towage. If ship asks for tug lines there will be an extra charge per line.

The number of tugs required in the dock area shall be mentioned on the "hailing bill". Eventually, "according to dock Pilot's advice" can be mentioned.

34 tugs available, up to 2,200 h.p.

BERTHING: Deeply loaded vessels normally moor at their berth in the docks 2 hours after high water.

BULK HANDLING FACILITIES: *Container Terminals:* At the Churchill dock 6 terminals belonging to private firms operate in total 8 container cranes with lifting capabilities from 40 to 53 tons and 3 other 38 ton cranes suitable for container handling. 3 other 30 ton gantry cranes at railroad terminal. Full series of straddle carriers, etc.

Grain:

1. Sobelgra Terminal at sixth harbour dock has 5 elevators with capacity of 400 t.p.h. each for unloading and 2 elevators with combined capacity of 900 t.p.h. for loading seagoing vessels. Elevators are combined with conveyor belts for direct transhipment or storage in silo (80,000 tons). Water depth 48 ft. in dock for seagoing vessels, 24 ft. in dock for barges. Quay length 1,200 ft.
   Under construction: additional silos 25,000 tons plus. 2 elevators with capacity of 150 t.p.h.
2. Grain handling plant of S.A. des Magasins a Grains (SAMGA) at Lefebvre dock. Quay length 150 m., draft 29 ft. fresh water, silo 75,000 tons, 4 elevators on quay plus use of floating elevators.
   Under construction: new silo of 45,720 tons and mobile elevator of 600 t.p.h.
3. Smaller installation of De Trouw (silo 10,000 tons) and Van der Stucken (silo 4,000 tons).
4. Sarandi terminal for seeds at Canaldock B1: storage capacity 7,000 tons.

Potash: Plant situated at quays No. 152/160 in the Albert dock, can accommodate vessels up to 35 ft., fresh water draft. Loading rate up to 6,000 tons per day. Storage capacity 200,000 tons.

Ore/coal/phosphate: Stocatra: Bulk handling plant situated at quays No. 232/256 of Hansa Dock. quay length 1,200 m., depth alongside about 45 ft., clearance of grabs above water level 15 m. Up to 48,000 tons of ore can be transhipped in 24 hours, out of 1 vessel.

Equipment: 9 travelling bridges 15 tons.
5 travelling bridges 25 tons.

SGM: Terminal at Canaldock: 2 bridges of 21 tons plus 1 bridge of 25 tons for non-ferrous ores. (See "Developments").

Coal terminal Vloeberghs: 3 cranes 10 tons. Quay length 300 m., Several smaller installations for coal.

Sulphur: Transhipment installations of Duval Sales (Antwerp Tank Cleaning) near Boudewijn lock with covered storage over 100,000 sq. ft.

Soda: Covered storage area of Solvay installations is 65,000 sq. m. (plus new warehouses planned).

Fertilizers: Besides quays of chemical plants such as Bayer and BASF there are specialized terminals for fertilizers mainly at third harbourdock (Manuport) and Canaldock B1 (Manufert) and Ferchimex (the latter used for fertilizer, sulphur, phosphates etc.).

Total covered warehousing space for chemical fertilizers is 38,405 sq. m.

Other specialized installations include:
Refrigerated storage: 318,00 cu. m.
Tank storage capacity: 10.2 million cu. m.

CRANES:

Container cranes	(35/53 t)	12
Quay cranes	(2,5/100 t)	525
Floating cranes	(5/250 t)	24
Mobile cranes	(5/90 t)	175
Loading bridges	(15/25 t)	16
Grain elevators:	on quay	13
	floating	11

TANKERS: *S.I.B.P.* Petroleum installations located at the Marshall Dock and finger pier jetties No. 429-437 near the locks. Depth alongside about 43 ft. Hoses all 12 in. Facilities for ballast discharge.

Esso: Refinery receives crude oil along quays No. 417 to 421 of Hansa Dock and one pier in the Marshall Dock. Depth alongside 45 ft. Hoses 12 in. and 16 in., hydraulic couplings. Slop discharge possible when berth is free. Oils can be received at the rate of 4/5,000 t.p.h.

Albatros: Refinery situated near Zandvliet Lock. Berth No. 1, depth 37 ft., Berth No. 2, depth 42 ft. Ballast discharge possible. Oil is received at the rate of 5/6,000 t.p.h.

R.B.P: Refinery at quays No. 279-285 in the fourth port basin. Depth alongside 37 ft. Oil is received at the rate of 3,500/4,000 t.p.h.

Petrol Pier South, Hemixem: One tanker berth in the river subject to tide. Max. ship's length restricted to 650 ft. Max. draft 32 ft. fresh water. Served by one 16 in. pipe-line. No facilities for slop discharge. Oil is received at the rate of 500/700 t.p.h. Tidal range 5 m. As only one large tanker can be accommodated, other tankers have to wait their turn in Flushing Roads.

A tank-cleaning installation is situated between the Boudewijn Lock and the Bayer Plant.

STEVEDORES: To enable Agents to order gangs, important to obtain ETA Flushing before arrival. Latest time to order gangs, normal day shift 0800-1600 before 0630 hrs. same day. First shift 0600-1400, before 1400 hrs. previous day; second shift 1400-2200 before 1230 hrs. same day; night shift 2200-0600 before 1500 hrs. same day. First shift Monday, from 0600 to 1400 before 1400 hrs. previous Friday. Failure to give exact ETA may result in losing 12 to

24 hours and the cost of gang's idle time. No work performed on Saturday and Sunday unless overtime paid.
MEDICAL: Ample medical attendance in the port. Hospital facilities available.
DENSITY: Fresh water in the docks, slightly brackish in the river.
FRESH WATER: All berths supplied by shore connections. Fresh water available by barge.
FUEL: All grades available. Min. 24 hours advance notice preferred. All grades can also be supplied by barge. Tankers may not refuel by barge concurrent with working cargo or ballast.
FIRE PRECAUTIONS: No floating objects allowed alongside during loading/discharge/ballasting.
DEVELOPMENTS: The navigable channel and estuary are dredged continuously. The latest plans foresee the bypass of the curve at Bath, shortening the distance to the sea by about 10 miles and making port (right bank) accessible for vessels up to 125,000 d.w.t. Now maximum draft of vessels is 45 ft.

At right bank new dock (quay length 4,700 m.) water depth 40 ft. is under construction.

At right bank junction between fifth harbour dock and America dock nearing completion (new lock planned).

At left bank: first lock nearing completion (operational 1977): 1,180 ft. × 165 ft. × 52 ft. 6 in. First canal dock on left bank under construction.

New Scheldt-Rhine link (for 9,000 tons push convoys) has been opened.

Albert canal (Antwerp-Liege) is being modernized for 9,000 ton push convoys.

S.G.M. terminal are installing a new 25 ton capacity belt system, with a telescopic loader and a Rotopel distributor. It will enable the unloading of cargo 49.5 m. from the quay. The terminal is to be dredged to allow vessels of between 80,000 and 120,000 d.w.t. with a 47 ft. draft to berth.
GANGWAY/DECK WATCHMEN: Not compulsory but recommended in general and specially for ships berthed at river quays because of rise and fall of tide.
OPENING/CLOSING HATCHES: Normally opened/closed by crew. Stevedores usually helping lift beams. Tramp vessels according charter party.
SHIP CERTIFICATES:

Registered Tonnage Certificate.

Belgian Tonnage Certificate (issued at first call valid as long as tonnage remains unchanged).

Derat. Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes or 100 cigarillos or 50 cigars or 250 gr. tobacco per man. Spirits 0.25 litres per head.
IDENTIFICATION CARDS: Not required.
CONSULS: The following countries are represented:

Argentina	Guatemala	Norway
Austria	Haiti	Pakistan
Bolivia	Honduras	Panama
Brazil	Iceland	Paraguay
Chile	Indonesia	Peru
Colombia	Ireland	Philippines
Costa Rica	Italy	Poland
Cuba	Japan	Portugal
Denmark	Lebanon	Senegal
Dominican Republic	Liberia	South Africa
Ecuador	Luxembourg	Spain
El Salvador	Madagascar	Sweden
Finland	Mexico	Switzerland
France	Monaco	Turkey
Germany	Morocco	U.S.A.
Great Britain	Nepal	Uruguay
Greece	Netherlands	Venezuela
Greek Maritime Office	Nicaragua	Zaire

REPAIRS: All kinds of repairs possible.
DRY DOCKS: Beliard Murdoch: No. 1 L. 738 ft., B. 109 ft.; No. 2 L. 885 ft., B. 134 ft. Mercantile: 6 docks from L. 480 ft., up to 1,024 ft., B. 60 ft. up to 165 ft. City dry docks: 10 docks from L. 169 ft. up to 685 ft., B. 30 ft. up to 83 ft.
REPATRIATION: All arrangements for crew changes and repatriation can be made.
AIRPORT: Zaventem Airport (distance 50 km.) served by regular airlines. Antwerp airport Deurne (distance 15 km.) only regular service with Amsterdam and London (3 flights per day). Plans to extend.
TIME: During the whole year GMT plus 1 hour.
HOLIDAYS: New Year's Day; Easter Monday; 1st May; Ascension Day; Whit Monday; 21st July; Assumption (15th August); 1st November; 11th November; Christmas Day. Cargo work can be arranged when labour available and at surcharge 100 per cent.
POLICE/AMBULANCE/FIRE: Harbour Police tel. 32.18.40; Alarm and accidents tel. 906; Ambulance tel. 900; Fire tel. 900.
TELEPHONES: At shipyards and oil terminals telephone is placed on board or in the vicinity without extra cost for local calls. Long-distance calls at special request.
AUTHORITY: City of Antwerp Port Control.
AGENTS: Muller-Thomsen, Antwerpen N.V., 9, Ankerrui, Antwerp. Tel. (031) 338920. Telegrams Mineral. Telex 31259.

BRUSSELS: 50.51 N. 04.22 E.

DOCUMENTS: Same as Antwerp and to be handed to Agent at Antwerp roads, where clearance obtained.
PILOTAGE: Notice of ETA Antwerp roads should be given 24 hours beforehand to Antwerp Agent, who will apply for upper Scheldt Pilot. This Pilot takes over at Antwerp roads and brings ship up Rivers Scheldt and Rupel to Wintam lock. Canal Pilot boards Wintam lock. Boatmen service on canal optional, but advisable for ships over 164 ft. length and according weather conditions. Boatmen for possible mooring Wintam lock entrance always available. Wintam equipped with VHF.
ANCHORAGES: Use of anchors strictly regulated on canal and only permitted certain areas in emergency.
ENTRY RESTRICTIONS: Ships proceed upstream from Antwerp to Wintam day and night accordance state of tide, direction of current, length and draft.
MAX. SIZE: Overall length: 344 ft. 06 in.; Extreme breadth: 48 ft. 02 in.; Max. draft: 19 ft.
HEALTH: See "Antwerp".
RADIO: See "Antwerp".
TUGS: Normally tug joins vessel Wintam lock. Ship's lines always used. Although not compulsory, towage advisable in accordance length and draft or weather conditions.
BERTHING: No specific requirements for berthing in canal. Owing dense traffic, ships should moor strongly.

The Brussels' Harbour extends over a length of 12.5 km. between Brussels (Sainctelettesquare) and Grimbergen (Pont-Brule).

The Inner port offers: 14 km. of quays and mooring berths 220,000 sq. m. of wharf areas. 390,000 sq. m. of storage areas. 169,000 sq. m. of warehouses.

Materials quay: Length: 710 m. Number of berths: 15. Draft: 3.5 m. 2 cranes of 2 tons lifting power, owned by the Canal Company.
Barges quay: Length: 710 m. Number of berths: 15. Draft: 3.5 m. Equipment: 1 crane of 2 tons lifting power owned by the Canal Company. 1 private installation for cargo handling.
Shipowners quay: Length: 920 m. Number of berths: 15. Draft: 6.5 m. Equipment: 3 cranes of 2 to 4 tons lifting power owned by the Canal Company. 6 private installations for cargo handling.
Steamers quay: Length: 920 m. Number of berths: 15. Draft: 6.5 m. Equipment: 7 private installations for cargo handling.
Factories quay: Length: 2,000 m. Draft: 6.50 m. (along the quay wall: 3.20 m.)
Leon Monnoyer quay: Length: 1,800 m. Number of berths: 20 Draft: 6.5 m. Equipment: 11 cranes from 3 to 10 tons lifting power, owned by the Canal Company. 9 private installations for cargo handling.
Heembeek quay: Length: 360 m. Number of berths: 4. Draft: 6.5 m. Equipment: 9 private installations for cargo handling.
Industrial Harbour Section: Length: 6,000 m. Number of berths: 60. Draft. 6.5 m. Equipment: 59 private installations for cargo handling, (electric cranes from 1 to 10 tons lifting power, grain elevators, belt conveyors, suction devices.)
Maritime Canal: Length: 20 km. Draft: 6.5 m. Equipment: 26 private installations of cargo handling.
SPECIALISED CARGO HANDLING FACILITIES: Private Cargo handling facilities exist in the whole of the Industrial Maritime Canal for grain, coal, fertilisers, liquid chemicals and L.P.G.
BRIDGES: Ships can reach outer harbour with clearance of 100 ft. and pass under fixed bridges to inner harbour with clearance of 20 ft. Road bridges open on demand. Railway bridges open according timetables, which subject change.
STEVEDORES: Arrangements made by Agents.
VHF: Wintam lock and tug boats equipped with VHF.
MEDICAL: No notice required for medical attendance. Hospital facilities available. In case of accident or emergency call phone number 900. No particular inoculations or certificates required.
TANKERS: Oil usually imported by tank barges. No slop facilities. Max. draft permitted for wine tankers, gas tankers and acid carriers: 19 ft.
DENSITY: Canal is fresh.
FRESH WATER: Fresh potable water delivered from shore in Willebroek lock at average rate of 10 t.p.h. during passage through lock, and in outer harbour at maximum rate of 20 t.p.h. according diameter of hose.
FUEL: All grades available. At least half a day notice should be given.
FIRE PRECAUTIONS: The usual precautions to be taken by tankers and ships handling inflammable or dangerous goods.
DEVELOPMENTS: Complete schedule for modernising canal, including building two larger locks, widening and deepening canal to be worked out over several years. Works of first new lock near present Kapellelock already completed.
GANGWAY/DECK WATCHMEN: Services of shore watchmen optional.
OPENING/CLOSING HATCHES: Carried out by ship's crew.
IDENTIFICATION CARDS: Not needed.
CONSULS:

Algeria	02	537.81.33	537.82.41
United Kingdom	,,	219.11.65	
Denmark	,,	217.11.31	
Spain	,,	511.73.90	
Finland	,,	512.98.93	
France	,,	217.31.79	217.24.63
Germany (Fed. Rep.)	,,	770.58.30	
Greece	,,	217.76.14	
Iceland	,,	512.59.65	
Italy	,,	537.19.34	537.90.56
Liberia	,,	344.49.40	

Luxemburg	,,	733.99.77
The Netherlands	,,	511.39.60
Norway	,,	736.20.45
Panama	,,	512.66.30
Portugal	,,	538.47.90
Switzerland	,,	512.78.43
Tunisia	,,	734.91.78

REPAIRS: No shipyards in Brussels, but in Boom and Temse, not far from Brussels, and Antwerp. Minor deck and engine repairs by small shipyard on canal.
REPATRIATION: Arrangements for repatriation can be made with maritime authorities on Antwerp roads when proceeding Brussels. Consuls in Brussels arrange for crew changes or repatriations (Consulates closed Saturdays, Sundays and Holidays).
AIRPORT: Brussels Airport served by regular airlines. Air terminal situated in centre town, directly connected with Airport by special railway.
TiME: GMT plus 1 hour throughout year.
HOLIDAYS: Official Holidays Belgium: January 1 (New Year), Easter Monday, May 1 (Labour Day), Ascension Day, Whit Monday, July 21 (National Holiday), August 15 (Assumption Day), November 11 (Armistice Day), December 25 (Christmas). Most offices closed on Saturdays.
POLICE/AMBULANCE/FIRE: General call, Ambulance/Fire: 900; Police: 906; Fire: 02/511.55.55.–512.22.22. Police 02/513.28.40.
TELEPHONES: Only placed for warships at one particular berth.
GENERAL: Bus 47 near left bank and street-car 58 near right bank of outer harbour, lead to town centre (10 minutes). General Information Office situated on de Broukeresquare (town centre). Ship stores can be obtained, but no bonded stores.
SHORE LEAVE: Crew members allowed ashore without restriction.
REGULATIONS: At night only main gate of outer harbour on right bank is open.
AUTHORITY: "Societe du Canal et des Installations Maritimes de Bruxelles" (Port of Brussels Authority).
AGENT: See "Antwerp".

GHENT: 51.02 N. 03.44 E. (See Plan)

DOCUMENTS:
2 Crew Lists (Benelux forms).
2 Passenger Lists.
2 Store Lists.
2 Lists personal effects of crew, such as camera, radio, cigars, cigarettes, tobacco, etc.
1 Bill of Health.
1 Belgium Tonnage Certificate.
1 List of Dangerous Cargo.
1 Manifest or Bill of Lading.

PILOTAGE: Cables 24 hours in advance to: "Belgisch Loodswezen, Vlissingen", when coming from the West; "Nederlands Loodswezen, Vlissingen", when coming from the North. Radio VHF Pilot boat West: Channel 6; North: Channel 6; VHF Vlissingen: Channel 14.
Pilot boat positions: West: Wielingen Buoy A.1; North: NSB Buoy.
Anchorages if awaiting Pilot: West: Buoy Scheur No. 2, between A.1 and Akkaert Buoy; North: Schouwendiep, Middeldiep. Schelde: Roads Flushing, Pit of Terneuzen, Everingen, Braeckman and Sloe.
Signal to require Pilot assistance: West, Night: "G", if VHF give destination; Day: "G Flag". North, Night: "G"; Day: "G".
ANCHORAGES: Terneuzen Roads.
RESTRICTIONS: None, navigation day and night, but over 32 ft., tidal entrances.
MAX. SIZE: Length 245 m.; beam 33 m.; draft 12.25 m. (F.W.). Turbine powered ships: Length 235 m.; beam 33 m.; draft 11.75 m.
HEALTH: Medical Officer of Public Health Service "Saniport-Ghent" inspects Bill of Health.
RADIO: Cable Agents ETA, draft, cash required: via Ostende Radio "OST" for vessels coming from West; via Scheveningen Radio "PCH" for vessels coming from North.
TUGS: Meet vessels Terneuzen Roads; ships use own lines.
VHF: VHF port operations Channels 5, 6 and 11. Channel 11: working channel on the ship canal Ghent–Terneuzen. Channel 5: Port Operations Ghent. Channel 6: Intership.
BRIDGES: Three bridges on Ghent/Terneuzen canal, Sluiskil, Sas-van-Gent, and Zelzate bridge. All open day and night, on signals by Pilots.
BERTHING: Berths for largest vessels able to enter the port are at Sifferdok, Texaco Dok, Rodenhuize Dok, and Sidmar Wharf. Other docks available for smaller tonnage, accommodating 6,000 to 8,000 d.w.t.
STEVEDORES: Will be advised by Agents of ETA, and must be ordered, by noon in order commence at 0600 next working day (first shift); by 1600 to commence 0745 following day (normal working day); by 0700 to commence 1400 same day (afternoon shift); by 1000 to start 1330 (for half a working day).
MEDICAL: Agents to be advised by radio or cable if urgent assistance required. Hospitals available. First aid tel. 900.
TANKERS: Berths: Fina, Anglo Belge des Petroles, Rodenhuize, and Texaco. Texaco have pipe-lines for loading and discharging 10 in. but all kinds of fittings available. Slop discharge: Two tanks each 40,000 barrels available; vessels to discharge by own power.

S.G.:

Aeroplane fuel	770	Diesel oil	825
Light gas-oil	840	Fuel	735
Super fuel	745	Half light gas-oil	935
Heavy gas-oil	950		

Two berths at Texaco each with one main and one spare pump for each product. One berth at Rodenhuize. Each capable accommodate 60,000 d.w.t. vessels. Max. draft 12.25 m.
DENSITY: Fresh.
FRESH WATER: Supply by boat. Supply within normal working hours at 85 fr. per cu. m. Supply outside normal working hours at 145 fr. per cu. m., with a supplement ranging from 800 to 3,600 fr. A minimum of 10 cu. m. will always be charged.
FUEL: All grades delivered by barges or trucks. At least 24 hours notice required.
SPECIALISED CARGO HANDLING FACILITIES:
Two roll-on/roll-off berths exist on the right bank of the Sifferdok, one being privately owned by Volvo Europa. The publicly owned roll-on/roll-off berth has a water depth of 12 m.
The installations of Eurosilo situated at the end of the Sifferdok offer facilities for bulk cereals and cattle fodder. Loading and discharging at a rate of 1,000 t.p.h. Storage capacity of the silos, 386,000 tons in 40 cells.
The Compagnie Belge de Manutention (CBM) situated on the left bank of the Sifferdok is specialised in handling heavy goods in bulk, such as pyrites, ores, phosphates, coal, pitch-coal, etc. by transporter bridges of 10 and 15 tons. Also mechanical shovels for the discharge of bulk goods in closed wagons and funnel wagons. Total storage capacity, 2,500,000 tons.
The same commodities are also handled by CBM in the Zuid and Middendok; grab discharge with 10-ton cranes.
Liquid chemicals are currently handled at the Ug. Kuhlmann factory in Rieme on the left bank of the canal, most commonly liquid sulphur and propylene. No berths for L.P.G. carriers exist in Ghent.
Specialised berths where equipment for handling fertilisers is available are No. 27 (Grootdok) and No. 83 (Sifferdok). Cranes for grab discharge, funnels and conveyor-belts.
WATCHMEN: Not compulsory, but available. Price for working days: plus/minus BF 1,500.0 per 12 hours shift.
HATCHES: Opening and closing by crew.
SHIP'S CERTIFICATES: Belgium Tonnage Certificate required.
CUSTOMS ALLOWANCE: Each crew member: 200 cigarettes, or 50 cigars, or 250 gr. tobacco, or 100 cigarillos. Wine practically free: Spirits: one opened bottle each man.
IDENTIFICATION CARDS: Not needed. Seaman's books only.
CONSULATES:

Germany	Tel. 25.91.68	Guatemala	Tel. 25.88.61
Central African Republic	,,	Haiti	,, 25.22.37
	,, 28.10.81	India	,, 26.34.23
Chile	,, 53.89.65	Italy	,, 25.85.66
Korea	,, 22.68.03	Norway	,, 51.25.21
Costa Rica	,, 25.04.15	Panama	,, 52.31.27
Denmark	,, 26.65.62	Netherlands	,, 25.18.16
Finland	,, 23.50.11	Peru	,, 28.20.83
France	,, 25.97.30	Portugal	,, 51.12.32
Great Britain	,, 23.08.20	Sweden	,, 26.19.26
Greece	,, 25.58.91	Tunisia	,, 26.41.42

REPAIRS: Practically all kinds of deck/engine repairs possible.
DRY DOCKING: Only for smaller vessels. There are 2 dry docks managed by the City Corporation.
(1) Length: 130 m.; beam 13 m.; depth 5.25 m.
(2) Length: 76 m.; beam 11 m.; depth 4 m.
REPATRIATION: Adequate facilities.
AIRPORTS: National airport Zaventem near Brussels; 35 miles from Ghent. All world airlines. Ostend Airport (Middelkerke) 45 miles.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: New Year's Day; Easter Monday; Labour Day (1st May); Ascension Day; Whit Monday; National Day (21st July); Assumption Day (15th August); All Saints Day (1st November); Armistice Day (11th November); Christmas Day. Cargo can be arranged on these days at special rates.
TELEPHONE: Police help 906; Ambulance 900; Fire Brigade 25.32.41; Water Bailiff 51.00.20; Port Taxi 51.09.88; Port Authorities 51.04.57.
AUTHORITY: City Corporation of Ghent, Port Administration.
AGENT: See "Antwerp".

OSTEND: 51.14 N. 02.55 E. (See Plan)

DOCUMENTS:
2 Crew Lists or Passenger Lists.
4 Cargo Manifests.
2 Copies Bills of Lading.
3 Freight Lists prepared by Agents.
2 Customs Provision Lists prepared by Agents.
General declaration prepared by Agents.
Customs declaration outward bound prepared by Agents.

PILOTAGE: *(a)* from Pilot boat between "S.W. Akkaert" and "A.1" lightbuoys. Black hull, white number forward on both sides of hull, yellow funnel black top. Displays by day at top of mast, red square flag with letter P in white; by night lights prescribed by International Regulations. Contact Pilot boat: Channel 6 VHF. Morse or flag signal: G.8. In low visibility: sound signal G.8 to be made at least 3 seconds after usual fog signal. Pilot boat answers with sound signal H at least 3 seconds after sounding prescribed fog-signal.

Anchorage awaiting Pilot: between S.W. Akkaert, N.E. Akkaert and A.1 lightbuoys. Depths at least 18 m. MLLWS. Advice from Pilot boat VHF Channel 6. If Pilot boat not on station, shipping informed by Ostend Radio in radiotelephonic frequency 2761 kHz (108 m.) announced on 2182 kHz (137 m.) on following hours: 0103–0803–1303–1603 and 2103 GMT.

(b) from Pilot station Ostend. ETA to "Pilot station Ostend" via "Radio Ostend" at least 2 hours before arrival. Harbour Pilot boat will meet as far as 51° 15′ 30″ N. 2° 30′ E. Pilot boat shows by day: red square flag white P; by night: international prescribed lights. Anchorage: 51° 15′ 30″ N. 2° 30′ E. Depths: at least 7 m. MLLWS. Pilot station Ostend operates VHF Channel 9 (only for Pilotage matters).

ENTRY RESTRICTIONS: Any restrictions imposed are shown on mast of signal station at end of Eastern harbour entrance pierhead.

MAX. SIZE: Entrance of lock to Commercial Docks restricted to max. beam 57 ft. 6 in. and draft max. 24 ft. Entrance to lock of Fishing Port restricted to ships with max. beam 50 ft. and max. draft 23 ft. Harbour channel restricted to 30 ft. draft.

HEALTH: Pratique obtained from Belgian Pilot. Any advice on health matters also obtainable from Pilot services.

RADIO: Ostend Radio – OST.

TUGS: Government tug 1250 Pk available, meets outside harbour. Tug lines optional; charge for use of tugs' lines: BRT 250 tons and less: 40 FB per half hour. BRT more than 250 tons: 50 FB per half hour.

BERTHING: According draft. Any specific instructions given by Harbour Pilots or Agents.

BULK HANDLING FACILITIES: Roll-on/roll-off berths in timber dock and on deep water quay with facilities for loading and unloading containers.

STEVEDORES: ETA advices week-days before 0600 hrs. For Sat. or Sunday work advise before 1500 hrs. Fridays. All stevedoring arrangements made by Agents.

MEDICAL: Advance notice to Agents for medical attention 6 hr. before arrival. Hospital services available. Medical information can be obtained on R/T via Ostend Radio.

TANKERS: Only small coastal tankers. Only discharge in Fishing Port. Max. length 285 ft., max. beam 50 ft., max. draft 23 ft., or Ostend-Bruges canal, max. length 312 ft., beam 57 ft., max. draft 21 ft. 16/5 to 16/10; max. 18 ft. 16/10 to 16/5.

FRESH WATER: Available quayside in docks. Rate delivery approx. 15 t.p.h. Cost 32 fr. per ton.

FUEL: All grades.

DEVELOPMENTS: New deep water quay with max. depth 30 ft. LLW, with roll-on/roll-off terminal under construction.

GANGWAY/DECK WATCHMEN: Not necessary. If required, cost approx. 900 frs. per shift of 8 hrs.

OPENING/CLOSING HATCHES: Normally carried out by crew. Can be done by stevedores but will then be charged.

CERTIFICATES: Load line cert. Tonnage cert. Radar and radio certificates.

TOBACCO ALLOWANCE: 200 cigarettes or 100 cigarillos or 50 cigars or 250 gr. tobacco. Fresh supply weekly.

WINE AND SPIRIT ALLOWANCE: 1 litre per man in opened bottles.

CARGO GEAR: No additional requirements.

CONSULS:

Austria	Chile
Guatemala	Great Britain
Germany	Monaco
Portugal	Denmark
Norway	Uruguay
France	Sweden
Finland	

REPAIRS: All types deck and engine repairs.

DRY DOCKS: In Fishing Port 2 slipways available, one 1,000 tons deadweight, the other 500 tons; one of approx. 3,000 tons is planned. One floating dry dock of 5,700 tons in Government repair docks.

REPATRIATION: Through immigration officers and Maritime Police, tel. 71941 and 76788.

AIRPORT: 3 miles from port, served by regular airlines.

TIME: Local time GMT plus 1 hour all year round.

HOLIDAYS: New Year (1 Jan.); Easter Monday (changeable); Labour Day (1 May); Ascension Day (changeable, in May); Whit Monday (changeable); Independence Day (21 July); Our Mary Ascension Day (15 Aug.); All Saints' Day (1 Nov.); Armistice Day (11 Nov.); Christmas Day (25 Dec.). Cargo work can be arranged on those days at sufficient notice.

POLICE/AMBULANCE/FIRE: Police tel. 71111 and 71057; Ambulance tel. 900; Fire tel. 71010 and 71086.

TELEPHONES: No arrangements for placing on board.

SERVICES: Compass adjusting, radio and radar repairs.

AUTHORITY: Harbour Master.

AGENT: Dens Ocean Ostend.

ZEEBRUGGE: 51.20 N. 03.12 E. (See Plan)

DOCUMENTS:

1 List of Dangerous Goods.
2 Crew Lists or Passenger Lists.
4 Cargo Manifests.
2 copies Bills of Lading.
3 Freight Lists prepared by Agents.
2 Customs Provision Lists prepared by Agents.
General Declaration prepared by Agents.
Customs Declaration, outward bound, prepared by Agents.

PILOTAGE: Compulsory except for small coasters. Pilot vessel located at A.1 buoy off Ostend and 14 miles N.W. of Zeebrugge. Black hull, white number forward on both sides of hull, yellow funnel with black top. Displays by day at top of mast, red square flag with letter "P" in white; by night, lights prescribed by international regulations. Pilot can be contacted by VHF, Channel 6, Morse or flag signal.

ANCHORAGE: In the vicinity of A.1 buoy pilot station, approx. position 51° 22′ N. 02° 53′ E. Depths up to 18 m.

RESTRICTIONS: Vessels with a draft of over 25 ft. are dependent on tide for entry.

MAX. SIZE: Length not limited. Max. draft up to 42 ft. depending on tide.

HEALTH: Pratique is normally given at pilot station provided health situation satisfactory. Any advice on health matters also obtainable from pilot service.

RADIO: Ostend Radio used for all messages. VHF Channel 9 used for Pilot. VHF Channel 8 used for tugs.

TUGS: Four permanent powerful tugs available. Normally join vessel at harbour entrance, ship's lines used.

BERTHING FACILITIES: Zeebrugge mole, for coal and other dry cargo, depth alongside 34 ft. low water.

Texaco Zeebrugge Marine Terminal: Two tanker berths, depth alongside 42 ft. low water. No slop disposal facilities. Container Quay, depth alongside 43 ft.

DENSITY: 1025.

FRESH WATER: Available from the berths, rate 30 t.p.h.

FUEL: All grades available. Can be supplied ex-wharf or by barge provided advance notice given.

BULK HANDLING FACILITIES: Container Quay, depth 43 ft. LW.

STEVEDORES: 24 hours notice required to arrange gangs.

MEDICAL: Advance notice advisable for medical attention. Doctor and hospital facilities always available. Vaccinations can be arranged.

DEVELOPMENTS: Work commenced 1972 on new sea lock to handle ships up to 125,000 d.w.t. Work expected completed within 8 years. The lock will be 500 m. long, 58 m. wide and will have a max. depth of 18 m. LW.

GANGWAY/WATCHMEN: Advisable for gangway, 2 for moorings.

OPENING/CLOSING HATCHES: Normally by crew.

CERTIFICATES: Registry, tonnage and usual certificates.

CUSTOMS ALLOWANCES: Daily normal use.

CARGO GEAR: Normal requirements. Ten cranes 3 tons up to 16 tons.

IDENTIFICATION CARDS: Normal papers.

CONSULS: None.

REPAIRS: Repairs afloat by local workshop.

REPATRIATION: All facilities.

AIRPORTS: Ostend, Brussels, Antwerp.

TIME: GMT plus 1 hour.

HOLIDAYS: Work possible any day.

POLICE/AMBULANCE/FIRE: Telephone 900.

TELEPHONES: Only shore telephones.

AGENTS: See "Antwerp".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Belize

BELIZE: 17.29 N. 88.11 W.

PORT LIMITS: Usually upon arrival at English Caye Pilot Station for vessels arriving from North and East and at anchorage in Belize Harbour for vessels arriving from South inside the reef.

DOCUMENTS:

Crew Lists – 5 copies for local use plus 10 Spanish copies for Consular Clearance.

Passenger Lists – 5 copies for local use plus 10 Spanish copies for Consular Clearance.

Stores List – 3 copies for local use plus 10 Spanish copies for Consular Clearance.

Manifests – 8 copies.

Customs Documents – Clearance for last port and crew declaration.

Health Documents – International Declaration of Health plus one copy crew vaccination list.

Ship's Papers and Certificates should be available on request.

PILOTAGE: A pilot is always on station at English Caye. They are kept informed of ships' movements by the respective Agents; for vessels with no appointed Agent, contact can sometimes be made with the pilot station on 2182, failing this Belize Customs control keep a constant watch on 2750. Vessels consigned to United Brands can make contact on 2182 HF or Channel 16 VHF. Various small boats are used by and are owned by individual Pilots. .

ANCHORAGES: Depths in harbour anchorage area vary due to a natural slope; for example, a vessel drawing 14 ft. can anchor within 0.25 mile; 16 ft. 0.5 mile; 20 ft. 1 mile and so on Southward. Masters should refer to Pilot for this information.

RESTRICTIONS: The Pilots do not consider the Eastern Channel lights sufficiently efficient for night-time transit and it has therefore become established that no night arrivals and departures are made. Recently, however, large modern freighters have insisted on making night arrivals using radar with no apparent difficulty.

MAX. SIZE: With no berths, size and length, within reason is not a problem. Tankers bringing oil to the Esso storage depot secure to buoys fore and aft. Max. draft 19 ft. 6 in.

PRATIQUE: Granted by Customs after boarding in harbour.

RADIO: Most ships' Agents man their own radio stations and usually stand-by on 2738 HF. Customs stand-by on 2750. United Brands-Belize stand-by on 2182 but in addition has frequencies 1045, 2190, 1400, 2638, 2670, 2738 and 2750 HF, and stand-by on Channel 16 VHF with alternative at Channel 6.

TUGS: Tugs are not normally necessary but small ones are available.

STEVEDORES: Gangs usually require 2 hours notice during normal working hours. Work rates average between 3 and 10 tons per gang hour and cost: average between U.S. $4.00 and U.S. $7.00 per revenue ton depending on type of cargo.

MEDICAL: Hospital facilities are available. Smallpox vaccinations required.

TANKERS: Undersea pipe-line 8 in. in diameter.

Hand-pump discharging rate 250 to 300 g.p.m., also gravity flow. Normal discharge rate 2,000 barrels per hour.

DENSITY: Density varies with outflow from rivers during wet season (July-December).

FRESH WATER: Very scarce and expensive. Approx. 4 U.S. cents per gallon.

FUEL: Light diesel oil 45/48 available subject to Government Approval. Can be at buoys with 8 in. dia. pipe (reductions to 4 in. available or by barge).

FIRE PRECAUTIONS: None.

CONSULS:

United States	Lebanon	Norway
West Germany	Nicaragua	Sweden
Guatemala	Holland	Denmark
Mexico	France	El Salvador
Honduras	Belgium	

REPAIRS: Only small minor repairs possible.

SURVEYORS: Lloyds and A.B.S.

GANGWAY/DECK WATCHMEN: Not required.

HATCHES: Stevedores open and close hatches except McGregor type.

CUSTOMS ALLOWANCES: 200 cigarettes plus 1 bottle spirits (0.20).

CARGO GEAR: Ship's gear; no heavy lift cranes available.

REPATRIATION: Possible regular air services to and from Miami, New Orleans, Kingston, Jamaica and neighbouring Republics.

AIRPORT: Belize International Airport 10 miles from Belize City.

TIME: Normally 6 hours behind GMT.

HOLIDAYS: Public Holidays: New Year's Day*; Baron Bliss Day (9th March); Good Friday; Holy Saturday; Easter Monday*; Queen's Birthday (22nd April); Labour Day* (1st May); Commonwealth Day (24th May); National Day* (10th September); Prince Charles' Birthday (14th November); Christmas Day* (25th December); Boxing Day* (26th December).

*No work whatsoever, all other days subject to overtime rates.

POLICE/AMBULANCE/FIRE: All emergencies dial 90.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Seaman's book sufficient.

REGULATIONS: None.

DELAYS: Discharge and loading operations occasionally delayed by weather (rain) and sometimes by shortage of equipment (barges, etc.).

DEVELOPMENTS: None in foreseeable future.

GENERAL: Starboard anchor usually used to make lee for operations on portside. It is necessary for vessels to provide toilet facilities for stevedores. Feeding of Supervisors and Customs Officials is normal.

AUTHORITY: No Port Authority.

AGENT: United Brand Company, PO Box 281, 14 Fort St., Belize City, Belize, C.A. Tel. 2100. Cables "Unibranco Belize". Radio call sign: United Brands, Belize.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Benin, People's Republic of

COTONOU: 06.20 N. 02.32 E.

PORT LIMITS: The area contained within an arc of a circle of 1 mile radius centred on the red light at the West Jetty.
DOCUMENTS: Once berthed the ship must be able to produce to the port authorities:
6 copies Crew List.
4 copies List of Ports of Call.
6 copies Passenger List, and passengers in transit.
3 Customs Declarations (personal effects list).
2 Maritime Declarations of Health.
3 Lists Provisions and Stores, including foodstuffs.
10 copies Manifest.
1 Bill of Lading.
1 Declaration of Arms and Ammunition.
3 Lists of Dangerous Cargo (unloading or in transit).
Also international documents of ownership and safety.
PILOTAGE/APPROACHES: Vessels must advise ETA to Port Authority "Dirport Cotonou" 24 hours prior arrival weekdays, and before midday Saturday for Sundays and before midday on day preceding holidays. Cable address Pilot station "Commandant du Port, Cotonou". On approach to port vessels may also call Pilot station on 2182 kc/s or VHF Channel 16. Permanent radio watch kept by port Coast-Guard Station. Pilot services permanent and operate night and day, Sundays and holidays, except for nights of 24th and 31st December from 1800–0600 hrs. Ships drawing more than 30 ft. must enter on high tide. On arrival in approaches, ships coming from West or South must steer a Northerly course in direction of lighthouse, and take Pilot about half a mile from fairway. If arriving from East, vessels should take Westerly course in direction of fairway and take Pilot about half a mile from fairway. Pilot boat is small cutter with black hull and white superstructure, by day carries flag "H" and by night carries statutory lights for pilot boats. Piloting obligatory for ships over 100 net tons.
ANCHORAGES: In cases of bad weather or of waiting for Pilot, ship must anchor approx. 1 mile to South of lighthouse. Sound anchorage with sand bottom and depth 14 m. Forbidden to anchor within radius of 700 m. from red light of West Jetty.
RESTRICTIONS: No restrictions on hours of entry or exit.
MAX. SIZE: Length 230 m. and draft 31 ft.
HEALTH: Free Pratique generally given by Agent.
RADIO: Advisable give Agent 72 hours notice of ETA. Thereafter re-confirm 36 hours prior arrival.
RADAR/VHF: No port radar service. VHF Channel 16. R/T 2182 kc/s.
TUGS: Tug assistance performed by Port Authority of Cotonou and compulsory for every vessel over 500 g.r.t., mooring, unmooring, at berth or shifting. Extra charge for using tug's lines.
BERTHING: Berthing quay 620 m. long which will accept alongside a minimum of 4 ships working together. Harbour dredged up to 9 m. under zero of chart and will permit almost all sizes of ships to work safely. Railway line runs 4 m. side of quay, under ship tackles, and used only for heavy lifts. Berthing priority only given cargo ships and tankers which have specially reserved berths. Other ships berth dependent on berths available and in order of arrival. As well as two tanker berths there is loading berth for bulk palm-oil, one waiting berth at harbour entrance, and 4 quays with warehouses for import/export traffic.
STEVEDORES: Ship must advise Agent in advance of number stevedore teams required, and specify number of hours work required. This must be done 24 hours in advance on weekdays, and before midday Saturday for Sundays, and before midday on day preceding holidays. Loading and unloading rate: Working days – 600 tons for bagged cargo. 400 tons for other cargo. Sundays and holidays, half above rates. Days counted as 24 hours starting from first break following berthing. For ships having to handle smaller quantities, assessment of time calculated in multiples of 300 tons for bagged cargo and 200 tons for other cargo, per 12 hours. Loading and unloading operations can be carried out on Sundays and public holidays if Ship's Master wishes, with exception of Labour Day (May 1st) and Independence Day (August 1st).
MEDICAL: Well-equipped modern hospital in Cotonou – smallpox vaccinations required.
TANKERS: 2 tanker quays for ships of 230 m. length and 31 ft. draft. Unloading carried out by 100 mm. pipe-line. Loading of petroleum products carried out by pumping (80m³/h) or by gravity (50m³/h). Products are aviation spirit 100/130, "Super" petrol, low-grade petrol, Kero Avtur, and gas oil.
FRESH WATER: Supplies available at all berths on quay by pipe-line of 100 mm. with reduction of 70 mm. (discharging 25 t.p.h.).
FUEL: Fuel oil of 1,500 seconds viscosity available at Berth No. 1 and at the Fishing Quay. Rate 50 to 80 cu/m. p.h.
FIRE PRECAUTIONS: Port has following safety equipment: 1 tug equipped with fire hose of 50m³/h. 2 motor pumps of 30m³/h. 1 draining pump of 150m³/h. In addition special security watches are kept on dangerous merchandise in classes 1a, 1b, 1c, 1d and 111c. Normal watch up to 5 tons, double watch from 5 tons to 16 tons. Motor pump standing by from 16–50 tons. Tug standing by for quantities above 40 tons for inflammable liquids (flashpoint less than 55° C) and above 50 tons for other dangerous cargo.
WATCHMEN: (See "Fire Precautions".) Recommended that a watchman be on board. Can be arranged by Agents.
OPENING/CLOSING HATCHES: Carried out by stevedores
CUSTOMS ALLOWANCES: 200 cigarettes and 3 opened bottles of spirits for each Crew member.
REPAIRS: Workshops for small repairs. No tank-cleaning facilities.
DRY DOCKS: Only hauling gear of 250 tons for careening small ships and trawlers.
CONSULS:
West German Embassy 31-2967
Chinese Popular Embassy 31-4424
U.S.A. Embassy 31-2650
French Embassy 31-2224
French Consulate 31-2638
Ghanaian Embassy 31-2746
Nigerian Embassy 31-3142
U.S.S.R. Embassy 31-2834
Niger Consulate 31-3334
Belgian Consulate 31-2486
Netherlands Consulate 31-3037
Consulate of Sweden and Norway 31-2433
Zaire Embassy 31–4983.
AIRPORT: 5 km. from port, served regularly by DC8 for European destinations (5 departures a week for Paris).
TIME: GMT plus 1 hour.
HOLIDAYS: January 1st; Easter Sunday and Monday; Labour Day (May 1st) – no cargo work; Ascension Day; Sunday and Monday of Pentecost; August 1st (Independence Day) – no cargo work; Assumption; November 1st (All Saints' Day); 25th December (Christmas); Tabaski and Ramadan at the beginning of Lunar Year (Moslem holidays).
POLICE/AMBULANCE/FIRE: Harbour Police 31-3942; First Aid 17; Hospital 31-2713 and 31-2717; Fire Brigade 18.
TELEPHONES: A telephone can be placed on board at request of Ship's Master.
SHORE LEAVE: Crew must carry Seaman's Identity Card.
AGENT: Socopao-Dahomey, BP 253. Tel.: 29–60/61. Telex: 5213. Telegraphic address: "Freight".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bermuda

HAMILTON, (incl. Freeport): 32.17 N. 64.47 W.

DOCUMENTS:
Ship's Register.
Derat. Certificate.
Clearance previous Port.
4 Crew Lists.
4 Passenger Lists.
2 Provision Lists.
2 Crew Personal Effects Lists, i.e. cameras, binoculars, cigarettes, etc.
5 copies Cargo Manifest if discharging.

PILOTAGE: Pilot ordered by Agent on receipt of vessel's ETA. Pilot boards vessel approximately 2 miles East of Island with St. David's Lighthouse bearing 240° True. Boats black hull varnished superstructure.

If vessel's ETA alters, Bermuda Harbour Radio which in direct contact with Pilot station can be contacted by VHF Channels 10, 12, 16, 26. Pilotage is confined to daylight hours only with exception of vessels calling for medical aid – some of which handled off-shore.

ANCHORAGES: Grassy Bay and Great Sound. These anchorages are used mainly by passenger liners as they are close to Hamilton Harbour and are protected from heavy weather. Also used by large vessels carrying out extensive repairs.

RESTRICTIONS: Restricted by draft of 26 ft. Daylight piloting only.

MAX. SIZE: Largest ship to enter to date, length 690 ft., draft 26 ft.

HEALTH: Pratique granted on 24-hour basis and can be obtained by wireless by sending message via VRT to "Health Bermuda" requesting free pratique be granted. If any suspected disease or fever on board advise "Health" as well as Agent.

RADIO: Commercial radio station operated by Cable & Wireless Ltd., call letters VRT Bermuda. Bermuda Harbour Radio, controls channel traffic, call sign ZBM Bermuda.

VHF: Operated by Bermuda Harbour Radio. Contact on Channels 10, 12, 16, and 26.

TUGS: Tugs normally join vessel in harbour if requested. Tugs not compulsory and ordered depending on the size of the vessel and weather conditions. Tug's lines used during normal tug operations.

BERTHING: Docks and tugs are agreed upon between Agent and Pilot prior ship's arrival.

STEVEDORES: Ordered by Agent after receipt of ETA. Average discharge general cargo 10 t.p.h.

MEDICAL: No advance notice required for medical attention if other than critical cases. First-class hospital facilities available. Vaccination certificates required for all seamen.

TANKERS: Shell bunkering Berth, Freeport, Ireland Island. Discharge lines 8 in. and 10 in. No slop discharge facilities.

DENSITY: 1025.

FRESH WATER: Delivered by barge. Order prior arrival to avoid delay.

FUEL: Grades available: Bunker "C" fuel oil, viscosity 100 SSF at 122° F. Diesel oil. Viscosity 3616 at 100° F.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually carried out by stevedores.

TOBACCO/WINE ALLOWANCE: Custom allows about one carton cigarettes and limited amount of spirits per man.

IDENTIFICATION CARDS: None required.

CONSULS:

Belgium	Mexico
Chile	Netherlands
Colombia	Norway
Denmark	Portugal
France	Sweden
Germany (Federal Republic)	United States

REPAIRS: All types minor deck and engine repairs can be carried out. Also major temporary repairs.

DRY DOCKS: Only yacht slipways available.

REPATRIATION: First-class facilities available for repatriation and crew changes.

AIRPORT: Distance from airport 10 miles. Connections to all parts of world. Average 15/20 flights per day.

TIME: Local time GMT minus 4. Permanent BST in 1974.

HOLIDAYS: New Year's Day; Good Friday; Commonwealth Day (May 24th); Queen's Birthday (celebrated annually in June); Cup Match (Thursday and Friday before first Monday in August); Remembrance Day (November 11th); Christmas Day, Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Police 2-2222; Ambulance 2-2000; Fire 00.

TELEPHONES: Can be placed on board vessel when alongside.

GENERAL: Port of Freeport, Ireland Island, situated in the Port of Hamilton at the old British Dockyard is used mainly by the Royal Navy and Shell Bunkering.

SHIPMASTERS REPORT:

Approaches: Approach was made at night from Southward. Gibbs Hill Light sighted at 29 miles. First radar echo was made at 34 miles. St. David's Lt. Ho. Occ. 5 sec. can be easily confused with St. David's House Lt., Gp Fl 2 and they are hard to pick out against background lights. Mills Breaker and Kitchen Shoal Buoys are both good lights and are conspicuous on the radar. Lobster Pots marked by unlit buoys can be troublesome.

Pilotage: There are ten Pilots who operate on a rotation basis. Least depth is in the Dundonald Channel and Two Rocks Passage approaching Hamilton. Passenger Vessels over 26 ft. anchor in Grassy Bay just North of the Dundonald Channel. Official max. draft is 26 ft. although I was told by the Harbour Master that they will take ships up to 26 ft. 06 ins.

Berthing: Vessel berths starboard side to, swinging on anchor with tug assistance. During a long stay vessels often have to shift up and down the wharf to make room for other ships making short calls. At one time the bow was overhanging the end of the quay by 100 ft. but even in this position ship can be well secured.

Cargo Operations: Labour force consists of around 40 men which can just make up two freezer gangs. When a container ship arrives she takes priority and one gang is lost. At weekends a few additional men are available from other jobs within the stevedoring firm and a third general gang can be made up. Stevedore stressed that cargo be restricted to two hatches when possible especially in ships with beams and hatches. Locker stow should be avoided when possible. Average on freezer was approximately 9 t.p.h.

Hours of work are:— 0800-1200, 1300-1700, 1800-2100. This applies every day except Saturday when work finishes at 1700 hrs. General cargo gangs can be worked until 2200 hrs. but all freezer gangs finish at 2100 hrs. to allow time for Receivers to clear the wharf of cargo by 2200 hrs.

Fresh Water: Not readily available in large quantities due to a water shortage. Price when available is 6 dollars a ton. We managed without buying any in spite of a prolonged stay.

Currency: Stated in Pilots book to be pounds. It is in fact Bermuda Dollars which are equivalent to American dollars and readily interchangeable.

Stores: Very expensive and would suggest only plan on buying essentials from supermarket in small quantities.

Discharge Averages:

No. 1 Palletised Milk Powder	20 t.p.h.
No. 2 Cartons of Apples (Locker)	6.2 ,,
No. 3 UTD Centre Meat & Butter	10.8 ,,
No. 3 MTD Centre Meat	8.8 ,,
No. 4 UTD Centre Meat & Butter	8.0 ,,
No. 4 UTD P Meat	11.0 ,,
No. 4 UTD S Cartons Cheese	7.6 ,,
No. 5 UTD Carton Meat (Full Deck)	8.5 ,,

AUTHORITY: Harbour Master, Marine and Port Services Dept.

AGENT: Meyer Agencies Ltd., PO Box 510, Hamilton 5, Bermuda. Tel. 55214, 54176.

Shipping, Insurance, Travel Agents. Marine repairs, tug and barge operators, stevedoring operators.

ST. GEORGE'S, 32.22 N. 64.41 W.

DOCUMENTS:
Ship's Register.
Derat. Certificate.
Clearance previous Port.
4 Crew Lists.
4 Passenger Lists.
2 Provision Lists.
2 Crew Personal Effects Lists, i.e. cameras, binoculars, cigarettes, etc.
5 copies Cargo Manifest if discharging.

PILOTAGE: Pilot ordered by Agent on receipt of vessel's ETA. Pilot boards vessel approximately 2 miles East of Island with St. David's Lighthouse bearing 240° True. Boats black hull, varnished superstructure. If vessel's ETA alters, Bermuda Harbour Radio which in direct contact with pilot station can be contacted by VHF Channels 10, 12, 16, 26. Pilotage day only. Except medical cases which are handled offshore.

ANCHORAGES: *(a)* Five Fathom Hole, located at Eastern end of Island and is point where Pilots embark/disembark. Used by vessels not required to enter or those awaiting daylight. *(b)* Murray's Anchorage, used instead of Five Fathom Hole during times of heavy weather (daylight hours only). Also, by vessels unable enter St. George's Harbour and wishing to take on water, carry out repairs, etc. A stand-by anchorage for vessels waiting berth at Esso Oil bunkering pier and for vessels leaving this pier and awaiting daylight. *(c)* St. George's Harbour, when weather conditions such that Five Fathom Hole and Murray's Anchorage unsuitable to land ill/injured persons vessel proceeds directly to St. George's Harbour and anchors.

RESTRICTIONS: Entry to St. George's Harbour restricted by draft of 30 ft. Murray's Anchorage restricted by draft of 38 ft.

MAX. SIZE: Largest ship to enter to date – length 628 ft. However, size controlled by max. draft of 30 ft., displacement and weather conditions.

HEALTH: Pratique granted on 24 hour basis and can be obtained by wireless by sending message via VRT to "Health Bermuda" requesting free pratique be granted. If any suspected disease or fever on board advise Health as well as Agent.

RADIO: Commercial radio station operated by Cable & Wireless Limited, call letters VRT Bermuda. Bermuda Harbour Radio controls Channel traffic, call sign ZBM Bermuda.

VHF: Operated by Bermuda Harbour Radio. Contact on Channels 10, 12, 16, and 26.

TUGS: Tugs normally join vessel in harbour if requested. Tugs not compulsory and ordered depending on the size of the vessel and weather conditions. Tug's lines used during normal tug operations.

BERTHING: Dock and tugs agreed upon between Agent and Pilot prior ship's arrival.

STEVEDORES: Ordered by Agent after receipt of ETA. Average discharge general cargo 10 t.p.h.

MEDICAL: No advance notice required for medical attention if other than critical cases. First-class hospital facilities available. Vaccination certificates required for all seamen.
TANKERS: Esso Oil Pier: Discharge lines 8 in. and 10 in. No slop discharge facilities.
DENSITY: 1025.
FRESH WATER: Delivered by barge. Order prior arrival to avoid delay.
FUEL: Grades available: Bunker "C" fuel oil, viscosity 122 SSF at 122° F. Diesel oil, viscosity 3616 at 100° F.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Usually carried out by the stevedores.
TOBACCO/WINE ALLOWANCE: Customs allow about one carton cigarettes and limited amount spirits per man.
IDENTIFICATION CARDS: None required.
CONSULS:

Belgium	Denmark
Chile	Netherlands
Colombia	Norway
France	Portugal
Germany (Federal Republic)	Sweden
Mexico	United States

REPAIRS: All types minor deck and engine repairs can be carried out. Also major temporary repairs.
DRY DOCKS: Only yacht slipways available.
REPATRIATION: First-class facilities available for repatriation and crew changes.
AIRPORT: Distance from airport 2 miles. Connections to all parts of world. Average of 15/20 flights per day.
TIME: Local time GMT minus 4. Permanent BST in 1974.
HOLIDAYS: New Year's Day; Good Friday; Commonwealth Day (May 24th); Queen's Birthday (celebrated annually in June); Cup Match (Thursday and Friday before first Monday in August); Remembrance Day (November 11th); Christmas Day; Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Police 5–0011; Ambulance 2–2000; Fire "00".
TELEPHONES: Can be placed on board vessels when alongside.
GENERAL: Esso Oil Berth, within Port of St. George, is purely a bunkering and petroleum discharge pier situated on the Southern side of Murray's Anchorage.
AUTHORITY: Harbour Master.
AGENT: Meyer Agencies Ltd., PO Box 48, St. George's 1, Bermuda. Tel. 7–1255 (6 lines). Telex 3361 Meyerco BA.
Shipping, Insurance, Travel Agents. Marine repairs, tug and barge operators, stevedoring operators.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bolivia

GENERAL: Bolivia is completely land locked with no ocean ports.

The country has special port facilities or 'in transit zones' in Brazil at Belem and Santos; in Argentina at Rosario; and to the Pacific at Matorani, (and shortly Ilo) in Peru also Arica and Antofagusta in Chile.

In 1975 Chile offered a corridor 5 to 7 miles wide at the Pacific to Bolivia, and negotiations are at present being conducted on this subject. Whether this zone will include the port Arica is not yet known.

(1) A newly installed in-transit zone at Rosario (Argentina) is expected to divert present Bolivian imports and exports from Buenos Aires. The new area covers sheds 23/30, an area of over 5 hectares, and 945 m. of wharf. The present free zone, in the centre of the port zone, will eventually become the northern sector of the port, with good railway connections to Bolivia. All Government Cargo is handled by the Bolivian Customs Office from Ocean Port, but all private cargo is looked after by forwarding agents on behalf of importers, whose job it is to arrange for despatch, pay port handling charges, rail freight, etc.

(2) There are also special port facilities at Matarani and Ilo in Peru, and a new raod is being built which will bring La Paz to within one days road travel from the sea.

(3) The country borders to the East with the Paraguay River on a brief stretch near Corumba, on the Caceres Lagoon by Puerto Suarez, and where a new port – Sucre is to be opened shortly in connection with the movement of Iron Ore and Manganese down river. The river will normally permit vessels up to 11 or 12 ft. draft, occasionally falling to 5 to 6 ft. in the dry season (October/November).

DOCUMENTS: In each port there are Bolivian Customs Authorities under the control of the Bolivian Consul. At none of the 'in-transit ports' are any special Consular despatches or documents needed by vessels, other than those required by the particular country. It is only necessary to present separate manifests for cargo in transit to Bolivia.

However commercial invoices, and goods documentation does require consular intervention.

Shippers must vise Bills of Lading and Consular Invoices and also attach suppliers invoices, certificates of origin and insurance policy. Most imports are handled under letters of credit. Documents must be made out in Spanish. At Ocean Port, forwarding agents replace the Bill of Lading with a railway bill or trucking bill. There is no exchange control or shortage of foreign exchange in Bolivia.

Claims are finally set up (shortages, condition, etc.) in Bolivia, and hook tallies, local port receipt to Bolivian customs, railway or truck receipts, etc., all form part of the settlement.

CONTAINERS: It is possible to despatch sealed containers right through to Customs in Bolivia for opening there.

WEIGHTS AND MEASURES: All weights and measures are to be expressed in the metric system, except for lumber, in board feet.

FLAG: Three equal horizontal stripes of red, yellow and green.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Brazil

GENERAL: All ports

DOCUMENTS:
The following documents are the maximum number required on arrival, including copies for agents.

	Required by Port Doctor	Customs	Police	Totals
Crew List	3	3	4	10/12
Crew Personal effects list		3		1/3
Stores (engine/deck /cabin/bonded)		4		1/4
Passengers landing in transit or negative	3	6	3	12
Manifest for port (or negative)			3 (arms	6/9
Manifest in transit (every port)			munitions only)	
Vaccination certificates (one each person)	1			1
Maritime Health Cert. (WHO form)	2			2
Deratization Cert. or exemption	1			1
Accompanied baggage, individual		3		3
Unaccompanied baggage manifest		3		3
General statement	2	2	4	4

The clearance from the previous Brazilian port of call must also be presented, and a detail of discrepancies in cargo (lost overboard, etc.) be available.

All the usual ship's paper's must be at hand:— Registration, Tonnage, Radio Certificate, Safety Certificate, etc. The due dates of all these certificates are specified in the arrival statement, to be signed by the Master.

Consular dues are now collected in Brazil, therefore no Consular intervention is required on ship's papers.

Care must be taken that ports as manifested check against the arrival certificate, and also that the list of ports coincide with those declared on the health certificate. Manifests must show:—

(1) Flag and name of vessel
(2) Detailed description of goods, including freights in U.S. Dollars
(3) Owners and Charterers name
(4) Date of entry and sailing must be shown on the first page.

FLAG: The Brazilian flag is a green ground with a yellow lozenge enclosing a blue sphere, with 21 white stars of which 5 form the Southern Cross and the motto 'Ordern & Progresso'.

This must be flown from the foremast when in Brazilian Ports, from 0800 hrs. to sunset daily.

The customs flag – blue with a white star – to be flown 24 hours a day after clearance is granted.

FREE PRATIQUE: Vessels must report E.T.A. via Agent 24 hours in advance, confirming 12 hours prior to arrival. The message must report that sanitary conditions are satisfactory or otherwise and an indication of the number of passengers intending to disembark and/or in transit.

On arrival the Port Health Authority will board, and further to the documents previously mentioned will require to sight vaccination certificates.

The reception committee will only board by accommodation ladder, or gangway if the vessel is alongside, and must be met at the head of the ladder by a Ship's Officer.

PILOTAGE: This is compulsory for all vessels over 200 g.r.t. There are specific boarding points shown on the charts for each port and vessels must wait there, flying flag G, either at anchor or under way. A safe rope ladder must be provided and must be properly illuminated. Pilots should be ordered at least 2 hours prior to arrival by ship's Agent, or in the event of outlying ports 24 or 48 hours ahead. (See each port).

STEVEDORES: Longshoremen are provided by the dock companies and paid for from the Port Charges. Stevedoring can be carried out either by ship's Agents or by contract. In all cases the number of men per gang and their salaries are fixed by Sunamen (Merchant Shipping Superintendancy in the Ministry of Transport).

The vessel is legally the employer of the labour, and as a result the vessel is responsible for any damage to the cargo, ship or any third party, by the stevedores.

GENERAL BERTHING INFORMATION:

A berthing priority in Brazilian Ports is given as follows:–

(1) Warships, Brazilian or Foreign.
(2) Regular Passenger Liners for whom immediate berthing facilities are available. if requested at least 24 hours in advance.
(3) Cargo vessels, for whom there are special installations, are given preferential berthing rights.
(4) Vessels with perishable cargoes are given priority berthing.
(5) Vessels that can load and discharge simultaneously can obtain preference over others.

As soon as cargo operations finish, all vessels must leave their berth, or be removed by the Port Authority.

FUEL: A monopoly on supply is held by PETROBRAS, and owners requirements must be made well in advance to the Petrobras offices in New York, London or Rio de Janeiro. Supplies are not plentiful, and in certain ports only certain grades are available.

POLLUTION: Very strict penalties are enforced, and fines are the same, however little pollution is caused. No dumping of any oil is permitted within 50 miles of the coast.

Garbage: It is forbidden to dump any garbage in any harbour or river In some ports garbage collection can be arranged.

CREW: Crew members wishing to join a vessel, must carry a letter of instruction for the ship's agent. They must be signed on within 48 hours of arrival.

For crew members joining from abroad it is advisable to be in possession of a two year multiple entry visa, as only U.S. consulates in Rio de Janeiro, Recife and Brasilia are authorised to issue visas.

Seamen's Missions:

Scandinavian Seaman's Mission
Flying Angel Club
German Seaman's Home

The above Missions are in Santos, and can arrange football matches, tours, etc. There are no Missions in other ports.

GENERAL: Operators and Masters of Liberian flag vessels should consult Agents well in advance respecting requirements for endorsement of seamen's books or passports.

Shipmaster's Report: Identification Cards.

The Regulations specified in the Identification Card Sections may still be in force, but they do not appear to be operated. Identification cards were not required by ship's personnel during our visit to Brazil.

ANGRA DOS REIS: 23.01 S. 44.19 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: When requested by the Agents, a pilot launch meets incoming ships off the automatic lighthouses of Itacuatiba and the Lage Branca, depending on whether the ships approach from the East or West, respectively. Pilotage compulsory, 2 hours notice required. State ETA and position Pilot will be embarked.

ANCHORAGES: In the Bay of Ilha Grande; approximately midway between the ports of Rio de Janeiro and Santos; offering excellent anchorages, amongst which may be mentioned: Enseada das Estrelas, Enseada do Abraao, Enseada das Palmas, Enseada Sitio Forte, and Enseada de Aracatiba.

The inspection area of the port health, federal receipt and maritime police authorities is covered by a radius of 300 m. around the point of co-ordinates 23° 00′ 42″ S., 44° 18′ 41″ W.

Anchorage for vessels of more than 31 ft. draft and 10,000 g.r.t. 23° 01′ 54″ S., 44° 19′ 18″ W.

Anchorages for vessels of less than 31 ft. or 10,000 g.r.t. 23° 00′ 48″ S., 44° 18′ 30″ W.

Anchoring prohibited in the approach channel and manoeuvring basin.

RESTRICTIONS: The Bay of Ilha Grande possesses two entrances, from the East and the West, permitting immediate access to the Port of Angra dos Reis from the direction of Rio de Janeiro or the Port of Santos, without any change of course. Both access Channels are adequately marked, enabling ships of up to 14 m. draft to navigate in complete safety as far as the port basin about one mile from the wharf, where they may lie at anchor and take on cargo from tenders tied up alongside There is another basin with a mud bottom even nearer the wharf, permitting anchorage and docking manoeuvres for ships of up to 10 m. draft.

HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Deratisation Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival.

TUGS: Available: 4 tugs of up to 600 h.p.

BERTHING: A wharf 1,300 ft. in length, with 1,050 ft. available for tying-up. The wharf is being extended 600 ft. and will be dredged the entire length of the quay so as to receive ships of up to 10 m. draft.

CARGO FACILITIES: Two grain suckers each with capacity of 60 t.p.h. Two electric cranes of 6–6.2 tons capacity, one crane of 3.2 tons capacity and three electric cranes of 1.5 tons capacity. Mobile cranes, 1 for 8 tons, 1 for 9 tons, 1 for 45 tons and 1 for 61 tons. Verolme have an 80-ton floating crane available for hire.

Also available for hire are 2 mechanical conveyors, each with 80 t.p.h. capacity.

MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.

FRESH WATER: Available. Vessels can be provided with up to 50 tons. Connection is 4 in. Pressure greater at night.

FUEL: No facilities for supplying large vessels. Small vessels can be supplied with diesel oil.

REPAIRS: Various mechanical workshops for the executiion of shipboard repairs, equipped with lathes, presses, planes, electric and acetylene welding, drills, power-saws and grindstones, etc. The big shipyards of Verolme are situated in the Bay of Jacuecanga, near the port of Angra.

CUSTOMS ALLOWANCES: For each crew member, 2 cartons of cigarettes and one bottle wine or spirits.

WATCHMEN: Gangway watchmen strongly recommended for any vessels working cargo with shore labour on board. Watchmen from shore not necessary for coal, iron ore and oil cargoes.

CONSULS: There are no Consuls in this port. They are situated in Rio de Janeiro.

TIME: The local time is GMT minus 3 hours.

HOLIDAYS: 1st January; 1st May; 29th June; 7th September; 8th December; 25th December; 31st December, also local holidays January 6th, April 3rd and December 8th.

TELEPHONES: Not available.

DEVELOPMENTS: Oil, terminal for vessels of 400,000 tons under construction.

AUTHORITY: Capitania dos Portos em Angra dos Reis.

ARATU: 12.48 S. 38.27 W.

Situated in Aratu Bay ten miles to the North of Salvador.
DOCUMENTS: See "General" before first port.
APPROACHES: Dredged depth of entrance channel 16 m.
BERTHING:
New Bulk Pier: Length 200 m. Width 35 m.
The berth is fitted with endless conveyor belts used both in loading and discharge. On the East side of the jetty there is a travelling tower with grab discharge, capable of discharging at 1,200 t.p.h.
The West side has a loading belt capable of loading at 1,200 t.p.h. Two vessels can be handled simultaneously loading or discharging
Vessels moor to two dolphins. Depth at berth 14 m.
Cement Works Pier: Max. size of vessel 105 m. LOA.
Max. Draft 21 ft. (Vessel lies on mud bottom at L.W.)
Cement in bags loaded using ship's gear.
Dow Chemical Berth: A new berth is to be built on the North Bank to handle cargo for the Chemical works.
Iron Ore Berth: The jetty is L shaped and 1,020 m. long. The depth alongside is 12.8 m. with a tidal range of 1.8 m. A discharge tower on the jetty has a travel of only 30 m. It is therefore necessary to shift along the jetty as each hatch is loaded. Discharge rate approximately 500 t.p.h.
REPAIRS: There is a naval dry dock in Aratu capable of handling vessels up to 45,000 d.w.t. It has dimensions 230 m. by 30 m. wide. Depth 11.5 m. However, the access channel will only allow vessels of up to 10 m. draft, though this is expected to be increased shortly.
FUEL: Available by road tanker from Salvador. Also see "General" before first port.
FRESH WATER: Available at all berths.
MEDICAL: Hospital available.
AIRPORT: Internal flights within Brazil available.
CONSULS: See Salvador.

BELEM: 01.25 S. 48.25 W. (See Plan)

PORT LIMITS: Subject to Charter Party Terms, vessel normally considered an "arrived ship" when at Val-de-Caes anchorage, Icoaraci anchorage, or alongside the quay.
DOCUMENTS: See "General" before first port.
PILOTAGE: Pilot usually ordered through vessel's Belem Agent, ETA at least 72 hours in advance and confirming not less than 24 hours prior to arrival. Vessels can apply direct to Pilot station (on condition that local radio station is operating). Telegraphic address "Praticagem – Salinopolis", and call sign of Salinopolis (or Salinas) radio station is PPL. Pilot boards at a point 7 miles North of Salinas lighthouse; a red motor-launch is used. Launch carries a red flag with a black P; it also has a black P painted on each side and on cabin roof. If pilot boat not in position on arrival of vessel, position 7 miles North of the light is a safe anchorage. Masters who do not not know area should approach Salinas with caution.
ANCHORAGE: Vessels with a draft greater than 26 ft. anchor off Icoaraci, 7 miles from the port where they work cargo.
Vessels that are impounded anchor off Val-de-Caes.
Vessels undergoing repairs anchor off the Naval base dock at Val-de-Caes.
Vessels with a draft of less than 26 ft. anchor at Val-de-Caes. Co-ordinates: 01° 24′ 01″ S., 48° 30′ W., 01° 21′ 03″ S., 48° 29′ 03″ W. and 01° 08′ 09″ S., 48° 28′ 03″ W.
Between Icoaraci and Val-de-Caes, there is a shallow spot at Tapana, which ships should approach with caution, although bottom is soft mud and sand.
BERTHING: The quays are of cement and sand construction on a base of stones, which is, in turn, on a bed of hard clay. The quay height is a max. of +4.50 m. to accommodate the max. tidal rise of up to +3.20 m.
Soundings taken in 1973, for vessels alongside in relation to the hydrographic zero of the port are as follows:

Length of quay (m.)	*Draft (m.)*	*Location*
75	2.5	S. face and N. face of Marechal Hermes Dock
300	3.5 to 4.5	Quay wall – Mosqueiro & Soure Shed and Warehouses 1 and 2.
342	4 to 5	Quay wall – Warehouse 3, Maua Square and Warehouse 4.
385	4.6 to 5.4	Quay wall – Warehouses 5, 6 and 7.
100	7	Quay wall – Warehouse 8
261	8	Quay wall – Warehouses 11 and 12,.
110	8	Quay wall – Ocrim Silo to the end of the Wall.

Quay equipment: 26 electric cranes, 11 cranes on pneumatic tyres, 2 steam cranes, ranging from 2.5 to 25 tons capacity. 2 floating cranes are also available of 100 tons and 20 tons capacity.
CRANES: 20 electric cranes of the locomotive type: 5 of 3 tons, 9 of 3.2 tons, 3 of 5 tons, 2 of 6.3 tons, 1 of 12.5 tons (serving warehouses 1 to 8). 2 fixed steam cranes: 1 of 20 tons and 1 of 25 tons (serving warehouses 11 to 12).
CARGO FACILITIES: Grain storage capacity of 6,387,770 cu. m. One grain sucker with capacity of 30 t.p.h.
TANKERS: At oil terminal of Miramar (Val-de-Caes), vessels of the Shell "H" class (18,000 tons d.w.) may berth or unberth at any state of the tide, subject to draft. Max. depth alongside berth at low water 26 ft., the same as that of approach channel. Mooring at this berth is to buoys inside the line of the "T" jetty.
HEALTH: Maritime Police, Customs and Port Health board vessel on arrival at whichever anchorage is used, or alongside. Pratique granted on the presentation of documents. If port *not* first Brazilian port of call, Port Health Authorities not required, although Police and Customs will still board. After first Brazilian port, Port Health only required in cases of illness or death. The use of quarantine "Q" flag not necessary. Also see "General" before first port.
RADIO: No VHF facilities in the area. Suggested that ship contacts Belem Agent through Barbados Radio, and this is also usual way that vessels are contacted by Belem. An alternative to Barbados Radio is the United States radio station at Chatham, Virginia.
TUGS: Tugs in area are small, underpowered and useless for berthing or unberthing. Brazilian Navy maintains four deep-sea tugs (Corvettas), for use in cases of extreme emergency.
STEVEDORES: Stevedoring gangs for day shifts 0630 and 1230 hrs. and 1630 hrs. for night shift. Loading and discharging rates exceptionally good, particularly if vessel working at anchorages into lighters. Any delays to vessels alongside can usually be put down to the lack of official clearances in case of loading export cargo.
MEDICAL: Notice of required medical assistance should always be given in advance. There are a number of first-aid posts for minor complaints. Vaccination Certificates for smallpox are essential, and, although not required officially, yellow fever vaccinations recommended.
DENSITY: Strong outflow of Amazon and its tributaries is such that water at Salinas is only semi-salt. In the river itself, the water becomes slightly brackish, and half way to Belem, is absolutely fresh.
GENERAL: Tidal action in the Guajara Bay is extensive, with the "Pororoca" phenomenon which comprises the meeting of tidal water with masses of fresh water coming from the Brazilian Equatorial rivers. The tidal wave takes 3 hours 40 minutes to come from the Salinas lighthouse to the South end of the port of Belem, the port establishment being 11 hours 35 minutes. Systematic measurements at times of spring tides show that the average height of water reaches 3.22 m. at high tide and in the quadratures 2.42 m.
During the ebb, the waters coming up the bay of Guajara are predominently picked up by the Western channel current, with great speed, thus explaining the great depths at that point, and also in the Western channel the average ebb and flow speeds are 1.30 and 1.74 m. per second, respectively, and in the East channel they are respectively 1.19 and 2.10 m. per second.
FRESH WATER; Fresh water only obtainable alongside main quay, and not at oil berth. Delivery rate 25 t.p.h. Boiler water may be taken direct from the river at a point named Capim, near the entrance to Marajo Bay.
FUEL: See "General" before first port. Available, but due to Brazilian Custom's laws, as much advance notice as possible should be given in order to obtain correct documentation. A minimum of one weeks' notice recommended.
GANGWAY/DECK WATCHMEN: The employment of gangway watchmen recommended.
HATCHES: Hatches normally opened and closed by stevedores, but if it is raining they are inclined to shelter before closing.
CUSTOMS ALLOWANCES: Custom's Authorities do not normally search ship's crews, and reasonable quantity can remain in the possession of crew members. However, no attempt should be made to take more than a reasonable amount ashore.
IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.
CONSULS:

Belgium	Holland	Republic of Dominica
Bolivia	Italy	Spain
Colombia	Japan	Sweden
Costa Rica	Mexico	United States
Denmark	Norway	Uruguay
France	Peru	Venezuela
Great Britain	Portugal	

REPAIRS: Deck and engine repairs of all types can be carried out by the Brazilian Naval Dockyard, or by repair shops of the Companhia Docas do Para.
DRY DOCKS: At Naval Base, there is a dry dock measuring 730 ft. by 74 ft. with a depth over the sill of 25 ft. There are also several small floating docks, but they are not adequate for sea-going vessels.
REPATRIATION: There are three international flights each week from Belem. Miami 1 flight per week, Wednesday. New York 2 flights per week, Monday, Friday. In additon, daily flights to Rio de Janeiro. Airport of Val-de-Caes is about 4 miles from the city centre.
TIME: Local time GMT minus 3 hours. Summertime (1 Dec.–28 Feb.) GMT minus 2 hours.
HOLIDAYS: New Year's Day (1st January); Carnival (variable); Labour Day (1st May); Corpus Christi (25th May); Independence Day (7th September); All Souls' Day (2nd November); Proclamation of the Republic (15th November); Christmas Day (25th December). Work could be carried out on these days, but costs would be prohibitive.
POLICE/AMBULANCE/FIRE: Maritime Police 234996; Ambulance 222523; Fire Brigade 23–3119.
TELEPHONES: Telephones can be put on board vessels alongside

main quay, but this facility is seldom used, Belem telephones being extremely erratic and unreliable.
AUTHORITY: Captain of the port.
AGENT: Agencias Mundais SA, Avenida Presidente Vargas 119, CP 190, 66000 Belem, Para. Cables: Amsanav Belem. Tel. 23–4013.

CABEDELO: 06.58 S. 34.50 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Contact Pilot's Headquarters by radio via vessel's Agent located at Joao-Pessoa (24 km. from Cabedelo). As no radio station available at Joao-Pessoa or Cabedelo such messages are usually relayed by Olinda Radio PPA – Fortaleza Radio PPC – Amaralina Radio PPA – or Rio Radio PPR. All messages are delivered by National Telegraph – Telegrafo Nacional. Pilots maintain day and night watch from Cabedelo beach. Pilots' launches painted red with capital "P". Vessels await Pilot 0.75 miles E.N.E. of Piedra Seca Lt.
ANCHORAGE: The inspection area of the Port Health, Federal Receipt and Maritime Police authorities is that covered by a radius of 185 m. around the point of co-ordinates Lat. 06° 58' S. and Long. 34° 58' W.

Anchorage for vessels of more than 10,000 g.r.t. – inner maritime area limited by the circle 185 m. distant around the point of co-ordinates: Lat. 06° 58' S. and Long. 034° 58' 08" W.

Vessels impounded or requiring considerable repairs – vessels of more than 5,000 g.r.t. at the point of co-ordinates: Lat. 06° 58' 10" S., Long. 34° 51' W., in a circle distance 1 mile around this point. Vessels of less than 5,000 g.r.t. in a circle distance 0.5 mile around the point of co-ordinates: Lat. 06° 58' 48" S., Long. 34° 50' 18" W.
RESTRICTIONS: For Masters calling at Cabedelo for first time it is preferable not to enter during darkness.
MAX. SIZE: Max. length 200 m., draft spring tide 23 ft., neap tide 21 ft.
HEALTH: Also see "General" before first port. If Master suspects contagious disease aboard he must report to Agent who will contact Brazilian Health Authorities at Joao-Pessoa.
TUGS: None available.
BERTHING: Safe drafts at bar entering or sailing: spring tide 23 ft., neap tide 21 ft. Berthing takes place in accordance with vessel's draft. Master must always give Agent vessel's draft arriving off Cabedelo. Length of quay, 600 m. depth alongside 5–10 m.
STEVEDORES: Advise Agent ETA at Cabedelo 48 hours prior to arrival to make arrangements with dock and stevedores for discharging or loading.
CRANES: 3 Portal cranes. 2×3 tons, 1×6 tons and 5 cranes of 1.5 tons capacity.
MEDICAL: For urgent cases recommended that vessel call at Recife instead of Cabedelo as Recife has better facilities. If vessel must enter patient will be removed to Joao-Pessoa Hospital as no hospital available at Cabedelo.
TANKERS: Cabedelo not a loading port for petroleum products. Messrs. Esso-Brasileira de Petroleo, have tanks for reception of gasoline and other petroleum products which are carried by Brazilian fleet of Tankers "Fronape – Frota Nacional de Petroleiros. At Cabedelo only berth No. 1 is suitable for discharging petroleum products or to bunker vessels since pipe-line is only connected to berth No. 1. Tankers enter and sail during dark hours from Cabedelo.
DENSITY: Varies from 1020 to 1025 at high water.
FRESH WATER: Supplied by pipe-line alongside quays at rate of 50 cu. m. per hour.
FUEL: Available. Suppliers Messrs. Esso-Brasileira de Petroleo. Pipe-line at berth No. 1 where vessels can bunker alongside. Pipe-line fuel oil, 8 in.; pipe-line diesel, 8 in.
DEVELOPMENTS: The port is being dredged to allow vessels with 33 ft. draft to enter. Also see "General" before first port.
GANGWAY/DECK WATCHMAN: Watchmen available. Also the hours of work agree except that Captains have option to choose suitable times when their services are required.
OPENING/CLOSING HATCHES: By stevedores. Crew assist when stevedores not familiar with modern hatches.
CUSTOMS ALLOWANCES: 1 carton cigarettes per crew member at Customs discretion and 1 bottle of whisky or any other kind of spirit, subject to Customs discretion.
IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.
CONSULS:

Vice-Consulate of the Netherlands	Tel. 4079
Vice-Consulate of France	,, 4588
Vice-Consulate of Portugal	,, 4243

Other consulates at Recife 110 km. from Joao-Pessoa about 2 hours by road.
REPAIRS: Minor repairs only.
DRY DOCKS: None.
REPATRIATION: Repatriation can be arranged via Recife or direct from Joao-Pessoa to Rio de Janeiro. No direct Air Service from Joao-Pessoa available for foreign destinations.
AIRPORT: 9 km. from Joao-Pessoa. Small Airport utilised by National Lines whose planes make regular calls.
TIME: 1 April – 31 Oct. GMT minus 3, Nov. 1 – 31 Mar. GMT minus 2.
HOLIDAYS: For holidays see "Recife". Work is possible during holidays and Sundays provided the Dock Administration and Stevedores are advised in anticipation say 24 hours before commencement. Usually on Good Friday, Christmas day and Independence day work at the Cabedelo dock is not obtainable. Same applies to the third Day of Carnival.
POLICE/AMBULANCE/FIRE: Police (located at Joao-Pessoa) 4848. Cabedelo has a small Police Station but no telephone available. Ambulance (located at Joao-Pessoa) 4065 and 4076 (24 km. from Cabedelo). Fire Brigade (located at Joao-Pessoa) 4212.
TELEPHONES: No facilities for placing telephones on board.
AUTHORITY: Delagacia de Capitania de Porto Cabedelo.
AGENT: Thom & Company Limited, Rua Maciel Pinheiro, No. 2, Joao Pessoa-Paraiba. Cables: Thom-Joao Pessoa. Tel. 5062.

CARMOPOLIS: 11.00 S. 37.04 W. (See Plan)

LOCATION: Terminal Maritimo de Carmopolis, Tecarmo, operated by Petroleo Brasileiro SA, Petrobas, is located in the Atalaia Beach, Lat. 11° 00' 30" S. 37° 04' 00" W. in Aracaju City, capital of the State of Sergipe.
DOCUMENTS: See "General" before first port.
PILOTAGE: All manoeuvres will be undertaken by the vessel's Master, with the help of a Carmopolis Mooring Master, who will board the vessel in the anchorage area and advise the Master on all operations such as mooring, connecting hoses, unmooring, loading, etc. It is important to emphasise that the services of the Mooring Master are afforded without charge and upon the express undertaking and condition that Petrobras shall not be liable for any damage or injury resulting from any advice, assistance or actions given or made by such Mooring Master. In the event it becomes necessary to disregard the Mooring Master's advice, in order to ensure safety of the vessel, the Master must forward a full written report of the circumstances for delivery to the Captain of the Port through the Terminal. It is the responsibility of the Master to notify the Mooring Master of any special conditions or peculiarities such as defective navigation equipment, tackle, gear or lack of necessary equipment which might impose hazards related to handling, mooring and loading the vessel.

Vessel must be moored to the entire satisfaction of the Mooring Master.

Unsatisfactory conditions will be reported to the Superintendent of the Terminal, who is empowered to reject the ship for future calls unless the reported difficulties have been remedied.
APPROACHES: When approaching the terminal, as well as the landmarks (Aracaju Light), there are also three fixed lighted platforms, located in the following positions, and can be visible in clear weather for a distance of 22 miles:

P4: 11° 00.23 S. 36° 56.03 W.
D8: 11° 09.46 S. 37° 03.15 W.
S25: 11° 00.23 S. 36° 51.56 W.

When for the first time approaching, and during night hours, contact can be made with the platforms, which maintain VHF Channel 16, and certain information can be obtained regarding anchorage, berthing time, etc.
ETA: Vessels bound to Aracaju or Tecarmo should transmit directly to "Fronape Rio" (PPA 25) a message informing vessel's name, flag, port of registry, classification, gross and net tonnage, horsepower, speed, number of crew, Owner's and Master's name.
ANCHORAGE: Due to the peculiar conditions of the terminal, mooring should be undertaken at daylight only. For vessels arriving at night, the advisable anchorage is in position: Lat. 11° 03' 00" S. Long. 36° 59' 00" W.

Anchorage may be obtained in a depth from 13 to 15 fathoms East or E.S.E. from the mooring buoys, and at a distance of one mile. The bottom is a good holding ground.

Anchoring is prohibited West and South-west of the terminal due to the existence of pipe-lines, which are newly laid down and unmarked on the charts. Strong currents prevailing along the coast line, which occasionally attain rates up to three knots.
RADIO: Vessels bound for Terminal Maritimo de Carmopolis should advise their ETA 48 hours prior to arrival, direct to PPA 25 (8,492 kHz, Petrobras own radio station) as well as to Agent in Aracaju (through Rio Radio, Olinda Radio or Amaralina Radio). In turn, these stations will send messages to the terminal.

ETA should be in local time, giving name of vessel, Master's name, number of crew, net tons, gross tons, nationality and d.w.t.

Confirmation or change of ETA should be cabled 24 hours before arrival.

When vessel is within about 50 miles of the terminal, contact may be made by VHF radio-telephone on Channel 16 (156.80 mHz) or SSB (2.182 kHz).
MAX. SIZE: Tankers up to 65,000 d.w.t. can be accommodated. Max. draft 15 m.
TUGS: There are no tugs available to assist berthing and unberthing.
BERTHING: The terminal consists of one berth (six buoys) designed for loading crude oil. The berth is located 7,150 m. from the shore. Loading of vessels is effected by one 26-in. submarine pipe-line.

Max. permitted draft for the terminal is 15 m. in order to ensure a safe bottom clearance, even under extreme operating sea conditions.

Amidships derrick or crane capacity must not be less than 5 tons, so that hose can be hoisted and connected.
HOSES: There is a submarine pipe-line from shore installations direct to the terminal, which are divided into two flexible hoses long enough to reach the ship's manifold. Usually, only one hose is

connected, of 10 in. diameter, from which 19,000 bbls. is the max. loading rate. Shore labour used to connect hoses. Hoses are lifted on the starboard side.
MEDICAL: Medical treatment and/or hospitalisation, if required are provided at Aracaju private hospitals. Dentists are also available in Aracaju. Agent will make such arrangements.

For emergency cases (injury etc.), Petrobras first aid may be requested by the Master.
MOORING: Vessels moor using both anchors forward with two lines from the port bow to No. 2 mooring buoy and from the stern run 8 to 10 ropes to the buoys, depending upon weather conditions and strength of currents.
BALLAST: No slop facilities are available for dirty ballast.

Brazilian Laws are very strict with regard to the pollution of coastal waters. Vessels are not allowed to discharge dirty ballast into the water. Heavy fines are imposed for violations. To offenders, fines will be charged (besides resulting delays) according to the ship's tonnage.
WEATHER: During Winter months, weather conditions are not favourable. Heavy swell prevailing at the sea berth from S./S.E. direction which causes a continuous rolling on the ship during the whole time of loading operations. The terminal is only sheltered from the North to West, and W.S.W. winds which are very rare during the Winter months.
CARGO: The cargo is called Sergipano Crude Oil of an average API 25, temp. 90° F. No heating required.
FUEL: No bunkers available at Aracaju Terminal.
FRESH WATER: No water available.
AIRPORT: There is an airport at Aracaju.
CUSTOMS ALLOWANCES: Brazilian Laws are strict with regard to smuggling, and Masters are requested to instruct their crew not to retain cigarettes in carton lots, cigars, tobacco, alcoholic drinks, drugs, souvenirs, etc.

By no means will any commercial transactions be tolerated be it either among terminal employees, crew members or anyone else.
AUTHORITY: Petroleo Brasileiro S.A.

FORTALEZA: (including Mucuripe), Ceara: 03.41 S. 38.32 W.

PORT LIMITS: From the end of the mole on a true bearing of 235° to the meridian of 38° 29.8′ W., thence to the coast.
DOCUMENTS: See "General" before first port.
PILOTAGE: By Associacao de Praticagem do Porto de Fortaleza. Address: Rua Dragao do Mar, 372. Tel. 212088. The Pilots board ships about 0.5 miles N.W. from the breakwater, call by International Code Signals.

Pilot may be ordered through the vessel's Agent or Fortaleza Radio (PPC). One hour before arrival specifying time of arrival and from which point the Pilot is required.
ANCHORAGE: Vessels awaiting Pilot may anchor W.N.W. of the breakwater head, distance 0.5 miles. Water depth 32 ft.
RESTRICTIONS: Entrance channel Length 1,000 m., width 150 m., depth 8 m.
MAX. SIZE: Up to 27 ft. draft depending on the tide.
HEALTH: The inspection area for Port Health and the other authorities is within 1,430 m. of position 03° 42′ 24″ S., 38° 29′ 18″ W.

All ships must be visited by Port Health Inspector. If vessel has passengers in transit for another Brazilian port, another visit will be required at port where passengers disembark. If ship's health condition satisfactory, Inspector will give free pratique immediately. Radio pratique available if Master able declare satisfactory health condition before arrival. Free pratique is valid for subsequent ports in Brazil.

If there is a crew member to be hospitalised, the Health Inspector will issue pass to hospital on request of Master or Agent who will be made responsible for all expenses incurred.

Inoculations for International Certificates can only be given by an employee of the Port Health Authority.

Ships are inspected by Custom House and Health personnel at the anchorage.
TUGS: One tug available.
BERTHING: 1,116 m. of berthing length. Berths for five vessels. One grain elevator, capacity 150 t.p.h. Four lighters available capacity up to 70 tons each.

Berth No. 1. 106 m. long, 18 ft. deep.
Berth No. 2. 150 m. long, 20 ft. deep.
Berth No. 3. 170 m. long, 22 ft. deep.
Berth No. 4. 530 m. long, 25 ft. deep.
Berth No. 5. 160 m. long, 33 ft. deep.

Vessels are advised to take a Pilot and use a tug if available due to the peculiar port variations.

Vegetable oils can be loaded in drums, 18/20 t.p.h. or ex-barge at 100/125 t.p.h.
CRANES: A 100 ton floating crane is on order. No. 4 berth has 5 cranes with capacities from 3 to 6 tons. No. 3 berth has a travelling suction tower with 2 tubes, operating at 120 t.p.h.
TANKERS: An extension is planned by No. 1 berth, for use of tankers, that at present, must use No. 5 berth. Dredging will be undertaken to a depth of 12 m. alongside the extension.

Tankers discharge crude, and are able to load clean oils through 7 lines ranging from 6 in. to 8 in.
FRESH WATER: Nine hydrants on the quay spaced 50 to 80 m. apart. Connections 2 in. Rate 20 t.p.h.
FUEL: Boiler fuel available from seven connections spaced along the quay. Diesel oil is available by road tanker. Also see "General" before first port.
REPAIRS: Two workshops available for machinery repairs. No electronic repairs possible.
TELEPHONES: Available on board through the Ceara Dock Co.
CONSULS: None at Fortaleza.
IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.
REPATRIATION: Can be arranged.
AIRPORT: Only internal services from local airport.
POLICE/AMBULANCE/FIRE: Maritime police tel. 24.14.94; Ambulance 21.34.34 and 21.22.22; Fire 23.13.81.
SHORE LEAVE: Allowed under control of maritime police.
AUTHORITY: Companhia Docas do Ceara.

ILHEUS: 14.49 S. 39.00 W.

DOCUMENTS: See "General" before first port.
PILOT: Call by flag signal. Locality of pilot station marked on chart. Type of boat: sailing.
ANCHORAGE: Marked on charts.
RESTRICTIONS: Vessel must wait daylight for pratique.
HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Deratisation Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival.
MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.
TUGS: Three private companies own tugs.
BERTHING: There is a total of 432.5 m. of quay available. The wharf extends 110 m. West from the breakwater. There are 5 Portal cranes (3×3 tons, 2×6 tons). Loading rates for bagged cargo of cocoa and coffee approximately 30/45 t.p.h. per gang. Discharge of bulk wheat by grab. Tankers moor partially off the quay to a stern buoy.
STEVEDORES: Arranged by Agent.
TANKERS: Terminal owned by Frota National de Petroleiros. Buoy mooring.
FRESH WATER: Available. Rate 50 t.p.h.
FUEL: Not available.
DEVELOPMENTS: Port will be completed in two years.
WATCHMEN: Compulsory.
HATCHES: By stevedores.
CUSTOMS ALLOWANCES: Only sufficient tobacco for daily use. No alcohol to be taken ashore.
IDENTIFICATION CARDS: Necessary to go ashore.
CONSULS: Only in city of Salvador.
REPAIRS: Workshop belonging to Port Administration. Minor repairs only.
REPATRIATION: Can be arranged.
AIRPORT: Situated near port.
HOLIDAYS: Work can be arranged on all holidays.
POLICE/FIRE/AMBULANCE: Police tel. 2530; Ambulance 2417.
TELEPHONES: No connection to vessels can be made.
SERVICES: Diving service available.
SHORE LEAVE: Allowed with identity card.
AUTHORITY: Delegacia de Capitania dos Portos.

IMBITUBA 28.13 S. 48.38 W.

DOCUMENTS: See General before first port.
PILOTAGE: There are two entrance channels. The North Channel has a depth of 10 m. the South Channel has a depth of 13 m.

No VHF facilities and Pilot is summoned by two prolonged blasts. The Pilot should be given an ETA at least 24 hours before arrival. Confirmation at 12 hours, via Radio P.P.F.
ANCHORAGE: Vessels may anchor in 10 to 11 m., off the entrance, although this is exposed to N.E. or East winds.
RESTRICTIONS: A breakwater protects the port. Vessels are restricted to a draft of 28 ft.
BERTHING: The port consists of a wharf 308 m. long with depths varying from 10 m. at the head to 7 m. near the shore.

The coal installation has a delivery rate of 24 t.p.h.
CRANES: Three 15 ton cranes, three 13 ton cranes, one 3.5 ton crane.
MEDICAL: Facilities available. Hospital in town.
FRESH WATER: Available from 1 inch lines on the pier. Delivery rate 6 t.p.h.
FUEL: Available by lorry. Also see "General" before first port.
REPAIRS: No facilities other than for minor repairs.
CONSULS: (At Rio Grande).

ITAJAI: 26.56 S. 48.38 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: To await or to receive Pilot, anchor from half to two miles East of South Breakwater.

Pilot Service does not have radio or VHF; any telegram can be addressed to Pilots Service in Itajai (Servico de Praticagem–Itajai), but customary to send all advices to Pilot Service via Agents.

Pilot Service has three launches painted red with a "P" on side and on funnel. Launches always anchored inside port. In case of bad weather, vessel must wait for instructions in Porto Belo Bay, South of this port, and in case of bad weather on sailing, if impossible to disembark Pilot in entrance of bar, must be done in Porto Belo Bay.
ANCHORAGE: Waiting anchorage situated in Enseada de Cabecudas, up to two miles distant from South light, depth of 8 m.
RESTRICTIONS: Vessels can enter or sail at any tide with a max. draft of 18 ft. Vessels with a max. draft of 22 ft. may enter or sail at high water. Tanker movements in daylight only. Max. speed allowed in the access channel is 5 knots.
MAX. SIZE: Max. length 160 m. for dry cargo vessels. For tankers, max. length 155 m.
HEALTH: When coming from abroad, vessel will be visited by Health Authorities, who issue free pratique after inspection. When coming from another Brazilian port, free pratique issued in previous port is sufficient. This document must stay on board, to be presented in subsequent ports. In case of sickness on board, after receiving free pratique, must contact Agent who notifies Health Service.
RADIO: For telegrams (radio) direct from vessel to Agent, or vice-versa, Departamento de Correios e Telegrafos radio station in Santos or Florianopolis, with prefixes: Santos PPS, Florianopolis PPF.
TUGS: Tugs service by launch from Pilot Service, and is used only in unmooring (to assist in turning round in front of quay) for vessels more than 100 m. long.
BERTHING: Previous communication required, time of priority based on time of arriving at bar. Length at quay, 703 m., depth alongside 6 m.
CRANES: 1×20 ton mobile crane for containers. 3 other moveable cranes. 2×1.5 ton Portal cranes, 1×3.5 tons, 1×5 ton.
STEVEDORING: Stevedores' hours as follows: Morning until 0700 hrs. Afternoon until 1230 hrs. Evening until 1900 hrs.
When vessel arrives in morning, advisable that Captain advises in advance number of gangs he will need so that Agency can make arrangements.
When discharging dry bulk cargo (grain or salt) trucks with special equipment used.
Average for loading: *(a)* Timber 120 tons p/gang day. *(b)* General Cargo 100 tons p/gang day. *(c)* Bags and Tobacco 90 tons p/gang day.
For discharging: *(a)* General Cargo 100 tons p/gang day. *(b)* Bulk 120 tons p/gang day.
Hours as follows: 0700 to 1100 hrs.; 1230 to 1630 hrs.; 1900 to 2300 hrs.; 2400 to 0430 hrs.
MEDICAL: In urgent cases, advise Agent requirements in advance. Hospital available. Normally no special vaccination required, nor presentation of certificates.
TANKERS: 6 oil terminals where vessels 155 m. length and 22 ft. draft discharge.

Shell terminal
Fuel oil 10 in. for discharging 8 in. for loading.
Diesel 6 in. for discharging 4 in. for loading.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.
Esso terminal
Fuel oil 8 in. for discharging 4 in. for loading.
Diesel oil 6 in. for discharging 4 in. for loading.
Gasoline 6 in. for discharging.
Kerosene 4 in. for discharging.
Atlantic terminal
Diesel 6 in. for discharging.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.
Ipiranga terminal
Diesel 6 in. for discharging.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.
Heliogas terminal
Gas 6 in. for discharging liquid 4 in. for discharging vapour.

DENSITY: During low tide whole port is influenced by fresh water of River Itajai – Acu, situation changing completely at high tides.
FRESH WATER: Available, supplied direct by hydrants along quay. Average supply 10 t.p.h.
FUEL: See "General" before first port.
DEVELOPMENTS: Two grain silos in port area under construction.
WATCHMEN ON GANGWAY: Not compulsory, but recommended.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: Customs can liberate one or two cartons of cigarettes and one or two bottles of spirits, dependant on time vessel remains in port.
IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.
CONSUL: Argentine Consulate, Tel. 348.
REPAIRS: Almost all repairs on engines or deck possible.
REPATRIATION: Repatriation, normally made by Agents via Rio de Janeiro and/or Sao Paulo.
AIRPORT: Situated about 10 kilometres from port. Daily regular flights to Sao Paulo, Porto Alegre, and Rio de Janeiro by Varig.
TIME: 2 Mar. – 30 Nov. GMT minus 3 hours. 1 Dec. – 1 Mar. GMT minus 2 hours.
HOLIDAYS: New Year's Day (January 1st); Good Friday; Tiradentes (April 21st); Labour Day (May 1st); Corpus Christi; Proclamation of the Republic (November 15th); Independence Day (September 7th); Christmas Day (December 25th).
POLICE/AMBULANCE/FIRE BRIGADE: Police 312; Ambulance 500; Fire Brigade 339.
TELEPHONES: There are facilities for placing telephones on board.
AUTHORITY: Junta Administrativa do Porto de Itajai.

MACEIO: 09.40 S. 35.45 W.

PORT LIMITS: Off "Peixe-Pau" buoy 1 mile due South of red light at end of old pier. The Sugar Institute (IAA) accepts Notice of Readiness only after having been signed by Surveyor to the effect that holds are in all respects ready to receive cargo.
DOCUMENTS: See "General" before first port.
PILOTAGE: Request for Pilot to be made through Agent at least 12 hours prior to arrival during week-days and 24 hours prior to arrival on week-ends and holidays. Pilot boards from pilot launch painted red and white, at Peixe-Pau Buoy, 1 mile due South of end of pier, identified at night by red flashing light. No radio. Light signals used for communication with pilot boat. Vessels may anchor off Peixe-Pau Buoy in bad weather.
ANCHORAGES: In vincinity of and within inner harbour – depths from 15 ft. to 24 ft. MLW.
RESTRICTIONS: Max. permitted speed between the Peixe-Pau Buoy and the port is 6 knots.
MAX. SIZE: No restrictions on length. Vessels may enter day and night. Pilot refuses to berth tankers after nightfall.
Vessels have loaded up to 33 ft. draft.
HEALTH: No Health Authorities board vessel. In event of suspected disease or fever on board, advise Agent by cable so that Port Authority may take appropriate action.
RADIO: Radio Olinda (Recife), call sign PPO. Radio Amaralinha, call sign PPA.
TUGS: None available or required.
BERTHING: Berths available day and night, weather permitting.
Sugar Terminal: facilities for loading bulk molasses. Projected loading capacity 1,000 t.p.h. of bulk sugar, 300 t.p.h. molasses.
Sugar wharf: 250 m. length. General cargo wharf 400 m. length, undergoing extension by a further 100 m. Depth alongside 33 ft.
A new loading installation fitted with a travelling retractable arm, using a centrifugal spinner, and capable of delivery 1,000 t.p.h. 24 hours a day is being assembled on this berth.
There are two Molasses tanks at the end of this wharf, loading rate 100 t.p.h.
A tanker jetty may shortly be situated at the old fishing wharf.
STEVEDORES: ETA required 24 hours before arrival to arrange gangs. When work required Saturdays and Sundays, ETA must be sent on Friday. Loading/discharge – General: 8 t.p.h. per gang. Sugar 20 t.p.h. per gang. Grain 60 t.p.h.
CRANES: Six cranes with capacity of 10 tons awaiting installation. Two diesel operated cranes of 8 tons capacity in operation.
MEDICAL: No advance notice needed except if vessel due to arrive on Saturday/Sunday in order to arrange doctor and/or hospital. Hospital facilities available.
TANKERS: One tanker berth. Max. draft 33 ft. One pipe-line 8 in. for Gasoline and one 6 in. for diesel/kerosene.
FRESH WATER: Fresh water available. Pipe-line from Water Tower by gravity. Rate about 15 t.p.h. 11 points at the general cargo wharf and 5 at the Sugar wharf.
FUEL: Diesel oil available from Shell, Texaco, Esso and Atlantic. However, storage capacity is small and it may not always be available. Delivery is gravity feed from road tankers. Also see "General" before first port.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCES: One carton cigarettes to be declared. One bottle alcohol, open, to be declared.
IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of Identity Card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The Identity Card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.
CONSULS:

Norway	2276	Portugal	2449
Italy	3302	France	2126
Spain	2640		

REPAIRS: Small repairs only can be effected.
REPATRIATION: Carried out by Recife Consulates.
AIRPORT: 11 miles North of town. Served by Varig, Vasp and Sadia.
TIME: GMT minus 3 hours.
HOLIDAYS: Work prohibited on Labour Day only. Other days on which work is considered overtime and charged as such are: 1st January, Good Friday, 7th September, 15th November and 25th December.
POLICE/AMBULANCE/FIRE: Maritime Police 2282; Riot Police 4488; Ambulance 2666 and 4433; Fire Brigade 2447.
TELEPHONES: Telephone on quayside. No arrangements yet for placing on board.
GENERAL: Prevailing winds: Summer months – N.E. Rainy season – S.E. with strong South winds during July/August/September and strong undertow during August/September.
DEVELOPMENTS: The Salgema marine terminal is being built

across the bay. It will consist of a jetty 1,300 m. long. The loading platform will allow 18,000 d.w.t. vessels to load in 11 m. depth.

Loading Caustic Soda	12 in. line 330/350 cu.m./hr.
Ethylene Chloride	10 in. line 330 cu.m./hr.
Ethylene Cryogenic	8 in. line 330 cu.m./hr.

AUTHORITY: Delegacia de Capitania de Porto.

AGENT: See "Recife".

MANAUS: 03.08 S. 60.00 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Pilots join vessel at Belem and make the round voyage back to Belem. Vessels entering via North Channel take a Pilot at Santana. No Pilots from Barra Norte to Santana.

ANCHORAGES: Suitable places can be indicated by the Pilot.

Anchorage for vessels over 3,000 g.r.t. Lat. 03° 09′ 00″ S. Long. 60° 01′ 48″ W.

Anchorage for vessels of less than 3,000 g.r.t. Lat. 03° 09′ 00″ S. Long. 60° 02′ 12″ W.

Vessels impounded or requiring considerable repairs Lat. 03° 08′ 30″ S. Long. 60° 02′ 30″ W.

Vessels in quarantine Lat. 03° 08′ 48″ S. Long. 59° 55′ 48″ W.

RESTRICTIONS: Passage across Barra Norte to be made at high water only. Berthing and unberthing preferably takes place at Manaus in daylight.

MAX. SIZE: Entry to the Amazon via the North Channel; max. draft 30 ft. Via Belem; draft 29 ft. with a length up to 175 m. and draft 24 ft. with a length up to 210 m.

HEALTH: See "General" before first port. All ships must be visited by Port Health Inspector. If vessel has passengers in transit for another Brazilian port, another visit will be required at port where passengers disembark. If ship's health condition satisfactory, Inspector will give free pratique immediately. Radio pratique available if Master able declare satisfactory health condition before arrival. Free pratique is valid for subsequent ports in Brazil.

If there is a crew member to be hospitalised, the Health Inspector will issue pass to hospital on request of Master or Agent who will be made responsible for all expenses incurred.

Inoculations for International Certificates can only be given by an employee of the Port Health Authority.

RADIO: Salinopolis Radio or Rio Radio. There is also Barbados Radio Station at Belem.

TUGS: Agents provide mooring launches.

BERTHING: Arranged by Agent who asks permission from local Port Authorities to provide a berth. All berths suitable for vessels able to navigate the river.

Two floating stages in "T" jetty form.

Easterly stage 272 m. long. Floating roadway 252 m.

There are 3 cranes on this stage.

Westerly stage 275 m. long. Floating roadway. No cranes.

Water depth 35 m. at both stages.

Warping buoys must be used when leaving stages as there are no tugs.

A third stage is planned.

A stone jetty 500 m. long will shortly be available for year round operations, when it has been fitted with Portal cranes.

Moageria Berth: Used for the discharge of bulk grain, one tube, rate 30 t.p.h.

CRANES: Ten fixed electric cranes with capacity 1.5–7.0 tons. Three mobile cranes, capacity 4, 6 and 15 tons.

STEVEDORES: Available.

MEDICAL: Doctors and hospital facilities available.

TANKERS: *Copam Refinery Berth:* a floating pontoon with buoy moorings ahead and astern. Vessel berths starboard side to, using port anchor.

Facilities for crude discharge. Products only loaded. No dirty ballast facilities.

No. 1 Terminal. Vessel lies to 4 buoys, and picks up a floating line, normally attached to the bank. Available for products only.

DENSITY: Fresh water.

FRESH WATER: Not suitable for drinking purposes.

FUEL: Bunker C and Diesel. Available ex-barge or at the terminal. Also see "General" before first port.

IDENTIFICATION CARDS: Required.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man. Only normal daily consumption wine/spirits allowed.

CONSULS: Following countries are represented at Manaus:

U.S.A.	Venezuela	Holland
Japan	Uruguay	Spain
Peru	Italy	Great Britain
Colombia	Belgium	Portugal
Bolivia	France	Denmark

REPAIRS: Very limited facilities available.

REPATRIATION: Can be arranged.

AIRPORT: Regular daily international flights from Manaus Airport.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January; 1st May; 29th June; 7th September; 8th December; 25th December; 31st December.

POLICE/FIRE/AMBULANCE: Civil Police tel. 22113; Maritime Police 22315; Fire 21155; Ambulance 21112.

TELEPHONES: Arrangements can be made for telephone connections on board.

SHORE LEAVE: Aliowed.

AUTHORITY: Administracao do Porto de Manaus.

NATAL: 05.47 S. 35.12 W.

Port situated on East bank of Potengi River, 2 miles from sea.

DOCUMENTS: See "General" before first port.

APPROACHES: Reefs at river mouth form natural breakwater. Entrance channel 200 yards wide with sharp bends.

PILOTAGE: Arranged by Agents who require at least 12 hours notice of ETA. Pilot boards at Outer Roads.

ANCHORAGES: The following are the zones for vessels anchoring prior to entering port;

Anchorage for vessels more than 3,000 g.r.t. – between the access channel and the right bank of the Rio Potengi, from 05° 46′ S., along an extension of 800 m. to the N.

Vessels impounded or requiring considerable repairs – same anchorage as for vessels over 3,000 g.r.t.

Anchorage for vessels up to 3,000 g.r.t. – facing the launch embarkation point at the end of the Rua Tavares de Lira, and to 150 m. along the right bank of the Rio Potengi.

Vessels in quarantine within a radius of quarter of a mile around a point half a mile to the South of the waiting point for the Pilot.

RESTRICTIONS: High water depth at bar 24 ft. to 26 ft., varies with tide and wind.

MANOEUVRING: The area intended for manoeuvring when coming alongside or leaving the port has a width of 300 m. along the whole length of the quay.

In this area and in the access channel anchoring is strictly prohibited except with the prior permission of the Port Captaincy.

MAX. SIZE: Length 520 ft., draft up to 23 ft. 6 in. at spring tides.

HEALTH: Official visit made on vessel's arrival if between 0700 and 1900 hrs. Visits can be arranged at other times.

The inspection area of the Port Health Federal Receipt and Maritime Police authorities is 04° 45′ 06″ S. and 35° 11′ 15″ W.

TUGS: Not available.

BERTHING: Quay length 1,312 ft. Wharf equipped with four 5-ton mobile steam cranes. Depth 24–25 ft.

CRANES: Two 1.5 ton cranes. Two portable tubes for wheat discharge at 10 t.p.h. each.

LOADING: When loading sugar bags, only canvas-bottomed slings to be used. Shippers will not permit loading with ordinary rope slings. Suitable slings can be hired from shore. Six slings required for each working gang.

TANKERS: Oil berth suitable for vessels up to 520 ft. length.

CUSTOMS ALLOWANCES: One opened bottle spirits and 200 cigarettes per crew member per week.

FRESH WATER: Available at the wharf, rate about 18 t.p.h.

FUEL: Available, delivery by road tanker, rate 32 t.p.h. Also see "General" before first port.

CONSULS: France, Italy, Lebanon, Portugal and Spain.

TELEPHONES: None available for installation aboard ship.

REPAIRS: There is a Naval Base at Natal, which apart from providing service to naval vessels, also deals with merchant vessels requiring repairs. The Base has seven departments, Mechanical, Naval Carpentry, Electricity, Electronics, Sails, and Painting, and a Docking System comprising two floating docks and one office ship. The Goias Dock has a capacity for vessels up to 1,000 tons and 4.80 m. draft. There is a ballasting service.

The City of Natal Dock has a capacity for vessels up to 2,800 tons and 5.80 m. draft.

Apart from other facilities, the Base has maintenance, refrigeration and kitchen services, which can be placed at the disposal of vessels during repairs to their own installations.

AUTHORITY: Port administration and Harbour Master.

AGENT: See "Recite".

PARANAGUA: 25.30 S. 48.30 E.

DOCUMENTS: See "General" before first port.

PILOTAGE: The Paranagua port area is some 17 nautical miles from bar and from sea buoy where Pilots board. For entry, necessary for Agent to requisition a Pilot 5 hours prior to ETA Paranagua Bar. For sailing from port, a 2-hour previous advice to Pilot necessary.

It is possible to requisition a special Pilot for entrance and sailing from Paranagua within a lesser period than required officially by Pilotage Association. Requisition for Pilot may be made during the following hours: week-days 0700–1100 and 1300–1700. Saturdays 0700–1200 and 1600–1700. Sundays and holidays 0800–0900. The Pilotage Association will attend unannounced vessels during those periods not covered by their regular office hours. This entails the requisitioning of a special Pilot earning 100% on the total ordinary bill. Pilotage very expensive. Pilot's association on VHF Channel 16.

RESTRICTIONS: No restrictions to entry in Paranagua Bay day or night. Sometimes, entrance channel not usable after dark because of buoys drifting out of alignment; however this is rare.

Existing entrance channel to the port from S.E. has a depth of 10 m. The South Channel now dredged to 12 m. thus allowing vessels up to 45,000 tons fully loaded to enter or leave. The channel will be dredged to 14 m. in the near future.

MAX. SIZE: See "Restrictions" above.

ANCHORAGES: Ample and secure in inner harbour.

HEALTH: (See "General" before first port). Health Authorities visit any vessel arriving from foreign port.

RADIO: No local radio. Messages should be routed: vessels coming from South via Rio de Janeiro radio or Santos radio; vessels coming from North via Florianopolis radio (PPJ).

VHF: Operates on international Channels 5 and 11. With inauguration of this service unannounced vessels may request

Pilots and also through local telephone service be connected with their Agents.
TUGS: Two small-powered, primarily for assisting berthing and unberthing. Also one private tug of 1,500 h.p.
BERTHING: There are at present 2,106 m. of quay.
Berths 1 to 3: 420 m. long, depth 10 m. (being dredged to 12 m.).
Berths 4 to 8: 670 m. long, depth 8 m.
Berths 9 to 11: 500 m. long, depth 8 m.
Berths 12 to 14: 500 m. long, depth 12 m.
Tween deck vessels cannot operate at berths 12 or 13.
Vessels are boomed off berths 1 to 6 by pontoons, and at 12 and 13 if necessary, for ease of cargo handling.
CRANES: Berth 14: four 12.5 ton portal cranes.
Berth 11 to 7: Two 12.5 ton portal cranes.
Four 6.25 ton cranes.
Six 3.25 ton cranes.
Also, one 30 ton, one 9 ton, and two 5.5. ton cranes.
One 100 ton Heavy Lift Barge, max. reach with 100 tons is 19 m.
BULK HANDLING FACILITIES:
Cargill: One loading tower of 500 t.p.h., movable over a distance of 150 m., capacity 20,000 tons (horizontal silo). Also capacity for 3,000 tons of bulk oil with capacity of 150 t.p.h.
Sanbra: At warehouses 6, 6a and 6b. 2 fixed loading towers, each 100 t.p.h., capacity 12,000 tons. Also two slightly movable elevators, with a total loading capacity of about 100 tons.
At the same berth there is a loading tower, movable over 180 m., with a loading capacity of 500 t.p.h. which is connected to a silo of 60,000 tons.
Gransol: At warehouses 4 and 5. One loading tower, 300 t.p.h., movable over a distance of 150 m. storage capacity 500 tons. 2×12.5 ton portal cranes for containers at Shed 5.
Socepar: One loading tower, 100/150 t.p.h., movable over 110 m. Storage capacity 25,000 tons.
Port Silo: (Operated by the port administration) one loading tower, 150/200 t.p.h., movable over 150 m. Storage capacity 10,000 tons.
Cargill and Sanbra can handle vessels loading to 42 ft. by using pontoons. Other installations, even with the use of pontoons, can only handle vessels loading to 30 ft.
The new grain terminal at warehouse No. 13 consists of 4 inter-connected horizontal silos, each with a capacity of 20,000 tons and 2 loading towers, movable over 200 m., loading capacity 1,500 t.p.h. each. The second phase of the construction is a 100,000-ton silo, which will be connected to the 4 horizontal silos, expected to be completed late 1974.
STEVEDORES: *Working Hours:* 0700–1100, 1300–1700, meal hours 1100–1300. Possible to work 1700–1900.
1900–2300, 0000–0400, meal hour 2300–0000. It is possible to work from 0400–0600 to complete the vessel. Normal night work is only possible until 0400.
Officially the same working hours are valid for Sundays and holidays.
MEDICAL: All facilities available. Crew members should hold valid International smallpox inoculation certificates.
TANKERS: Petroleum Berth: 184 m. long, 10 m. depth.
Gas Berth: 130 m. long, 10 m. depth.
FRESH WATER: Ample available and of good quality. Pumping rate about 30 t.p.h.
FUEL: All types of bunkers and diesel are generally available. Lubricating mixtures can be obtained but require considerable advance notice. Furnishing of these supplies must be contracted for about a week in advance. Also see "General" before first port.
GANGWAY/DECK WATCHMEN: Use of a gangway watchman is compulsory and they must be employed 24 hours a day, including Saturday, Sunday and holidays.
OPENING/CLOSING HATCHES: Usually done by stevedores but can be done by ship's crew.
CUSTOMS ALLOWANCE: Each crew member allowed to keep out of bond one carton of cigarettes and one bottle of wine or spirits.
IDENTIFICATION CARDS: Required for going ashore.
CONSULS:

Norwegian 233	Swedish 873	Danish 233
Italian 324	Uruguayan 832	Portuguese (no tel.)

Consulates at Curitiba (50 miles distant):

British 4–0498	Spanish 4–2946	Syrian 4–3873
German 4–2322	Polish 4–2472	Swiss 4–7553
Dutch 4–0097	Austrian 4–7241	Argentine (no tel.)

The nearest American consulate is at Sao Paulo.
REPAIRS: Minor repairs available for deck and engine-room. Better facilities for repairs to refrigeration.
AUTHORITY: Port Captain.
AGENT: Agency, Stevedoring, cargo brokers and Chartering: Cranston Woodhead S/A., PO Box, 179, Rua Comendador Correa Junior, 421, Paranagua – Pr. Tel. 2-0059, 2-0061. Cables "Cranwood" and "Realloyd".

PORTO ALEGRE: 30.05 S. 51.15 W.

This information does not apply to Tramandai Oil Terminal which is listed separately.
DOCUMENTS: See "General" before first port.
PILOTAGE: Porto Alegre situated 164 miles up the Lagoa dos Patos, a large freshwater lake, and vessels must take on a Pilot after receiving pratique at Rio Grande, which lies at sea entrance of lake. Pilot and authorities board after arrival at Rio Grande inner anchorage. Pilots arranged by Agent upon receipt of vessel's radioed ETA via Rio Grande Radio (PPJ). Since 40-mile channel between Rio Grande and Lagoa dos Patos is unlit, vessels should proceed from Rio Grande only by daylight, allowing 3 hours to negotiate channel. Vessels over 12 knots may leave Rio Grande for Porto Alegre not later than 1700 hrs. in Summer, or 1500 hrs. in Winter. Vessels under 12 knots not later than 1600 hrs. in Summer or 1400 hrs. in Winter. Entry must be made to Rio Grande at least 3 hours before these times to allow for clearance.
RESTRICTIONS: Vessels approaching Porto Alegre from the Lagoa should do so only by daylight since 30 miles access channel leading from the Lagoa to Porto Alegre poorly lit. If necessary, vessels should anchor off Itapoan Lighthouse at head of the Lagoa, to await daylight before proceeding. On arrival at Porto Alegre, free pratique must again be obtained, and crew lists, store lists, etc., again presented to authorities, who usually visit vessel in berth alongside.
MAX. SIZE: Not recommended that vessel of more than 215 m. LOA attempt to reach Porto Alegre. Max. safe draft from mid-April to mid-October is 17 ft. and from mid-October to mid-April, 16 ft. 6 in.
ANCHORAGES: Inner harbour. Not normally used unless port congested. If vessels are too late for transit they must anchor at either end of the lagoon overnight.
HEALTH: Vessels receive clearance on passing Rio Grande. No yellow flag required. Also see "General" before first port.
RADIO: All messages should be routed via Rio Grande Radio (PPJ).
TUGS: Only small low-powered tugs available. These normally used for unberthing only. Ships' lines normally used. The four tugs are 220, 250, 280 and 320 h.p.
BRIDGES: Vessels proceeding up-river from Porto Alegre to oil berth must pass under bridge with lifting-span. Span is lifted when approaching vessel sounds prolonged blast on siren.
BERTHING: The berths are on the East bank of the river, and the jetties stretch over a distance of 8 km.
Maua Quays: Berths "A", "A1" to "A7" and "B", "B1" to "B7". Length, 1,482 m. Depth 18 ft.
Navegante Docks: 2,433 m. long.
Cesa Grain Berth: 2 belts loading rate 100 t.p.h. each. 3 grain elevators, rate 100 t.p.h. each.
Between Maua and Navegante there are several small jetties but none capable of handling ocean-going vessels.
CRANES: *Maua Quays:* Eleven 3 ton portals, two 6.25 ton cranes, four 3 ton portals (Narrow gauge).
There are no cranes available at Navegante Docks.
STEVEDORES: *Working Hours:* 0730–1130, 1300–1700. Overtime 1700–1900, 1900–2300 and 0000–0400 hrs.
MEDICAL: Full facilities available. Crew members should hold valid international smallpox inoculation certificates.
TANKERS: Proceed to oil and LPG berths on Gravatai River for discharge. These berths accessible only to small tankers of up to 1,600 d.w.t. Refer to "Tramandai".
DENSITY: Fresh water at all times, unaffected by tides.
FUEL: Available, delivered by road tanker. Also see "General" before first port.
GANGWAY/DECK WATCHMEN: Vessels at anchor and alongside must have a watchman.
OPENING/CLOSING HATCHES: Usually done by stevedores.
CUSTOMS ALLOWANCE: Each crew member allowed to keep out of bond 1 carton of cigarettes and 1 bottle of wine or spirits.
FRESH WATER: Available from hydrants at all berths. Delivery rate up to 25 t.p.h.
IDENTIFICATION CARDS: Necessary.
CONSULS:

British	Spanish	Italian
German	Belgium	Norwegian
French	Danish	Swedish

REPAIRS: All light deck and engine-room repairs possible. No dry-docking facilities available except for small vessels of up to 300 ft. LOA.
TELEPHONES: Connections available from warehouses A, A2, A4, A6, B, B2, O, O2 and D4.
DEVELOPMENTS: 2 new dredgers are being used to deepen the channels leading to Porto Alegre, permitting a working draft Rio Grande/Porto Alegre of 20 ft.
A new grain elevator with a capacity of 60,000 tons is expected to be ready shortly.
AUTHORITY: Port Captain.
AGENT: Cranston Woodhead, S/A, PO Box 500, Largo Visconde do Cairu No. 12, 10th Floor, Porto Alegre. Tel. 24.47.66, 24.40.10, 25.05.78/79, 25.05.91 and 25.05.93. Telex 28600 AB Cranwood PAE. Cables: "Cranwood" and "Realloyd".

RECIFE (Pernambuco): 08.04 S. 34.52 W.

(See Plan)

DOCUMENTS: See "General" before first port.
PILOTAGE: Contact Pilot Headquarters only by radio. Messages should be addressed to "Associacao Praticagem – Recife". Pilots maintain a permanent watch during day in station which overlooks port area and outer roads to observe any vessel approaching and requiring their services, displaying "G" flag. At night only means of contacting shore is by radio. Pilot boats or launches are painted red, with letter "P" in black.
ANCHORAGES: Most favourable position for ships to await pilot boat is 1.5 miles in direction 303° from "Picao", also just outside the 6 fathom line. In fine weather ships can sail to a position 8 cables from "Picao" in same direction just South of buoy. Anchorage in fine weather between above-mentioned places; in bad weather

more than 1.5 miles in direction 303° from "Picao" and North and South of line, in water of 7 and 8 fathoms depth.

RESTRICTIONS: Vessels only enter port at night in cases of necessity. 3ft under keel clearance required when heavy swell running.

The port is situated between 2 channels, 1 to the North, the other to the South, which are the main fairways of the port. The Southern channel is 850 ft. wide by 32 ft. 6 in. deep and the Northern channel is 32 ft. deep but with variable width.

Tankers: May enter and leave during daylight hours only (0500–1800 hrs.).

MAX. SIZE: Vessels 220 m. in length can enter, max. draft 31 ft.

HEALTH: The Brazilian Health Authorities only visit vessel at the first Brazilian port of call. Master must report if all crew is well and in case of sickness on board on arrival Port Doctor when visiting vessel must be informed. After visit Port Doctor gives Master a certificate that vessel has been cleared. Captain must retain certificate on board to show to Health Authorities at other Brazilian ports of call if requested. Heavy fine imposed if document not presented. Also see "General" before first port.

RADIO: Usually vessels calling at Recife communicate with Agents through Rio-Radio-PPR, Fortaleza Radio-PPC or Amarakina-Radio-PPA-Salvador, which messages are relayed via The Western Telegraph Co. Ltd. who have stations in above-mentioned cities. Recife Radio Station PPO-Olinda Radio, located at local Post Office building at centre of City of Recife Avenida Guararapes and has very poor range. Customary for Olinda Radio to relay messages to distant vessels from Recife (port) via other vessels in near range. By no means a sure and reliable method.

TUGS: Pilot brings vessels to inner harbour where tugs available to help to go alongside; not practice for tugs to meet vessels on outer roads. 4 tugs available, largest 1,250 h.p. Vessels up to 5,000 g.r.t. require 1 tug. Vessels over 5,000 g.r.t. require 2 tugs.

BERTHING: Vessels arriving at Recife roads with 26 ft. can enter port on low tide and can go alongside from berth No. 1 to No. 7, over 26 ft. it is better to wait for high tides to enter, 31 ft. being the max. draft for entering Recife.

Depth alongside wharves:

Warehouse No.1–1A: 31 ft.; No. 7–11: 24–22 ft.
,, No. 2–5: 30 ft.; No. 12–14: 22 ft.
,, No. 6: 28 ft.; No. 15: 18 ft.

At anchorage (pool) in port, max. draft is 31 ft. Depth between 32 ft. and 26 ft., the max. rise of tide being 5 ft. Distance from the quay side, 200 m. Manoeuvring space is 1,640 ft. or 500 m. with a depth of 28–30 ft. max.; 590 ft. or 180 m. with a depth of 26 ft.

SPECIAL CARGO FACILITIES: *Cereals:* Silos with unloader, Silo capacity 10,000 tons, capacity of unloader 100 t.p.h.

Wheat: Silos with unloader: Two silos capacity 28,000 tons, capacity of loader 100 t.p.h.

Sugar: Sugar Terminal: warehouse capacity 200,000 tons, capacity of unloader 1,000 t.p.h.

Molasses: Tanks: capacity to store 14,000 tons, capacity of unloader 120 cu. m.p.h.

Cranes:

1 Crane with capacity of 20 tons (Warehouse 5/6)
17 Cranes ,, ,, ,, 1.5 tons
3 ,, ,, ,, ,, 5 tons
8 ,, ,, ,, ,, 8 tons
1 floating crane 40/50 tons capac. (Dock Co.)
1 ,, ,, 70 ,, ,, (Navy)

Docks – Internal

1 Crane with a capacity of 8 tons
1 ,, ,, ,, ,, 5 tons

Note: The Docks' Co. floating crane's hook height above water level is 7 m. and the Navy's 15 m.

STEVEDORES: Advise Agents of ETA at least 48 hours prior to arrival to make necessary berthing arrangements and hire dock labourers and stevedores in time.

MEDICAL: In *urgent cases* communicate with Agents immediately by means of Radio at least 48 hours prior to vessel's arrival if possible. It is necessary for vessel to enter port to enable sick person to land because on outer roads there is too much swell. Not necessary to Dock. Port Doctor must be advised by Agents and will board to see sick person and grant permission to land in Recife temporarily. Hospitals available also First Aid Stations equipped with ambulances. Crews should always have yellow fever and small-pox inoculation certificates.

TANKERS: Oil companies who keep petroleum products here are: Esso Brasileira de Petroleo, The Texas Co., Shell, Atlantic Refining Co. To discharge petroleum products tankers utilise berth No. 1 – considered by the Port Authorities as inflammable berth. Tankers can berth also at Nos. 2 and 3 where pipe-lines exist. For discharging fuel oil in bulk berths No. 5 and 6 can be utilised. Max. safe draft for a tanker to enter Recife is 30 ft. and entry must take place on high tide.

DENSITY: Low water density in Summer time 1028. High water density in Summer time 1027.

FRESH WATER: Supplied by Port Administration by means of pipe-lines in the docks. Vessels can be supplied alongside any quay; water fit for human consumption.

The local Port Administration has one water barge, capacity 240 tons, for supply to vessels inside the breakwater.

There are 92 hydrants, diameter 2.5 in., rate 15–20 t.p.h.

FUEL: *Fuel Oil:* This can be loaded between warehouses 1 to 6 by existing network along the quay. At warehouse No. 1 there is a 10 in. take-off point and two of 12 in.: Warehouse No. 2 has a 10 in. take-off and two of 12 in.; No. 3 there are two of 6 in. and one of 8 in.; at warehouse No. 5 one of 8 in.; at warehouse No. 6 one of 8 in. – all with a capacity of 60 to 100 t.p.h. and from warehouse No. 6 to No. 15 tanker trucks with a capacity of 40 t.p.h. Also see "General" before first port.

Diesel Oil: At warehouse No. 1 there is a 6 in. take-off and one of 8 in.; at warehouse No. 2 there is a 6 in take-off and one of 8 in.; at No. 3, two of 6 in. with a capacity of 40-50 t.p.h.; at other warehouses this supply is effected by tanker trucks.

DEVELOPMENTS: Plans to build berth for exclusive use of tankers at Olinda. Plans are also underway to dredge the access channel to 11.5 m. It is also intended to construct new berths for general cargo and molasses tankers, and to modernise the existing berths. Work expected to be completed 1977.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally by stevedores but crew helps when stevedores not familiar with hatches of modern vessels.

CUSTOMS ALLOWANCES: One carton cigarettes and one bottle of spirits allowed each man at Customs discretion.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: The following countries are represented in Recife/Pernambuco:

Argentina	Ecuador	Jordan
Belgium	Finland	Lebanon
Britain	France	Mexico
Colombia	Germany	Netherlands
Czechoslovakia	Greece	Norway
Denmark	Italy	Portugal
El Salvador	Japan	United States

REPAIRS: Available at naval repair yard (Departmento Industrial da Base).

REPATRIATION: Facilities by air available.

AIRPORT: Situated 9 miles from docks.

TIME: GMT minus 3 hours.

HOLIDAYS: *National Holidays:* Fraternidade Universal (January 1st); Tiradentes (April 21st); Labour Day (May 1st); Brazil's Independence Day (September 8th); Commemoration of the Republic (November 15th); Christmas Day (December 25th).

State Holidays: Nossa Senhora da Conceicao (December 8th); Nossa Senhora do Carmo (July 16th); Carnival 3rd Day; Good Friday, Memorial Day (November 2nd).

POLICE/AMBULANCE/FIRE: Harbour Police 240124; Ambulance (Pronto-Socorro) 22411; Fire Brigade 240077.

TELEPHONES: Can be connected on board if requested.

AUTHORITY: Administracao do Porto de Recife/Pernambuco.

AGENT: Thom and Cia Ltd. Barbados Lima 159, Recife. Cables "Thom Recife".

RIO DE JANEIRO: 22.55 S. 43.12 W. **(See Plan)**

(A) GENERAL CARGO SECTION. (B) TANKER SECTION.

SECTION A

DOCUMENTS: See "General" before first port.

CLEARANCE: All clearance is taken care of at the quarantine anchorage (pratique, custom's immigration). Accommodation ladder must be rigged for this purpose.

After clearance by the customs a dark blue flag with a white five-pointed star in the middle must be shown day and night during vessels stay in port. Deratisation service is available. Inspection of the vessel will be made by inspectors to whom the valid deratisation or derat-exemption certificate must be shown.

PILOTAGE: Entrance to Guanabara Bay is 1 mile wide between Ponta de Santa Cruz and Ponto de Sao Joao. This is divided into two parts by Ilha Lage 0.6 mile W.N.W. of Ponta de Santa Cruz. Main channel for entering port is on the East side of Ilha Lage, depth 30 to 50 m. The channel between Ponto de Sao Joao and Ilha Lage, depth 5.7 m. should be avoided.

Pilots are ordered by vessel's Agent, who should be kept informed of vessel's ETA. Unless pilotage from sea required, Pilot will board with Port Authorities at quarantine anchorage in approx. position 22° 53′ S. 43° 09′ W.

Pilotage is compulsory within the port limits, which extend from the quarantine anchorage to the W., N. and E. The approach from sea to the quarantine anchorage may be done without a Pilot, but for deep draft vessels it is recommended to take a Pilot because of the narrow deep draft fairway. If requested, the Pilot will board the vessel 2 miles South of Cotunduba Island. Pilot boats are painted red with a black "P".

ANCHORAGE: In the Rio de Janeiro port area, the following areas are designated for anchorage of vessels coming into port.

Anchorage for vessels up to 22 ft. (6.7 m.) draft Anchorage No. 3. Within 300 m. radius of position 22° 51′ 1″ S., 43° 10′ 8″ W.

Anchorage for vessels with 22 ft. (6.7 m.) draft or more within 800 m. radius of position 22° 51′ 5″ S., 43° 08′ 6″ W.

Vessels impounded or requiring extensive repairs: position determined by the Port Captaincy for each specific case.

Vessels in quarantine: position 22° 50′ 7″ S., 43° 08′ 6″ W.

Vessels carrying explosives and inflammable material: position 22° 51′ S., 43° 11′ W.

RESTRICTIONS: Port is accessible to all vessels at all times and states of the tide. Attention must be paid to messages sent by Rio Radio about forbidden areas due to Marine exercises with live ammunition along the coast near entrance to the port.

Access Channel Limits: The port access channel is 200 m. wide, and dredged to a depth of 17 m. (55.7 ft.).

The access channel to the Mineral and Coal Quay is 150 m. wide, 10 m. (32.8 ft.) deep, running true 308°, starting near the Maua Pier and extending to the quay manoeuvring basin.

The access channel to the Gamboa Quay and the Sao Cristovao Quay is 300 m. wide along the quay with a depth varying from 6 to 10 m. (19.6 to 32.8 ft.).

The Caju Quay access channel is 80 m. wide along the quay, with a depth of 6 m. (19.6 ft.).

MAX. SIZE: No limits for entering port. Draft limited by berth depth.

HEALTH: Vessels from another Brazilian port automatically receive free pratique and should not fly quarantine flag. If suspected disease or fever on board it is advisable to cable Agent before arrival. Also see "General" before first port.

RADIO: Rio Radio, call sign PPR. Working frequencies 17,194; 13,105; and 8,364 kHz. VHF marine radiotelephone is available. Channel 16 for general call, Channels 11 and 12 for Pilot and harbour purposes.

TUGS: There is adequate tow-boat service at Rio de Janeiro varying from 220 h.p. to 1,200 h.p., tariff being divided into sections – 200 h.p. to 600 h.p. and 601 h.p. to 1,200 h.p. The number of tugs to be employed in a service depends on the tonnage of the vessel and/or nature of the berth and respective approaches, as determined by the naval authorities. Ship's lines usually employed.

Requirements: The assistance of tugs for mooring and departure operations is governed by the following rules:

(a) Manoeuvring at the Gamboa and Sao Cristovao Quays:
vessels up to 2,000 g.r.t. no tug.
2,001 to 5,000 g.r.t. 1 small tug.
5001 to 15,000 g.r.t. 1 large and 1 small tugs.
15,001 to 30,000 g.r.t. 2 large and 1 small tugs.
over 30,000 g.r.t. 2 large and 2 small tugs.

(b) Manoeuvring at the Caju Quay (warehouses 19 to 33):
vessels up to 2,000 g.r.t. without tug.
2,001 to 5,000 g.r.t. 1 small tug.
5,001 to 15,000 g.r.t. 1 large tug and 1 small tugs.
over 15,000 g.r.t. 1 large tug and 2 small tugs.

(c) Manoeuvring at the Mineral and Coal Quay:
vessels up to 2,000 g.r.t. without tug.
2,001 to 5,000 g.r.t. 2 small tugs.
5,001 to 15,000 g.r.t. 2 large and 1 small tugs.
over 30,000 g.r.t. 3 large and 1 small tugs.

(d) Manoeuvring at the Petroleum Terminals, Maua Pier and Docks:
vessels up to 4,000 g.r.t. 1 small tug.
4,001 to 15,000 g.r.t. 1 large and 1 small tugs.
15,001 to 30,000 g.r.t. (loaded) 2 large and 1 small tugs.
15,001 to 30,000 g.r.t. (in ballast) 2 large tugs.
over 30,000 g.r.t. (ballast) 3 large tugs.
over 30,000 g.r.t. (loaded) 3 large and 1 small tugs.

The following must also be observed:

1. All vessels (tankers) manoeuvring at quays which are not terminals will be assisted by tugs as shown in section *(d)*.
2. The requirements in sections *(a)*, *(b)*, *(c)* and *(d)* will apply when the manoeuvre is effected under normal conditions.
3. In abnormal conditions, and according to the Pilot's judgement, other necessary measures will be adopted to ensure safety of the manoeuvre.
4. When a vessel is manoeuvring with the aid of a tug, the Pilot may call for a further tug with power compatible with the requirements of the manoeuvre.
5. A tug will be considered as large where its power is in excess of 600 h.p.

BERTHING: Berth usually accessible day and night. Ratguards obligatory.

For vessels loading iron ore, it is important that hatch combings are not higher than 31 ft. above the water-line in order to pass under the loading belt.

Quay	*Length*	*Depth*
Pier Maua	883 m.	11 m. (36 ft)
Gamboa Quay	3,298 m.	9.5–10 m. (31.1–32.8 ft.)
Sao Cristovao	1,428 m.	8–9.5 m. (26.2–31.1 ft.)
Caju Quay	1,300 m.	6 m. (19.6 ft.)
Mineral & Coal Quay	438 m.	12.5 m. (40.9 ft.)

CRANES: 164 gantry cranes, 20 jib cranes, 10 steam cranes, 7 tracked cranes; 4 floating cranes, largest with capacity of 200 tons.

STEVEDORES: Cable Agent ETA 36 hours before arrival in order to arrange gangs required. When arriving during week-ends or on Monday, Agent needs ETA on Friday afternoon. Loading/discharge rates:

General cargo cases 7 to 8 tons per gang/hour.
Bags 15 tons per gang/hour.
Grain in bulk 1,000 tons per eight hours.
Coal in bulk 7,000 tons per day.
Loading iron ore 25,000 tons per day.

MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.

DENSITY: Salt water at entrance to bay. Further inland water often brackish, and density varies with tide.

FRESH WATER: Available alongside from 69 points, loading rate 30 t.p.h. Also available by barge, capacity 450 tons, loading rate 100–200 t.p.h.

FUEL: See "General" before first port.

DEVELOPMENTS: Plans under study to build new iron-ore loading installation to take vessels up to 100,000 d.w.t.

WATCHMEN: Gangway watchmen strongly recommended for any vessels working cargo with shore labour on board. Watchmen from shore not necessary for coal, iron ore, and oil cargoes.

CUSTOMS ALLOWANCES: Each crew member allowed 2 cartons of cigarettes and one bottle wine or spirits.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: Pratically all countries have consuls in Rio.

REPAIRS: All types deck and engine repairs can be effected. Five dry docks. Largest dry dock, length 259 m., breadth 34 m., max. draft 14 m.

POLICE/FIRE/AMBULANCE: Police 234–2020; Maritime Police 243–0181; Ambulance 222–2121; Fire 232–1234.

HOLIDAYS: *Legal Holidays:* New Year's Day (January 1st); St. Sebastian (January 20th); Tiradentes (April 21st); Labour Day (May 1st); Independence Day (September 7th); Proclamation of the Republic (November 15th); Christmas Day (December 25th).

Religious Holiday: All Soul's Day (business and banks closed) (November 2nd).

Movable Holidays: Good Friday (business and banks closed); Corpus Christi (business and banks closed); Carnival (Saturday through to noon on Ash Wednesday) – non-official irregular working hours – banks closed.

Federal and State Government Departments, as well as banks, do not work on Saturday.

TELEPHONES: Available at warehouses 1–8 on request to the Brazilian Telephone Company.

SHORE LEAVE: Shore leave is permitted.

DEVELOPMENTS: Caju Quay is being widened and dredged to 12 m. to provide 2 container berths, 1 sulphur and salt berth, and 1 heavy lift general cargo berth.

The existing iron ore berth will close.

The Coal Quay is expected to cease operations 1980 to allow expansion to be continued to Caju Quay. Both coal and iron ore will be re-routed to Sepetiba.

GENERAL: Vessels to fly signal letters when manoeuvring in port and special Brazilian Customs flag after reception.

AUTHORITY: Captain of the port.

(B) TANKER SECTION. All information refers to the "Petrobras Terminal" *unless otherwise stated.*

LOCATION:

South Dock-Island (main)
Lat. 22° 49′ 2″ S. — East Berth (PP1) or
Long. 43° 09′ 2″ W. — West Berth (PP2)

North Dock-Island (secondary)
Lat. 22° 48′ 3″ S. — East Berth (PS1) or
Long. 43° 08′ 9″ W. — West Berth (PS2)

Butadiene Dock-Island
Lat. 22° 48′ 2″ S. — East Berth (PAB)
Long. 43° 09′ 0″ W.

Ilha Redonda Pier
Lat. 22° 48′ 1″ S. — West Berth (IR)
Long. 43° 09′ 0″ W.

DOCUMENTS: See "General" before first port.

APPROACHES: The safe access to the Terminal is made through a main (deep but narrow) channel swept to 17 m. (55 ft.) that begins between the Island of Cotunduba and the Point of Leme. It extends as far as the East neighbourhood of the South Dock-Island East Berth. As long as the ship does not exceed 11.3 m. (37 ft.) the access can also be undertaken through the North – South axis passing by Ilha Rasa and the bar's entrance (secondary entry, larger but shallower).

A long bridge (Rio-Niteroi), under construction, linking Ponta do Caju (West) to Ilha do Mocangue Grande (East) will cross the swept channel. Three navigable empty spaces: – the central one 300 m. (980 ft.) wide; 50 m. (165 ft.) high at MLWS, the side ones with 200 m. (650 ft.) in width – will maintain the safe access for ships.

A shoal (reef) in 11.5 m. (36 ft.) deep lies about 0.3 m. E.N.E. of Lage Is. just after the bar's narrow entrance (between Sao Joao and Santa Cruz Points). A wreck marked by a green buoy (CS) lies sunk nearly 1.3 miles Eastward of Cotunduba Is.

ANCHORAGE: Vessels should anchor N.E. of Ilha Fiscal for port authorities clearance. After pratique has been granted they should change anchorage site while awaiting for a berth alongside.

Vessels should anchor clear of the 17 m. (52 ft.) swept channel. They must take care to avoid dropping their anchors on the route of submarine cable near to a line joining the islands of Villegagnon and Boa Viagem.

Prohibited Anchorage: In no circumstances should ships drop anchor Westwards and between South and North platforms due to the existance of submarine pipe-lines connecting Ilha D'agua to the platforms and to Ilha Redonda.

READINESS: Arrival is usually considered the time the vessel reaches the anchorage area or the time the Pilot boards the vessel, whichever occurs first notice of readiness will be accepted at the time the tanker is in all respects ready to operate.

PILOTAGE: Pilotage is compulsory after the ship's free pratique has been granted. From that moment on all movements within the port limits will be made under the assistance of a Pilot. Request for pilotage service may be made either right to the Harbour Pilot's Working Co-operative (pilot station VHF Radiotelephone – Channels 16 and 12. Listening period from 0600 to 1800 hrs. local time) or, through ship's Agent, 24 hours beforehand.

For tankers larger than 100,000 d.w.t. Pilots usually board the

vessel outside the main channel's entrance. This will occur if weather conditions permit and by daylight only.

Ships could also use, in most circumstances, a secondary entry which N. – S. axis passes through Ilha Rasa (larger but shallower) as long as their draft does not exceed 11.3 m. (37 ft.). In certain cases and at the discretion of the Pilot, according to the prevailing conditions, ships will use this channel with a draft up to 12.5 m. (41 ft.).

Ships may anchor 1.8 mile on the North of Ilha Rasa for awaiting the Pilot, who will board the ship and proceed by day or night according to ship's draft, visibility conditions, etc.

A pilot ladder must be safely rigged for immediate use and be long enough to reach the Pilot's launch. At night adequate lighting must be rigged so as to enable the Pilot to approach and board the vessel. In addition, a boat rope should be led along the side, from well forward. A lifebuoy with 27 m. (15 fathoms) of rope must be conveniently placed in the vicinity of gangway for use in emergency. Vessels should always make a lee. Tankers of 40,000 d.w.t. or over are requested to have a pilot ladder (preferably with a centre gripping line) rigged alongside the accommodation ladder in order that the Pilot may transfer to it after about 2 to 3 m. (6 to 10 ft.).

MAX. SIZE: Tankers up to 135,000 d.w.t. will operate in the terminal. Draft is 15.8 m. (52 ft.) at low water.

Berthing capacity is limited by structural resistance of installation, actual depth of the swept channel and weather conditions.

South Dock Island (main)

East Berth (PP1) – Tankers up to 15.8 m. (52 ft.) draft will moor and unmoor at any time.

Structural resistance of pier was designed to handle tankers up to 115,000 d.w.t. but under special circumstances this limit will be extended to 135,000 d.w.t.

West Berth (PP2) – By day tankers up to 13.1 m. (43 ft.) draft will moor according to the range of tide.

9.4 m. (31 ft.) draft to a range of 0.0 m. (0.0 ft.).
12.2 m. (40 ft.) draft to a range of 0.3 m. (0.98 ft.).
12.5 m. (41 ft.) draft to a range of 0.6 m. (1.98 ft.).
12.8 m. (42 ft.) draft to a range of 0.9 m. (2.94 ft.).
13.1 m. (43 ft.) draft to a range of 1.2 m. (3.94 ft.).

By night only ships up to 35,000 d.w.t. will moor.

Leaving at night only enough ballasted and with own power, up to 48,000 d.w.t.

Shifting ship from East to West Berth only by daylight, draft 12.8 m. (42 ft.), fair weather and wind speed up to 2 Beaufort;

North Dock-Island (secondary)

East Berth (PS1) – Tankers up to 35,000 d.w.t. will moor either by day or night.

At low tide, the maximum draft permitted is 10.2 m. (34 ft.).

West Berth (PS2) – At night tankers up to 14,000 d.w.t. will manoeuvre. Whenever another tanker is already berthed to the Butadiente Dock-Island, night mooring to the North Dock-Island is not advisable. West-berthing will be undertaken with ebb tide, i.e. the set of the current is South, preferably.

At low water max. permitted draft is 8.2 m. (27 ft.).

Butadiene Dock-Island (PAB)

Manoeuvres will be undertaken at daylight only. Max. permissible draft at low water is 8.5 m. (28 ft.).

Ilha Redonda Pier (IR)

LPG tankers will moor by day only, limitations concerning draft is 7 m. (23 ft.) at most. Max. ship's LOA is 100 m. (360 ft.).

Advisable draft for safe manoeuvring: Although the amount of ballast carried on vessels is at the Master's discretion, the table below is recommended as a guide:

Vessels of 30/40,000 tons, draft for'd 16 ft. aft 20 ft.
Vessels of 40/50,000 tons, draft for'd 18 ft. aft 24 ft.
Vessels of 40/70,000 tons, draft for'd 20 ft. aft 28 ft.
Vessels of 70/100,000 tons, draft for'd 24 ft. aft 32 ft.

Vessels over 100,000 tons, should have approximately one-third of the vessel's deadweight in ballast.

RADIO: Vessels under charter to Petrobras bound for Rio de Janeiro should advise their ETA 48 hours prior to arrival to PPA25 (Company's own radio station) as well as to their Agents when it will be the case, through PPR (Rio Radio – Government Coast Station). Confirmation or change of ETA should be cabled 24 hours before arrival. When within range, tankers may also call Torgua or Fronape VHF radio-telephone stations for instructions. All ETA's should indicate whether it is local time or GMT.

The terminal radio and communication centre is located in the Oil Handling Control Room situated at Ilha D'agua. There is a RT set operating 24 hours a day, on Channel 16 (Delta) and manned by terminal operators.

It is strictly prohibited to use vessel's wireless transmitters in the port of Rio de Janeiro.

Non-compliance with this regulation may result in a fine being imposed on vessel by the authorities.

TUGS: Tugboat assistance is rendered by two Petrobras 1,430 h.p. tug boats (twin motors equipped with controlled pitch propellers). Private tugboats are also available. While rendering such assistance tugs act under the orders of the Harbour Pilot. Petrobras tugs are fitted with fire pumps and monitors (including mechanical foam) to assist in fighting fires. All manoeuvring orders will normally be given by VHF telephone on Channel 13 (Alpha) – 156.65 mHz, however, they usually keep watch on Channel 16 (Delta) – 156.8 mHz. Ships not provided with radiotelephone, orders will be conveyed to the fore tug by a mouth whistle and to the aft tug by the ship's whistle. All orders received by tugs will be acknowledged with a distinct short blast. Hawsers are always supplied by the ship except when tugs are manoeuvring alongside ship in which case the towing lines will be given by the tugs.

The tugs are usually stationed either at the terminal dolphin or "L" pier on Ilha D'agua. The Pilot in consultation with the Master, will decide the number of tugs required for each berthing or unberthing operation. Safety of the Terminal installations demands, at least, two tugboats, even for bow thruster equipped ships.

BERTHING:

Petrobras: Torgua is an oil terminal consisting of four distinguished mooring sites located on different places inside the Guanabara Bay.

All these mooring sites are linked to Ilha D'agua and then to the mainland (Duque de Caxias Refinery – REDUC) by submarine pipe-lines. Three of them are dock-islands, i.e. island-type offshore platforms lying near to the Eastern edge (about half mile away) of Ilha D'agua (where storage tanks, operation controlling room and part of the administrative staff are placed). Two of these dock-islands are squared platforms (South and North) with two berths each (East and West). The South one is designed for larger tankers consisting of two mooring and two breasting dolphins on each side of the platform. It is normally used for the discharge of crude oil.

The North Dock-Island (smaller) has only two mooring dolphins on each side. Two berths (East and West) are also available. It is generally used for handling derivatives. The third Dock-Island (the smallest and round shaped one) is actually the dolphin of the North Dock-Island square platform. It is known as the "Butadiene Pier" and only one vessel at a time can be berthed there (East) either for discharge LPG/butadiene or loading light grades. Besides these three mooring sites there is a fourth located on Ilha Redonda (approx. 2 miles E.N.E. of Ilha D'agua). This installation comprises one single berth (West), head of a small pier. It handles LPG only. Two spherical refrigerated storage tanks (2,000 tons) can easily be seen from incoming vessels.

Other Terminals: *Manguinhos Terminal* – Operators: Refineria de Petroleo de Manguinhos. At Manguinhos terminal a draft of 36 ft. is permissible. Conventional buoy berth in which two ship's anchors and four buoys are used, one on starboard forward of the bow and three buoys aft. Two ship's lines run to each buoy. The terminal is situated in the inner harbour of Rio de Janeiro and close to the quays. Three 8 in. hoses from an underwater pipe-line are connected to the ship's manifold. Maximum back pressure is 100 p.p.s.i., at the ship's rail. Discharge rate is about 1,000 t.p.h. Care is to be taken that the vessel shall not exceed a draft of 40 ft. during discharge. Bunkering is permitted when discharging cargo.

Riberia Terminal – depth alongside 30 ft.
Shell Terminal – ,, ,, 31 ft.
Texaco Terminal – ,, ,, 29 ft.

MEDICAL: Medical treatment and/or hospitalisation, if required, is provided in private local clinics. Dentists are also available. For emergency cases (serious illness or injury) Torgua first aid may be requested by the Master. Internal telephone number is 39.

If patient does not speak Spanish, Portuguese or English an interpreter should accompany him. A nominal amount is charged for any supplies or medicines furnished by the terminal.

CARGO INFORMATION:

South Dock-Island (main)

	Pipe-lines				Hoses/Arms		
Grades	*No.*	*Dia. in.*	*Volume cu. m.*	*cu. m. per hour*	*No.*	*Dia. in.*	*P.S.I.*
			For Loading				
Diesel oil	1	12	90	1,100	1	8	250
Gasoline	1	12	90	1,100	1	8	250
Fuel oil (HPP, LPP)	1	12	90	1,200	2	8 & 12	450
Kerosene (lamp & jet)	1	12	90	600	1	8	230
Water	1	6	22	50	1	2.5	150
			For Discharge				
LPP crude oil	1	32	4,000	4,000	3	8/12/12	150
	1	26	6,128	2,000	3	8/12/12	150
HPP crude oil	1	26	6,128	2,000	3	8/12/12	110
Ballast/slop	1	12	90	—	1	8	80

North Dock-Island (secondary)

			For Loading				
Diesel oil	1	12	98	700	1	6	230
	1	8	50	350	1	6	230
Gasoline	1	12	58	700	1	6	230
	1	10	78	400	1	6	230
Fuel oil (HPP, LPP)	1	14	135	1,200	2	6	450
Kerosene (lamp & jet)	1	12	98	700	1	6	230
Water	1	4	12	50	1	2.5	—
			For Discharge				
LPP crude oil	1	26	6,000	2,000	2	6	120
Ballast	1	12	98	800	1	6	150

Butadiene Dock-Island

			For Loading				
Gasoline	1	12	102	700	1	6	230
	1	10	73	400	1	6	230
Diesel oil	1	12	102	700	1	6	230
	1	8	48	350	1	6	230
Kerosene (lamp & jet)	1	12	102	600	1	6	230
			For Discharge				
Ballast	1	12	102	800	1	6	150
LPG/Butadiene	1	8	575	300	1	6	250

NB:— A mooring buoy exists on the N.W. of the Dock-Island (Dolphin).

Ilha Redonda Pier (West Head Berth) IR

			For Loading				
LPG	1	8	5.6	—	2 8	(L)	150
	1	6	3.2	—	1 6	(V)	150
LPG	1	8	5.6	—	2 8	(L)	600
	1	6	3.2	—	1 6	(V)	

N.B.:—Two mooring buoys exist.

FRESH WATER: Facilities may be arranged to supply water in North and South platforms only. Water supplying barges are also available.

FUEL: The Terminal is equipped with blending valves and can deliver any type of fuel – as Bunker C fuel oil, marine gas oil, marine diesel oil and intermediates of any grade – concurrently with tankers working cargo, at international prices. Also see "General" before first port.

The supply rates are about 300 mt/hr. for Bunker C, 180 mt/hr. for MGO and 450 mt/hr. for intermediates.

Orders for bunkers should be placed, a minimum of 48 hrs. in advance, to: Marine Fuel Division, Commercial Department. Telegraphic Address: Petrobrasecope. Telex number: 031422 or 031423. Rio de Janeiro – Brazil.

BALLAST: All ballast should be pumped out to the terminal slop tanks. Under no circumstances should it be pumped into the sea even if the ballast is said to be clean. As soon as the ship is moored, the Terminal Representative must be told of the quantity of ballast on board and the estimated time to pump it out. Right after discharging a sludge ballast of high pour point (HPP) oil, tankers are asked to flush the line with water from the main suction inlets. The Terminal Representative must be notified 30 minutes before the ship will be out of ballast.

There are two sludge tanks with a total capacity of about 8,900 cu.m. (56,000 bbls.). The terminal is particularly interested in having vessels complete the deballasting operation promptly after berthing in order to minimise time at berth. Simultaneous loading and deballasting is encouraged on properly equipped vessels.

REPAIRS: Repairs of all kinds can be effected in Rio de Janeiro. There are floating cranes with a capacity of 100 tons. Divers service may be obtained. Dry dock to hold ships up to 33,000 d.w.t. are available. It is suggested that charges should be discussed with ship's Agent prior to proceeding with any repair work.

SURVEYORS: Lloyd's Register of Shipping, American Bureau of Shipping and Bureau Veritas have representatives in Rio de Janeiro. Advance notice should be given in order to arrange for an appointment through Fronape on ship's Agent.

Chas. Martin & Co. petroleum inspectors are available in Rio de Janeiro. Contact may be through Agent. E. W. Saybolt & Co. inspectors are also available in Santos.

Chas. Martin & Co., Rua da Lapa, 200 – conj. 906, 20,000, Rio de Janeiro, GB, ZC-00, Tel.: 242-4219, 245-5636 and 225-3507.

E. W. Saybolt & Co., Rua Bras Cubas, 3, 11,100, Santos, SP. Tel.: 4-6638.

GENERAL:

Gangway: All vessels using the port of Rio de Janeiro must provide a safe gangway. The use of rung ladders (sea ladders) is contrary to port regulations and port authorities will not board except by means of a safe gangway or accommodation ladder. A lifebuoy with 27 m. (15 fathoms) of rope must be conveniently placed in the vicinity gangway for use in emergency. It will be the responsibility of ship to provide and maintain this equipment.

At night, the gangway must be adequately lighted. In addition, a boat rope should be led along the side, from well forward. In the near future a special safe gangway will be provided in the South and North dock-islands.

Repairs: Repair and maintenance services for radar, radio, gyro compass, echosounder, etc., are available. The repair man should be contacted through ship's Agent.

Stores: Provisions and stores are available. Requisitions should be conducted through the Agents. Ship chandlers are normally permitted to visit ships when specifically instructed by Agent.

Launches: Launch service for the transportation of personnel ashore must be arranged through ship's Agents. Terminal boats are intended for operational assistants and they are normally stationed at a small "L" pier on the South of Ilha D'agua (Barge Dock).

Laundry: Laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message to Agents.

Photographing: The taking of photographs within the boundary of the terminal premises is prohibited.

Ratguards: Ratguards must be fitted to all mooring lines.

Sea Pollution: Brazilian law is very strict in regard to the pollution of harbour and coastal waters. Vessels should not discharge dirty ballast, ashes, refuse, etc., into the water. Heavy fines are imposed for violations. All overboard discharge valves from cargo tanks and bilges are to be conducted with the greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged to avoid harbour contamination should an oil spill occur.

Similarly, any hull leakages will be subject to equal restrictions. To offenders, fines will be charged (besides resulting delay) according to ship's tonnage, i.e. 2% of the largest country's minimum wage per each ship's (gross) ton.

Emergency towing wires: Two towing wire ropes (fore and aft) should be hung overboard to the water's edge in such way that tugs can easily make fast if an emergency situation arises.

Shore Leave: Shore leave is normally permitted. Baggage and packages are subject to examination upon entering and leaving the Terminal property and vessels, either by Petrobras watchers or by custom's officers.

Cleaning: Several contractors in the area provide labour for tank cleaning and mopping. Masters need of this service should submit their requirements to ship's Agent who will contact and request a contractor to go on board to discuss details and estimate costs of work to be effected.

It must be pointed out that the Master of the vessel is solely responsible for the fitness of the ship's tanks for loading his next cargo, and will therefore be held liable for any contaminations of the cargo after loading, due to inadequate tank cleaning. Therefore it is up to him to decide the degree of tank cleaning necessary. He may, of course, seek advice from petroleum inspectors in this respect, whenever there is any doubt.

Compass Adjustment & RDF Calibration: Compass adjustment or radio direction finder calibration can be effected by competent hydrographers and extra-masters. Contacts with Agents or through the pilot's station.

Custom's Watches: Sometimes while vessel is in port, Brazilian custom's officials are assigned on board to ensure compliance with custom regulations. Meals must be supplied to these officials during regular meal hours.

Important Telephone Numbers (PABX):

Terminal's Executive Assistant	10*
Operation Manager	28*
Operation Supervisor	38
Marine Section	50*
Safety Section	40*
Medical Section	39

(*) To be used in working hours only.

DEVELOPMENTS: A new berth is being built on Pombeya Island and dredged to 12 m. This is intended to relieve Ilha de Braes Fort.

AGENT: L. Figueiredo S/A. Av. Pres. Vargas 463–20° Andar. Tel. 221-6127. Cables: "Doratrans-Rio". Telex 031720 "Doralice-Rio".

RIO GRANDE: 32.03 S. 52.05 W.

DOCUMENTS: (See "General" before first port).

PILOTAGE: Bar pilotage is compulsory on approaching Rio Grande contact can be made with Pilots by VHF Channel 16, pilot boat is easily identified as it is painted red. Requests for a Pilot to be made by Agent at least 12 hours in advance for vessels entering and two hours for vessels sailing. Bar Pilots either bring vessels with cargo to discharge/load direct to berth, or up to inner anchorage (when no berth is available or in the case of vessels en route to Porto Alegre).

ANCHORAGES: Official anchorage situated at a point between inner light buoys Nos. 4 and 5, just before entrance proper to inner approach channel. In case of necessity, vessels may discharge/load to/from lighters at anchorage where depth is over 35 ft.

RESTRICTIONS: Depending on weather conditions and subject to prior arrangements with Bar Pilotage, vessels drawing less than 24 ft. may enter or leave any hour of day or night. Draft subject to change as access channel is being dredged to 42 ft.

MAX. SIZE: *Bar max.:* subject alteration, see Restrictions.

Anchorage and bar fourth section: Fourth section is where new super port of Rio Grande will be situated. The natural draft inner roads is 50 ft. therefore if draft at access channel confirmed, foresee no difficulties vessels drawing heavy draft entering and operating at anchorage or super port grain and fertilizer terminals.

Inner New Port (Porto Novo): Subject to alterations.

HEALTH: *(a)* Vessels arriving from a foreign port of call must receive visit of Port Health Authority. Each passenger (whether to land or in transit) and crew member must be in possession of a valid international vaccination certificate against smallpox. Also see "General" before first port.

(b) Maritime Health Declaration has to be made out and handed to Doctor at time of visit. When all papers have been examined and found in order, the Doctor will authorise lowering of the yellow flag and hand over free pratique.

(c) Vaccination against smallpox can be made on board and respective international certificate issued.

(d) In case of death, suspected disease, serious accident, etc., on board before vessel arrives in port, master should radio Agent giving full particulars so that necessary steps may be taken with Health/Police authorities.

RADIO: Radio Juncao, call sign PPJ, situated on outskirts of Rio Grande, is a receiving/transmitting station, operating on a wavelength of 600 metres (500 kc/s). There is telephone communication between radio station and shipping offices so that, normally, messages are relayed without any appreciable delay. Radio messages may also be despatched through Florianopolis Radio, via Western Telegraph, and these are also received quickly, under normal conditions. Most Agents are equipped with VHF.

TUGS: Compulsory for vessels over 2,800 d.w.t. Five tugs available. Tugs usually join vessel as soon as she has come through approach channel, in the port proper, but in the case of deeply-laden vessels, normally attend before vessels enter inner approach channel. Ship's lines always used.

Tug Requirements:

Vessel 2,800-5,000 d.w.t. 1 small tug. 5,001–10,000 d.w.t. 1 small and 1 medium tug. 10,001-15,000 d.w.t. 1 medium and 1 large tug. over 15,001 d.w.t. 2 large tugs.

BERTHING: *New Port:* Length of quay, 1,864 m., depth 8.5 m. 38 cranes, capacity 2.5 tons to 10 tons.

Old Port: Only used by fishing vessels.

No mooring buoys. Vessels berth alongside quay to load/discharge. If weather conditions permit, recommended that vessels should berth starboard side to wharf in order to facilitate sailing, especially if there is a possibility of night departure. Turning vessel round before coming alongside, however, may not always be advisable or safe because of wind and current conditions at time. Vessels loading down to maximum safe draft must be starboard side to quay on sailing. If weather does not allow ship to turn on arrival, she must do so as soon as conditions permit, before being too deeply laden.

Oil Carriers: Tankers measuring over 200 m. long have entered and berthed at Rio Grande, coming alongside port side to berth. On sailing, they go out stern first, turning after negotiating approach channel and reaching anchorage. Favourable conditions of wind and current necessary for this manoeuvre.

Installations for discharge of petroleum products: All fuel oil discharged at tanker berth within port proper — i.e. subject to a maximum draft of 29 ft. White petroleum products may also be discharged at this berth. A deep-water tanker pier has been constructed close to the anchorage but it is in limited operation for white products only, because pipe-lines to main storage tanks and refinery have not yet been installed. This pier, which is capable of accommodating two vessels of 160-180 m. overall length, has a depth of over 35 ft.; it also has installations for supplying fresh water which may, in case of necessity, be used by cargo vessels. No facilities for the discharge of residues.

BULK HANDLING FACILITIES: *New port;* depth alongside varies from 26 ft. to 29 ft. depending on berth and has the following facilities:

CESA Terminal: One silo with a capacity of 55,000 tons used for grain and soya beans. Conveyors feed two pneumatic chutes, each 150 t.p.h. The facility is being improved to handle 1,000 t.p.h.

Port-owned Terminal: Two silos with a total capacity of 70,000 tons. Loading is carried out by a single retractable arm, max. reach 20 m. Average loading rate 1,500 t.p.h.

Samrig Terminal: One silo with a capacity of 35,000 tons. Loading is carried out by two movable chutes each with a capacity of 200 t.p.h.

At other berths loading is carried out by portable equipment.

Cotrijui Grain Terminal: At Rio Grande Superport. Consists of a T-shaped jetty, 170 m. long. It has 8 loading tubes in 2 banks of 4 fed from overhead belts. Loading rate 1,000 t.p.h. for each bank of tubes. Depth 55 ft.

Soya Bean Oil can also be loaded here at 500 t.p.h. through a 12 in. pipe-line. The innerside of the T jetty can accommodate barges to further increase the loading rate if required.

The terminal gives preference to self trimming vessels and bulk carriers.

The Luchsuper Fertilizer Terminal: has a T-shaped jetty, 130m. long. Depth 50 ft. It can handle Urea, Phosphoric Acid, Ammonia and Sulphuric Acid at 500 t.p.h. Bulk chemicals can be discharged here with two 6 ton Portal cranes. Two container berths are in the latter stages of completion.

The Superport will eventually cover 8 km. along the waterfront with provision made to handle fuel, chemicals, oils, salt, fertilisers, minerals, containers and roll-on/roll-off traffic. Four of the new 20 berths are in operation.

STEVEDORES: Working hours, straight time, 0730/1130 – 1300/1700 (week-days). During week-days, labour for morning shift which commences at 0730 hrs., may be ordered up to 0715 hrs.; at 1245 hrs. extra gangs may, if necessary, be engaged for afternoon shift commencing at 1300 hrs. For night work longshoremen (i.e. dock labourers as distinct from stevedores) must be ordered before 1600 hrs.; stevedores, tally-clerks, etc., for night work may be engaged up to 1845 hrs. for shift that starts at 1900 hrs. Sunday/holiday work must be ordered previous day, up to 1000 hrs.

MEDICAL: Two hospitals available which have adequate facilities to deal with majority of cases. Only vaccination required at present is against smallpox.

FRESH WATER: Supplied at main quay at a rate of 10 to 15 t.p.h. or at tanker pier where rate is about 25 to 30 t.p.h. Port has a barge *Gutemberg* which can supply water (100 t.p.h.). It is only used in extreme cases where no other supply is feasible, as cost is high due to high overtime rates and tugs standing-by during whole operation.

FUEL: Bunkers may be supplied by Esso, Shell or Petrobras at tanker pier at a rate of up to 300 t.p.h. Same has to be previously stemmed aboard and supply is only effected when confirmation of stem is received. Cost varies according international demand. Barges for supply at roads are sometimes on hand. Also see "General" before first port.

DEVELOPMENTS: Dredging continues to a depth of 14 m. at the entrance and 13 m. in the inner channel.

GANGWAY/DECK WATCHMEN: Gangway watchman is compulsory. It is advisable to use deck watchman when pilferable cargo is accessible. The rate is 50% higher than that for a gangway watchman.

OPENING/CLOSING HATCHES: Opening and closing of conventional hatches normally done by stevedores, without any extra cost; advisable, however, for steel hatches to be handled by crew.

CUSTOMS ALLOWANCES: Each crew member allowed one carton cigarettes (or the equivalent in pipe tobacco) and one bottle of spirits, per week. Ships that remain in port for over a week may request Customs, through their Agent, to open bond for another weekly issue.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The Identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS/VICE-CONSULS:

Britain	Tel.	2.3303	Norway	Tel.	2.1611
Denmark	"	2.3011	Portugal	,,	2.3978
Italy	"	2.2362	Spain	,,	2.2621
Netherlands	,,	2.3303	Uruguay	,,	2.2953

REPAIRS: Two small repair shops equipped to carry out minor repairs. No dry docks. Radio, radar and gyro technicians available but expensive.

REPATRIATION: Seamen rejoining their ships or being repatriated have to proceed to Porto Alegre, by bus, where arrangements can be made for embarkation by air.

TIME: GMT minus 3 hours, except during the period 1st December to the last day of February (Brazilian Summer time) when the difference is 2 hours.

HOLIDAYS: National: 1st January;* 21st April; 1st May;* 7th September;* 15th November; 25th December.* Municipal: 2nd February; Good Friday;* Corpus Christi; 29th June.

Note: Days marked (*) no labour available.

POLICE/AMBULANCE/FIRE: Police 2.1695; Hospitals 2.3802; Ambulance 2.3801 Fire 2.1778.

TELEPHONES: There are no facilities for placing telephones on board.

GENERAL: *Flags to be flown.*

(a) Brazilian flag at the top of the foremast.

(b) Yellow flag (to be hoisted until the doctor's clearance is given).

Vessels arriving from a Brazilian port, with no disembarking passengers, must *not* hoist yellow flag unless there is sickness on board requiring presence of the Health Authorities.

(c) Pilot flag.

(d) Customs flag (to be hoisted after the vessel is cleared by Customs and flown during the vessel's stay in port).

AUTHORITY: Port Captain.

AGENT: L. Figueiredo S/A. R. Marechal Andreia 311, Tel. 862. Cables "Doranave-Rge. Telex: 028880 (Public booth).

SALVADOR (Bahia): 12.58 S. 38.31 W. **(See Plan)**

DOCUMENTS: (See "General" before first port.)

Agent also fills out the "Entrada & Saida Capitania do porto" to be signed by Captain. The particulars for this document are:

Name of Captain – name of ship – flag – code signal letters – tonnage: gross and net – horsepower – engines: twin or single – type of ship, etc. – port of registry – tons of cargo to discharge – owners – Agents in port – last port of call – previous ports of call – next port of call – number of crew – number of disembarking passengers – number of transit passengers – speed of vessel – also specifications of nature and quantity of cargo in transit.

Documents to be supplied to the Ship before departure.

1 "Clearing pass" from the Port Captain
1 ,, ,, ,, ,, Federal Police
1 ,, ,, ,, ,, Post Office
1 ,, ,, ,, ,, Custom House
1 Custom House negative cargo declaration for each following Brazilian port of call.

The Port Doctor will require the following information: Class, name and flag of ship – net register tonnage – name of Master and ship's Doctor – number of officers and crew – name of Agent – all ports called at during voyage – number of days from first to previous ports of call – number of passengers disembarking and in transit – tons of cargo to be discharged – whether any sick persons or deaths occurring on board.

The Customs will require the following information: Name of vessel – nationality – gross and net tonnage – H.P. of engines – name of Captain – number of officers and crew – owner's name – name of Agent – all ports called at during voyage – ports of destination – days of voyage from first to previous ports of call – tons of cargo to be discharged – particulars of passengers.

The Federal Police require the following information: Vessel's name – nationality – gross and net tonnage – name of Captain – number of officers and crew – name of Agent – port of departure and all ports of call – number of days from first and last ports of call – number of passengers disembarking and in transit – specification of embarking and disembarking ports of each transit passenger.

Ships calling at Salvador are normally boarded by the authorities at any time, day or night, when required. If there is no special urgency, however, the visit is effected the following morning at 0630 hrs.

PILOTAGE: Application for Pilot cabled by Master to Agent who makes all arrangements with Pilots' Association. Advance notice of ETA should be cabled by Master 48 and 24 hours before arrival. Pilot boat painted red. The location where Pilot has to be taken is indicated on all charts.

Pilotage is not compulsory but Pilots are used by all foreign vessels for entering and leaving the dock. Sometimes they are also used to shift ships to anchorage for the Authorities visit.

Pilots belong to the Pilot Association which is controlled by the Port Captain.

Payment of pilotage is made by the Agency against vouchers signed by the Master showing the service rendered (pilotage fees do not include charge for motor launch for the Pilot, ropes for mooring, etc.).

When vessel arrives during the day, and a berth is immediately available, a Pilot is sent to meet her before anchoring, to be brought alongside. In such instances, a gangway must be kept lowered for the authorities to board the vessel. If a berth is not available, the vessel must anchor at the quarantine anchorage to be visited by authorities. When arriving at night, the vessel must anchor at the quarantine anchorage, to await daylight, unless she is to be brought alongside immediately on arrival, in which case the Agent will cable the Master and arrange Pilot accordingly.

The Pilot Association may be contacted on VHF, Channel 16 (Channel 11, working).

ANCHORAGES: Inner anchorage can accommodate vessels with a draft of up to 33 ft., but there is sufficient depth of water in the outer anchorage to accommodate vessels with any draft.

RESTRICTIONS: There is sufficient depth of water in the outer anchorage to accommodate the largest vessels afloat with safety, and the anchorage can, in addition, take a considerable number of vessels at any one time. The average depth of water in the channel leading to the dock warehouses is 33 ft. (10 m.) except opposite Shed No. 2 where 28 ft. (8.50 m.) is the max. depth. The dock quays are sheltered by two breakwaters, one running parallel with the shore for just over half a mile. Because of the shallow draft opposite No. 2 Shed, all vessels entering or leaving the port with more than 28 ft. normally enter the Northern Channel.

MAX. SIZE: Max. draft 30 ft., max. length about 250 m. The 10 m. quay situated next to the docks, where tankers discharge chemical and other vessels bulk cargoes, max. draft 33 ft., max. length of about 250 m. Also see "Tankers".

ARRIVAL INFORMATION: Required before vessel's arrival:

(a) Vessel – ETA; deepest draft.
(b) Cargo – Quantity of cargo to be discharged and specification of hatch list.
(c) Passengers – Number of passengers disembarking.
(d) Bunkers – Quantity required.
(e) Water – Quantity required.
(f) Labour – Quantity required.
(g) Any other information – Number of mailbags to be landed, etc.

Specimen of telegram to be sent from previous port:

1. Vessel's name.
2. ETA Salvador.
3. Draft.
4. Number of passengers disembarking.
5. Number of mail bags to be landed.
6. Quantity of bunkers required.
7. Quantity of water required.
8. Number of gangs required.
9. Any other information.

FLAGS: On entering the port the vessel should fly the following flags:

1. Brazilian flag on fore mast top.
2. Quarantine flag when Salvador is first Brazilian port of call, or when there is a passenger for Salvador from a foreign port.
3. Customs flag (white star on blue background) after the vessel has been visited.
4. Flag "B" if dangerous cargo on board.
5. Pilot flag.

PRIORITY: Passenger vessels and wheat vessels have priority over cargo ships and the so-called "navios mixtos", i.e. cargo ships with a limited passenger accommodation. Passengers vessels are those that carry 60 or more passengers; except when loading 1,000 tons or over in which case they loose their priority.

HEALTH: The Doctor only boards the vessel when Salvador is first Brazilian port of call or when there are passengers from abroad to disembark, in which case Master should advise Agent who will then take the necessary steps required by Port Health. A yellow flag should be flown if Port Health Doctor is required on board.

RADIO: Master should always endeavour to contact Agent through Radio Amaralina coastal station, call sign PPA, and Agent will contact Master the same way. Since this station has a limited range, the Agent at Salvador may be contacted via Rio Radio when North-bound, or Olinda Radio/Fortaleza Radio when South-bound.

TUGS: Tugs are rarely used for berthing, but occasionally used for unberthing. When used, the line is supplied by vessel. Vessels unberthing at Salvador usually avail themselves of a line to a buoy. For tankers berthing at 10 m. quay, a tug is usually supplied to help vessel moor and unmoor. When coming alongside tug joins vessel inside port.

The following tugs are available:

1 tug 400 h.p.	1 tug 600 h.p.
1 tug 200 h.p.	1 tug 650 h.p.
1 tug 300 h.p.	1 tug 150 h.p.

BERTHING: No restrictions, but if draft over 28 ft. some Pilots prefer to manoeuvre in daylight. Tankers at 10 m. quay may unberth at any time, but Pilots usually refuse to berth during hours of darkness because of the bad lighting on this length of quays.

The wharf at Bahia is protected by two breakwaters. There are two channels for vessels entering and leaving. On the wharf there are 11 sheds and between some of the sheds sheltered storage spaces. About 24 electric cranes are available on the quays, with lifting capacities ranging from 1.5 to 3.2 tons; there is one 5-ton crane in front of No. 11 Shed. New cranes with a capacity for 6 and 10 tons are also to be installed.

Heavy lifts are left on the wharf until taken delivery, or discharged directly to trucks.

The sheds are as follows:

		Depth at low water ft.
No. 1	Out of use	—
2	Only used for "Aid" cargo	23
3	Coastal vessels	23
4	Export cargo, foreign vessels	23
5	Import cargo, foreign vessels	23
6	Export cargo, foreign vessels	23
7	Import/Export cargo, foreign vessels	30
8	Export cargo, foreign vessels	30
9	Import cargo, foreign vessels	30
10	Export cargo, foreign vessels	30
11	Import cargo, foreign vessels	30

All warehouses (excl. No. 11) are fitted with overhead internal cranes.

There is also a length of quay (commonly called 10 m. quay – depth 31 ft.) on which there is no shed or equipment for the handling of general cargo. There are, however, 2 conveyor belt systems for loading magnesite and chrome concentrate. This quay is also used for loading other bulk ores with buckets, refrigerated meat, discharging sulphur and other bulk cargoes.

Explosives would be discharged into lighters at the proper anchorage for discharge of such cargo and taken to special deposits. Forewarning must be given for this cargo in order that arrangements may be made in advance.

Coal/coke are discharged directly to trucks at any of the warehouses.

All other goods are loaded/discharged at the wharf.

STEVEDORES: The Agents at Salvador act as stevedores.

The work at Salvador, especially loading, is considered amongst the best in Brazil, as a rule, sufficient gangs are available.

Masks, gloves are supplied by the stevedores. All other material such as slings, nets, etc., shall be supplied by the vessel.

The ordinary working hours are 0700–1100, 1300–1700 hrs., Mondays to Saturdays incl.

For overtime work, permission must be obtained in writing from the Customs and Rural Department. As it would be difficult to obtain permission before each overtime period, a general permission covering ship's stay in port shall be obtained prior to arrival.

1100–1300 hrs. Special permission must be obtained from the Dock Company which is only given to passenger vessels, or for cargo vessels to finish the cargo, or under special circumstances.

1700–1900 hrs. Continuation period. Advice must be given to workmen at 1645 hrs.

1900–2300, 0000–0400 hrs. Considered as night work. Advice must be given to the Dock Company at 1645 hrs. and to the stevedores at 1700 hrs.

2300–2400 hrs. same as 1100–1300 period.

0400–0600 hrs. Continuation period. Advice must be given to workmen at 0345 hrs.

0600–0700 hrs. Second night continuation period. Can be worked under special circumstances to finish the cargo. Vessels discharging/loading bulk cargoes, or loading/discharging reefer cargo, are allowed to work round the clock.

To work on holidays, advice must be given to the Dock Co. before 1700 hrs. the previous working day. For Sunday work advice must be given before 1100 hrs. on Saturday. The same applies for stevedores/tally/coopers.

CARGO INFORMATION: *Inward cargo.* When cargo is discharged from the vessel it is checked, weighed and weight noted by the shore tally-clerk (for account of the ship), by the Dock Company tally-clerk and by the Custom House. If there is a difference in weight, the ship is held responsible and has to pay double duty on same. Once the goods have been checked and weighed ship's responsibility ceases.

Goods are delivered to the consignees on presentation of the bill of lading to the Dock Warehouse.

Transhipment cargo. Foreign cargo for transhipment at Salvador must be so declared on the manifest, and after it has been discharged the Agents have to obtain special Customs permission to tranship it to the port destination and also sign a guarantee that the goods are going to that port and that duty will be paid there. They will be held responsible for that duty until a declaration issued by the Custom House at the port of destination is received by them and handed over to the local Customs.

Transhipment charges vary considerably with the type of cargo and are very high compared with foreign freights.

Outward cargo. Generally, cargo to be loaded is deposited in the dock shed prior to vessel's arrival.

Refrigerated cargo. All reefer cargo is discharged directly to trucks, and vice versa.

Dangerous cargo. Vessels with explosives and inflammables on board are not permitted to come alongside. All vessels carrying this kind of cargo must fly the "B" signal and remain at the proper anchorage. Advance notice must always be given of any vessel carrying explosives and inflammables. Under special circumstances it may be arranged for vessels to come alongside if they only have a minimum quantity of dangerous cargo on board, and the hatch in which it is stowed is not to be opened at Salvador.

When vessels are boarded by the harbour officials, the Master must hand to the Customs Officer and the Federal Police the Dangerous Cargo List.

Corpses as cargo. Notice should be given to the Port Authorities of such cargo carried, if possible, before vessel's arrival.

Vegetable oil in bulk. Vegetable oil in bulk is loaded directly from lighters where the oil is deposited prior to vessel's arrival. Vessels are usually required to supply steam for pumping when they can.

Loading and discharging rate. The average rate for loading bagged and baled cargo is 16–20 tons per gang per hour. (Tobacco has been loaded at 28 tons and cocoa at 30 tons per gang hour). Discharging rate of general bagged cargo is about 10 tons per gang hour.

Heavy lifts. For heavy lifts of more than 3 tons, a request shall be made to the Dock Co. to use the 80-ton capacity floating crane. Heavy lifts may also be discharged directly to the quay with the vessel's own gear when, due to a light draft (under 24 ft.), they can come directly alongside without the use of a pontoon. It is recommended that the Agent be consulted before booking any heavy lifts for Salvador as the heavy lift crane is sometimes out of working order.

Inflammables, fuel, & diesel oil, etc., as cargo. Bulk crude oil,

diesel, fuel, inflammables, lubricants, etc., are discharged at the Madre de Deus Terminal, which belongs to the Government owned Petrobras.

Damaged cargo. When cargo is discharged, damaged or pilfered, it is immediately checked and weighed by the Dock Co. and the Customs and separately stored.

The Insurance Co. makes a survey in the presence of the Dock Co. upon request of consignees.

Bulk wheat is discharged to two mills at Salvador, namely the "Moinho Salvador" and "Moinho da Bahia". Average discharging rates (23 hrs. work per day) are respectively 1,500 and 800 tons.

Handling of mail. Timely notice should be given to the Agents in case there is mail to be landed, stating the number of bags.

As regards outgoing mail the Agents will be advised by the Post Office if there is any and issue the Post Office Pass. The bags shall be placed at the quayside, loading being for the account of the ship.

MEDICAL: When vessels arrive over week-ends or during holidays advisable that Master cable Agent giving advance notice of medical attention required if case is serious. For routine medical attention no previous advice required as ample medical and hospital facilities available.

TANKERS: All tankers loading/discharging inflammables, lubricants, etc., must do so at the Madre de Deus Terminal, which is privately owned by Petrobras, the Brazilian Government-run oil company.

The Madre de Deus Terminal is a T-fashioned quay situated within All Saint's Bay, 18 miles from Salvador. All vessels calling at Madre de Deus must be cleared at Salvador where Agent and authorities board the vessel before proceeding to Madre de Deus. This terminal is equipped only to handle tankers. Water, bunkers and deballasting facilities are available.

Max. drafts are 41 ft. for vessels loading and 37 ft. for discharging, and length 240 m.

Five berths are available, pipe-line is 12 in.

PP1. Max. size 65,000 d.w.t. Depth 13 m.
PP2. Max. size 53,000 d.w.t. Depth 13 m.
PP3. Max. size 16,000 d.w.t. Depth 13 m.

These 3 berths can load or discharge both Crudes, White oils and Products. They are all fitted with deballasting facilities.

PS1. Max. size 4,000 d.w.t. Depth 7.5 m.
PS2. Max. size 2,000 d.w.t. Depth 5 m.

DENSITY: Salt water.

FRESH WATER: Advance information recommended. Rate 15 t.p.h. If several vessels are in need of supply, pressure may not be enough to supply all at once. No water barges available in the port, and all vessels are replenished alongside.

FUEL: Diesel oil can be supplied alongside at Salvador, directly from trucks to vessel, but fuel oil can only be supplied by Petrobras at the Madre de Deus Terminal, 18 miles up the bay.

Lubricants are supplied in drums. Also see "General" before first port.

DEVELOPMENTS: The normal dock quay has been joined to the 10 m. quay closing off a small basin. Dredging is presently being undertaken and vessels will be able to come alongside the new length of quays in the future with a draft of up to 30 ft. When the closed off basin has been completely filled in, new warehouses are to be built for the handling of dry cargo, The breakwater running parallel with the quays is being extended in its Northern end by about 280 m. Work however, on both these projects is comparatively slow, and it is impossible to foresee when either will be completed.

GANGWAY/DECK WATCHMEN: All foreign vessels must employ a gangway watchman by law. Hold watchmen are optional, depending on request by Masters/Agents.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: Customs officials will place cigarettes and "souvenirs" belonging to crew members under lock and seal. Excepting the Captain, each crew member may keep in his possession only one carton of cigarettes and one bottle of spirits with seal broken. The Customs will periodically renew the seals for vessels staying in the port for a lengthy period thus enabling new issues to crew.

LIGHTERS: Soc. Alvarengagem de Ilheus are operating four lighters in the port with a combined capacity for about 670 tons.

CONSULS:

Argentine	Germany	Portugal
Austria	Italy	Spain
Belgium	Mexico	Sweden
Bolivia	Netherlands	Switzerland
Denmark	Nicaragua	U.S.A.
France	Norway	Uruguay

REPAIRS: The Navy operates a dry dock at Aratu with the following capacity: 35,000 tons; length 230 m.; width 30 m.; depth 8.5 m. Various small vessels can be attended at the same time. There are a number of workshops in Bahia fitted for repairing vessels, but it is recommended that large repairs be effected at the Aratu dry dock. When time allows, repairs may be made whilst the vessel is alongside the wharf. There is no time-limit but, as a rule, a vessel is not supposed to remain idle at the wharf if the berth is needed for another vessel which has to load/discharge.

SURVEYORS: *Lloyd's Agent:* Cory Brothers & Co. Ltd., Avenida Estados Unidos 4 11° andar. Telephone 22858 and 22848.

Bureau Veritas: Harold Taxman, Tel. 20447.

American Bureau of Shipping: Harold Taxman, Tel. 20447.

REPATRIATION: All crew changes and repatriations made via Rio de Janeiro as Salvador has no direct air connections with foreign countries

AIRPORT: Airport is 31 kms. from centre of town. No direct flights to foreign countries but various daily connections available with Rio, S. Paulo, etc.

TIME: GMT minus 3 hours. From December 1st until March 31st all clocks are advanced 1 hour for Summer time.

HOLIDAYS: *1st January; 6th January; 7th February; *24th March; 21st April; *1st May; 25th May; 24th June; 2nd July; 15th August; 7th September; 2nd November; 15th November; 8th December; *25th December.

*Stevedoring labour always available but dock labour is not on the days indicated above.

POLICE/AMBULANCE/FIRE: Police Tel. 08 (Mobilised Police Service); Police Tel. 20194 (Maritime Police not mobilised); Ambulance Tel. 04; Fire Tel. 05.

TELEPHONES: No facilities available for placing telephones on board.

REGULATIONS: Rat-guards must be used at all times, as the Port Health make periodic inspections on the quay.

STORES: Ship chandler can supply meat, vegetables, tropical fruits, canned goods, etc., but no bonded stores for foreign goods available.

AUTHORITY: Capitao dos Portos.

AGENT: L. Figueiredo S/A. Rua do Pilar, 28. Tel.: 2-0663/64. Cables: "Dorabahia-SDR". Telex: 035838/9 (public booth).

SANTANA: 00.03 S. 51.10 W. (See Plan)

DOCUMENTS: See "General" before first port.

PILOTAGE: No Pilots available either for the North Channel entrance and/or for docking and casting off operations.

ANCHORAGE: In front of the port, protected anchorage between mainland and Santana Island, where vessels can safely anchor at any location. Bottom is mud.

As it is impossible to traverse the river from Port Santana to the open sea in one stretch, two places for anchoring are recommended by the Port Superintendent of Santana, (i) Punta de Ceu, and (ii) after passing Banco do Meio. At both places the river current is strong and unpredictable, but at the anchorage, after Banco do Meio, the vessel would have more manoeuvring room in the event of the anchor dragging.

RIVER NAVIGATION: At the entrance to the river in ballast the vessel should have a draft of about 17 ft. in order that the ship can be manoeuvred along the whole length of the river, even at low water. At this time the Captain has the opportunity to observe and carefully study all points necessary to navigate the vessel fully loaded outward bound.

The ship should be loaded up to 34 ft. 6 in. max. depending on the season.

The Santana Strait should be navigated only during daytime and with carefully controlled speed.

When loaded and outward bound, the Captain should study carefully the tides and direction of currents, and if necessary contact ICOMI Radio ZZK-5 for further instructions.

RESTRICTIONS: Vessels can depart at any stage of tide. Night transit in North Channel is at Master's discretion.

Channel transit restricted to 33 ft. in low water. Due to shifting of mud banks it is recommended that a set of up-to-date Brazilian nautical charts, covering from outer bar to Santana Port, should be used.

Tidal range on outer bar area is about 8 ft., on "Banco do Meio" area is about 16 ft. All data published on Brazilian nautical chart refers to average spring low-water tide.

The Brazilian Hydrographic Office publishes annual tide tables for Barra Norte do Rio Amazonas (Ilha do Brigue) 00° 55.0′ N. and 04.5 W., and Santana Roads (00° 03.4′ S. and 51° 10.8′ W.).

MAX. SIZE: On East side of floating ore pier, general cargo pier has a depth alongside of 30 ft. Along floating ore pier depth ranges from 35 to 90 ft. (at low water). 35 ft. on East end of pier. Tidal range about 9 to 11 ft. Tidal current at middle of river ranges from 2 to 3 knots, while close inshore along ore dock it runs approximately 1-1.5 knots. Amazon river water at Santana is fresh in spite of tides.

HEALTH: Health authorities visit vessel arriving from abroad. Authorities require regular ship's gangway to be lowered. Jacob's ladders not accepted. After Master having handed over Declaration of Health, medical authorities issue free pratique. If entering after calling at another Brazilian port, free pratique automatically granted. Also see "General" before first port.

RADIO: Vessels scheduled to load ore at Santana must radio Belem (Para) Agents (preferably via Chatham or Amagansett Radio) at least 48 hours prior to ETA North Channel. Other means of communication not satisfactory and result in delay. ICOMI maintains own radio-telegraph service between Macapa and Belem. Macapa station located at port of Santana, call letters ZZK5, sends on 6765 kc./s and receives on 6200/6400.

TUGS: No tugs available.

BERTHING: *Private Floating pier:* Length 247 m. Depth of water 18 m. A retractable loading arm loads Manganese at a maximum rate of 1500 t.p.h.

Macapa pierhead: Length 18 m. Depth of water 12 m. Fitted with a 50 ton crane, and used for general cargo handling.

Recommended that amidship hatches be used for Santana cargo. Vessels berth according to direction of tidal current. Berthing operations assisted by a motor craft to place lines on shore, East of pier. On West side, lines moored to the bitts on floating fender. Linesmen available to assist berthing and shifting. Ore carriers have preference when docking.

When berthing, use of the anchor must be avoided except in an emergency. This facilitates shifting the ship during loading and also when leaving the berths. Because of the strong current, the confined space for entering the berths and 50-60 m. depth of water, the anchor is not easily lifted and the ship is exposed to the danger of drifting to the adjacent bank.

STEVEDORES: Stevedores come from Macapa about 25 km. by road from the port. Also checkers and coopers. Conveyor belt for ore loading fixed, consequently vessels must be shifted by own winches to load various hatches. Effective average loading rate 1,000–1,100 long t.p.h. Special caution must be taken not to pump all ship's ballast before loading starts, since the height of boom is 40 ft. above water level. Cargo belt trimmed only. Hire of trimmers is for ship's account and is performed at anchorage.

MEDICAL: Medical attention may be arranged at Macapa through ship's Agent.

TANKERS: Discharge at the Dolphins Pier, about 150 m. West of floating pier. Pipe-lines lead to tanks ashore (distance from pier 1,000 m.). Storage tanks have capacities for 35,000 barrels of diesel oil, 9,500 barrels of gasoline and 60,000 barrels of fuel oil. Discharge of different bulk liquids effected after flushing pipe-line. Vessels liable to fines, by Port Captaincy, for bulk liquids discharged in port areas.

DENSITY: The Amazon river water at Santana Port is fresh water at any stage of tide. The temperature of river water being normally around 82° F. makes it possible that a density below 1,000 may be found. Checking density during load operations is recommended.

FRESH WATER: No drinking water available.

FUEL: Fuel oil available through Texaco Brazil. Delivery is by road tanker. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Watch by crew members sufficient.

OPENING/CLOSING HATCHES: Ore-carriers: service carried out by crew. General cargo vessels: service executed by stevedores.

CUSTOMS ALLOWANCES: Limited quantity for use during ship's stay.

CARGO GEAR: No additional requirements as to gear. A heavy-lift stiff leg derrick mounted on the pier. Boom: 60 ft., Mast: 37 ft. 6 in., Capacity: 65 metric tons. Mobile crane (maximum lift 2.5 tons) available for discharge of general cargo from small vessels.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on dis-embarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: None. Documents which are to be visaed by a Consul must be sent to Belem.

REPAIRS: Only in cases of extreme emergency and then only minor repairs.

REPATRIATION: Effected by ship's Agent. No Immigration authorities at Macapa.

AIRPORT: Macapa airport 25 km. from Santana near city of Macapa. Numerous scheduled domestic flights from Macapa to Belem, a trip of 1 hour and 15 minutes.

TIME: GMT minus 3 hours. Summertime (one hour forward) as from November 1st till February 28th.

HOLIDAYS: New Year's Day (January 1st); Tiradentes (April 21st); Martyr of Independence; Labour Day (May 1st); Independence Day (September 7th); Proclamation of the Republic (15th November); Christmas Day (December 25th).

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Port of Santana: For establishment of tide times at Santana (00° 03′ 26″ S.–51° 10′ 58″ W.), 40-45 minutes must be added to the times shown in the tables for Macapa.

Alongside the ore-loading pier, the tidal current continues to run for 10-15 minutes beyond the time computed from the tables. In mid-stream, the delay in the change of current is 60-90 minutes.

Vessels can dock or depart at any time without regard for tidal conditions.

SHIPMASTER'S REPORT: (1975) (Including information on Barra Norte do Amazonas.)

Courses: Recommended by Santana Port Superintendent to enter Barra Norte:

01° 30′ N., 49° 44′ W. to 01° 15.5′ N., 49° 34.7′ W. 254°–074°
01° 15.5′ N., 49° 34.7′ W. to 01° 10.3′ N., 49° 37′ W. 204°–024°
01° 10.3′ N., 49° 37′ W. to 01° 05′ N., 49° 43.5′ W. 231°–051°
01° 05′ N., 49° 43.5′ W. to 01° 01′ N., 49° 44.6′ W. 195°–015°
01° 01′ N., 49° 44.6′ W. to 00° 45′ N., 50° 03.5′ W. 230°–050°
Off Ponta Ceu

Courses on river agreed by Port Superintendent:

Recommended Position	Course
00° 45.0′ N., 50° 03.5′ W.	257°
00° 40.9′ N., 50° 22.7′ W.	222°
00° 36.8′ N., 50° 26.2′ W.	185°
00° 26.4′ N., 50° 27.1′ W.	204°
00° 20.5′ N., 50° 29.8′ W.	233°
00° 17.0′ N., 50° 34.3′ W.	242°
00° 10.8′ N., 50° 45.7′ W.	260°
00° 09.3′ N., 50° 54.3′ W.	228°
00° 04.4′ N., 50° 59.5′ W.	211°
00° 02.0′ S., 51° 03.4′ W.	227°
00° 03.1′ S., 51° 04.6′ W.	242°
00° 03.7′ S., 51° 05.7′ W.	275° into Santana River

Buoy No. 1 (Barra Norte Buoy) found to be in 01° 03′ N., 49° 45.2′ W., Buoy No. 2 found to be in 00° 55.08′ N., 49° 49.93′ W. Racon will be operating soon.

Documents:
5 Crew Lists.
3 Vaccination Lists.
3 Stores Lists – Deck, Engine and Provisions.
Health Declaration.
Passenger, or nil-Passenger List, indicating vessel in ballast.

Anchorages: Any location in Santana River. This vessel anchored 0.5 miles to West of jetty, depth varying from 126 to 160 ft. under the keel depending on state of the tide. The vessel held well without dragging with 5 shackles in the water. If necessary to anchor in the main river, recommended to anchor outside the main channels in order to avoid the main current.

Health: Officials board at the anchorage. Accommodation ladder required. Doctor, Agent and representative of Federal Police (Immigration). Doctor attends to quarantine clearance, and will also attend to sick crew members and arrange any necessary vaccinations for smallpox or yellow fever.

Berthing: Density of water at berth 995. Loading rate 650 t.p.h. This vessel loaded 14,637 long tons in 29 hours 30 minutes, but 4 hours were lost in shifting up and down the berth, and 3 hours for meal breaks.

Radio: Radio Officer's Report: Notes for the guidance of ships calling at Santana, Macapa Territory, Brazil.

There are many possible ways of obtaining communication with Santana, however it is suggested that the 3 most probable ways are:

(1) Through the United States using station WSL (Amagansett) or station WCC (Chatham). This is the most expensive way and also difficulty was experienced in maintaining schedules when approaching the Brazilian Coast due to the great distance involved. If this method is used the telegram must be addressed to ICOMI, Santana, Macapa, Brazil, otherwise delay in delivery may be experienced as there are at least 5 other Santana's in Brazil.

One major point in favour of using this method is that communication with the USA is possible from European Waters. All information regarding frequencies, schedules, etc., is contained in Admiralty List of Radio Signals, Volume One.

(2) Using station PPR (Rio de Janeiro). Depending on propagation conditions it should be possible to maintain schedules with this station from about 4–5 days out from the Amazon Mouth. This is the only Brazilian station with HF capability and it has a direct Telex link with Santana. This station is cheaper to use than going through the USA and is probably the better of the two methods so far mentioned, especially if communication is not necessary until nearing the Brazilian Coast. As above, all pertinent information can be found in Admiralty List of Radio Signals, Volume One.

(3) Using the ICOMI private radio station call-sign ZZK5. This station operates on 6765 mHz. and listens on the band 6200 mHz.–6400 mHz. at 0930, 1230, and 1530 hrs. Brazilian time, i.e. GMT minus 3 hours. At all other times he works an internal communications network and does not listen out for Ship stations calling on this band.

It is possible to hear ZZK5 at about 3 days out from the Amazon Mouth, however, it must be pointed out that this vessel was unable to make a schedule with him even after many hours of repeated calling. Also, under normal conditions, this station does not use his call sign when maintaining internal communications and some difficulty was experienced in identifying him. However he works almost continuously using a "Bug" Key and this may be of some help when trying to pick him out.

Whilst alongside in Santana this vessel, by previous arrangement, made a communications test with ZZK5 which proved to be very satisfactory. The standard of morse was very good and the operator spoke quite good English.

Note: After leaving Santana schedules were maintained in the mornings at 0930 hrs. and in the afternoons at 1530 hrs. both on Brazilian local time, until this vessel was some 500 miles out. At this time ZZK5 was still readable but getting weak, however he was still giving this station a readability of 5 and a signal strength of 4/5. No further communication was attempted after this time. This station, ZZK5, being privately owned makes no charge for official messages transmitted to and from it.

Note 2: It is suggested that the Brazilian Coast Stations be left severely alone as making communications with them proved to be almost impossible.

This vessel did work one station which proved to be an experimental station on the Embratel Net (PPL2) which is just being set up. The operator spoke English and was kind enough to relay, free of charge, one of our messages to his parent station PPL whom we had been calling for hours with no response. PPL2 listens on 500 kHz. and uses for his working frequency 438 kHz.

The ICOMI Agent in Santana informed us that the Brazilian Government was in the process of setting up a new network, of which PPL2 is part, which would have M/F, H/F, W/T and R/T facilities as well as VHF. This should prove to be a more satisfactory arrangement but unfortunately it is not due to come into service until at least 1976.

Fresh Water: Available when not required for the loading belt, that is when cargo is not being loaded, but the rate is very slow being about 5 to 10 t.p.h. Good quality water.

Shore Leave: No restrictions during this visit. No shore passes were issued.

Mail: 2 deliveries of 2 packages received during our stay. Mail from the ship is sent by air to Belem agents for forwarding. Cables are sent by the Santana Agent by telephone to Belem for forwarding.

Tide Tables: Brazilian tables show HW Barro Norte for Ilho do

Brique (00° 55′ N., 50° 05′ W.). HW off Pta do Guara is 2 hours earlier. HW outer bar (01° 15′ N., 49° 10′ W.) is 4 hours earlier. British Admiralty Tide Tables show HW Barro Norte for 01° 36′ N., 49° 09′ W., also for Ilho do Brique 00° 55′ N., 50° 05′ W. Vessel, according to Brazilian Tide Tables obtained at Santana, entered the Barro Norte on the 11th January at LW steaming against the ebb from the outer bar to the Banco do Neio. Echo sounder showed minimum 10ft. under keel. Outward bound on the 16th vessel left about 3 hours before LW Santana to reach Banco do Neio about 2 hours before HW Ilho do Brique. However, better speed in river transit resulted in arriving Banco do Neio about LW Ilho do Brique. Decided to proceed seawards as conditions favourable. Echo sounder showed minimum 10 ft. under keel. Admiralty Pilot states Amazon rises this time of the year due to snow melting in the Andes during the Northern summer, this results in big increases in water depth.
Shippers: Industria Comercio de Minerios S/A. Icomi. Cable: Icomi – Santana Macapa.
AUTHORITY: Industria e Comercio de Minerios S.A.–Ycomi.

SANTEREM: 02.25 S. 54.43 W.

Also see "General" before first port.

Santerem is located on the right bank of the Tapajos River which joins the Amazon River.
BERTHING: *Old Port:* Wood Jetty length 150 ft., width 15 ft., depth 12 m. at HW, 6 m. at LW. Jetty faced with spring-piled fender 3 ft. off jetty and 18 ft. above water level.

New Port: Pier, length 200 m., width 25 m. The ramp leading to the shore is 60 m. long and 9 m. wide. Cranes are to be installed. Minimum depth of water alongside, 32 ft. Rise and fall of seasonal tide 6 m. Height of pier above water 1–7 m. Depth for small vessels 3–9 m.

There are at present two 6 ton cranes, with plans to install a further four.

The principal export is meat which is delivered by road. A cold store is to be built.
FUEL: Fuel oil available at Petroleo Sabba private wharf. Also see "General" before first port.
AUTHORITY: Port Captain.

SANTOS: 23.56 S 46.19 W. (See Plan)

DOCUMENTS:
The following documents, etc., are required to be presented to the authorities upon ship's arrival.

To Port Health Authorities:
1 Crew List
1 Free Pratique Certificate from the first Brazilian port of call, if any.
1 Maritime Declaration of Health (only at the first Brazilian port). Deratization Certificate.

To Federal Revenue Bureau (Custom House):

Envelopes addressed to the Federal Revenue Bureau containing a cargo manifest and copies of Bills of Ladings covering cargo loaded at foreign ports, or a negative manifest if no cargo loaded for Santos. Envelopes for the Federal Revenue Bureau – from Federal Revenue Bureau's Delegates of every Brazilian intermediate port of call following the same procedure. Tankers are permitted to bring bulk petroleum products on 1 manifest "for Brazil", although cargo may eventually be discharged at 1 or more Brazilian ports. In the latter case, the original manifest is visaed by the Federal Revenue Bureau at each discharging port, is kept on board and delivered to the Federal Revenue Bureau at the last discharging port.
3 Crew Lists.
3 Store Lists (Deck, Engines, Cabin, etc.)
3 Lists covering Crew's belonging.
1 Copy of each of the above Lists duly visaed by the Federal Revenue Bureau of the previous Brazilian port of call, if any.
Federal Revenue Bureau's Pass from the last Brazilian port of call, if any.
Statement of Cargo Discrepancies, also 1 List giving the name of all preceding ports of call with dates of arrival and sailing, respectively

To Maritime Police (DOPS):
3 Crew Lists plus 1 visaed by the Maritime Police authorities of the last Brazilian port of call, if any.
2 Stowaway List and Declaration (if stowaways found on board).
1 Captain's General Information Report covering the number of passengers on board for Santos, or in transit from each foreign port of call, also the number of Crew members.
Maritime Police Pass from the last Brazilian port of call, if any.

To Port Captaincy:
Port Captaincy's Pass from the last Brazilian port of call, if any.

The Captain must also fill out an Arrival Declaration giving all data concerning his vessel as well as the number of crew, passengers on board, ports of call, cargo loaded for this port, Agents, etc.

To Post Office: Mail lists or mail passes from every port of call.

Passengers to land or in transit:

Whenever there are passengers on board, the following additional documents are required:

Passengers Disembarking:
2 Passenger Lists together with individual baggage declarations, in duplicate, for the Federal Revenue Bureau.
2 Passenger Lists for the Health Authorities.
3 Passenger Lists and Individual International Embarking/Disembarking Cards, duly filled out, for the Maritime Police.

Passengers in Transit:
2 Passengers-in-Transit Lists for the Port Health Authorities.
1 List for the Maritime Police visaed by the Maritime Police Authorities of the last Brazilian port, if any.

PILOTAGE: With the new buoyage for the delimitation of the anchorage areas on the bar, pilotage services are compulsory from the parallel 24° 02′ 00″ between the Morro da Munduba and the Ponta de Itaipu up to the Piacaguera Channel except for ships going to the anchorage areas No. 5, 6 and 7, marked on the Brazilian Maritime Chart DHN 1701 (5th Edition), where vessels must remain whilst awaiting Pilots.

ANCHORAGE:

Area No. 5: Anchorage for ships with a maximum of 100 m. length and a max. draft of 5.79 m. (19 ft.).
(a) 24° 00.0′ S. 46° 19.6′ W.
(b) 24° 00.0′ S. 46° 19.9′ W.
(c) 24° 00.5′ S. 46° 20.1′ W.
(d) 24° 00.5′ S. 46° 19.6′ W.

Area No. 6: Anchorage for ships up to 180 m. long and with a max. draft of 9.75 m. (32 ft.).
(a) 24° 00.6′ S. 46° 19.7′ W.
(b) 24° 00.6′ S. 46° 20.1′ W.
(c) 24° 01.5′ S. 46° 20.5′ W.
(d) 24° 01.5′ S. 46° 19.7′ W.

Area No. 7: Anchorage for ships over 180 m. in length and a max. draft of 9.75 m. (32 ft.).
(a) 24° 00.6′ S. 46° 20.7′ W.
(b) 24° 00.6′ S. 46° 22.2′ W.
(c) 24° 02.0′ S. 46° 22.2′ W.
(d) 24° 02.0′ S. 46° 21.3′ W.

Area No. 7: Ships over 180 m. long and with a draft over 9.75 m. (32 ft.) should at anchor at:
24° 02.0′ S. 46° 20.7′ W.

Note: Anchorage out of the delimited areas is forbidden. The entrance channel to the port must always be kept free for navigation.

Non-observance implies fines, according to the Rules for Maritime Traffic.

During navigation of the channel, speed must be reduced to a maximum of 6 (six) knots.
RESTRICTIONS: The access channel and port area have been dredged to 13 m. and dredging will continue to a depth of 13.5 m. However, depth alongside the deepest general cargo quay does not exceed 31 ft. 6 in. at high water, and can be as low as 27–28 ft. at low water.
MAX. SIZE: Regulations in force stipulate that vessels drawing max. 28 ft. and not exceeding 750 ft. in length may enter/leave the port at any state of tide, day and night. Those drawing 28 ft./30 ft. are subject to tide. These are the official drafts for the port, however in practice, depending on tide, vessels up to 32 ft. may also enter/leave the port.
RADIO: Santos Coastal Station, VHF Channel 16. Working 24, 25 26 and 27. S.S.B. facilities will be available at a later date.
HEALTH: Port Health Authorities consisting of one doctor and one assistant will check all vaccination certificates and issue a free pratique pass, which shall remain on board for presentation at subsequent Brazilian ports of call. Masters can obtain free pratique by radio, which does not mean that the doctor will not come on board, but only that other authorities can board the ship before his arrival.

Free pratique by radio: Master should radio to Agent (in Portuguese) as follows: "Para Sa Portos condicoes sanitarias a bordo satisfatorias" (Master's name) which means: "Sanitary conditions on board satisfactory". *N.B.* "Sa Portos" is the cable address of Port Health Authorities.
TUGS: Seven tugs available, equipped with two radios (VHF Channels 10, 13 and 16). Up to 1,360 h.p.

Tugs' service for mooring/unmooring not compulsory and depends on Master's decision with Pilots' advice.
BERTHING: The length of the available quay wall is as follows:

General cargo from abroad	4,070 m.
Coastwise general cargo	246 m.
Bulk cargo: liquid	1,512 m.
Bulk cargo: solid	1,809 m.
For yachts and other small craft	462 m.

Depth alongside quays:

Warehouse	No. 1	to No. 12	– 7 m.
,,	No. 12–A	to No. 22	– 11 m.
,,	No. 24	to No. 27	– 8 m.
,,	No. 29	to No. 37	– 11 m.
,,	No. 38	to No. 39	– 13 m.

Alamoa Terminal	12 m.
Saboo Quay	10 m.
Barnabe Is. (inflammables)	10 m.
Conceicaozinha Terminal	13.5 m.

Wharves. Total length 6,013 m. inner Harbour (Saboo New Quay) 800 m. (depth 11 m.). Barnabe Island pier 300 m. (depth 10 m.).

Special cargo handling facilities. Refrigerated cargo: Refrigerated cargo after discharge is deposited in the cold storage (between warehouses 23 and 25). The Receiver is usually responsible for cartage and storage arrangements as well as for the required temperature to be maintained in cold chambers.

Bulk cargo. Grain elevators: There are 3 elevators in Santos from which wheat can be discharged direct into freight cars, owned by: Cia. Docas (with external silos) between Sheds 25 and 26; Moinho

Paulista between Sheds 12A and 13; Moinho Santista between Sheds 8 and 9.

Cosipa Terminal, depth 10 m.; Ultrafertil Terminal, depth 10 m.

Fertiliser, sulphur, etc, in bulk can be discharged at any point along the quay where 6-ton cranes equipped with automatic motor-driven grabs or shovels are in operation. Alternatively, cranes with ordinary hand-filled buckets are used. The usual place for handling this type of cargo is by the Saboo bend.

Heavy lifts: Cia Docas operates 2 floating cranes – one 60 ton and one 150 ton. The 150 ton crane reaches 22 m. in height and can handle lifts within a radius of 10 m. 2 cranes of 250 tons and 65 tons respectively, have been recently installed.

Special/valuable cargo: Special or valuable cargo, objects of art, precious metals, etc., are discharged without special formalities and may be kept in Shed 12A, where there is a special safe.

BULK HANDLING FACILITIES: The Ultrafertil Terminal is situated East of the Cosipa Terminal and both make use of the same manoeuvring basin with depth of 10 m., connected with the Port of Santos by a dredged channel 8 km long, 10 m. in depth and 60 m. in width.

Cosipa Terminal consists of a pier 150 m. in length and 22 m. in width, built on concrete tubing, with a depth of 10 m., allowing for the berthing of vessels of up to 22,000 d.w.t. Future plans foresee the lengthening of the pier to 250 m. and a depth of 13 m., enabling it to receive vessels of 45,000 d.w.t.

Equipment for the discharge of coal and ore is installed at the pier, capable of handling 600 t.p.h., as well as equipment for the loading of steel plates produced at the plant.

Ultrafertil Terminal is an open dock in the form of an "L" built on concrete tubing, 240 m. in length and 15 m. in width. At its main point, vessels of 23,000 d.w.t. and drawing 10 m. may berth. The secondary point permits the berthing of vessels of up to 3,000 d.w.t. (liquid gas carriers).

The terminal is especially equipped for the discharge of bulk solids at a rate of 500 t.p.h. and is likewise equipped with pumps and adequate pipes for the discharge of liquified gas.

Macuco Novo Quay: Export terminal for cereals. Length 280 m. Max. draft for vessels is 13 m. Storage capacity 60,000 tons. Loading rate 3,000 t.p.h.

Container Terminal at inner part of port. Equipped with 3 heavy weight shore cranes, capacity 30 tons each. Loading/discharging rate: 20 pallets per hour, using fork lifts.

STEVEDORES: All longshoremen are in employ of Cia. Docas, which holds charter for general operations at Santos Docks. Their services can be requisitioned up to 1500 hrs. for vessels at berth/expected to berth next day. Stevedores ordered but not used shall be paid full day or night. Therefore, if the men should be kept standing by (inactive) at 0700 hrs., their period runs up to 1700 hrs., and at 1900 hrs., their period runs up to 0400 hrs.

Port Workers: In Brazilian ports there are 2 categories of workers engaged in handling cargoes in loading and/or unloading ships, namely:

Longshoreman: In the employ of Dock Company, to work ashore operating the cargo from the ship's tackles to the warehouse or to waggons, lorries, etc. as well as in the reverse operation.

Stevedores: They are called "autonomous" because they have no ties of fixed employment and they are engaged by Shipowners or their Agents to work on board the ships in loading and/or unloading operations. They are professional and qualified workers grouped in their respective syndicates or trade union.

FRESH WATER: Adequate supply of fresh water is always available from hydrants along the quay (day and night) or from water-barges (Piloes). Water barges cannot supply more than 2 ships per day, their capacity being only 250 tons, which can be pumped into the ship's tanks at the rate of 80 t.p.h. Cia. Docas should be advised 24 hours in advance, priority being given to passenger vessels.

FUEL: MFO, MDF, and gas oil can be supplied at Vallongo by Shed No. 1 or at the Saboo New Quay Extension, or by barge, if up to 300 tons. Applications for supplies should be made a few days in advance to avoid delay in delivery.

TANKERS: Discharge terminals at Saboo Quay, Alamoa and Ilha Barnabe.

Alamoa Terminal: Allows simultaneous mooring of 2 tankers with capacity of up to 50,000 d.w.t. Length of wharf 630 m. Depth of 12 m. at LW. Sixteen "Chiksan" arms available. Unloading rate 500–2,000 t.p.h.

Ilha do Barnabe: Length of dock 301 m., depth 10 m. The dock is used for loading, unloading and storage of liquid fuel.

REPAIRS: There are several workshops at Santos; however only capable of handling small jobs. Complicated engine repairs should be avoided as much as possible.

SURVEYORS: Practically all the Classification Societies are represented in Santos. Hold and derrick inspections as well as cargo surveys, are executed expertly, among others, by Perimar Ltd. a surveying firm which also performs testing, sampling and technical research. Its address is: Rua Amador Bueno, No. 38, conj. 91, 9th floor, P.O.B. 624, 11.100 Santos. Telephone 35.2677. Telex 013–1213. Cables: Perima Santos.

P & I Clubs: Most associations, British, Scandinavian, Polish, Japanese and Greek are represented by Pandibra Ltda. at the following address: Rua XV de Novembro 65, 8th Floor, P.O.B. 550, 11.100 Santos. Telephone Exchange No: 34.7228. Telex: 013–1248. Cables: Pandibra Santos.

WATCHMEN: Masters of vessels may at their own discretion have crew members posted as watchmen, but are strongly recommended to have shore people for the job, specially when vessel is carrying any kind of pilferable cargo.

OPENING/CLOSING HATCHES: May be performed by ship's crew or by stevedores.

CONSULS: The following countries are represented in Santos:

Italy	Chile	Panama
Denmark	Argentina	Greece
Finland	Belgium	West Germany
Paraguay	Uruguay	Norway
Portugal	El Salvador	Bolivia
France	Holland	
U.K.	Sweden	

DEVELOPMENTS: Dredging operations being carried out in order that vessels up to 45,000 tons with a draft of 12.3 m. can come into the port and go alongside Conceicaozinha. As a second phase, this dredging will be extended to the estuary to attain a depth of about 14 m. From this locality up to the Cosipa channel, the dredging should reach a depth of 12 m.

For the prolongation of the Macuco Quay, a depth of about 13 m. is contemplated. A section of another 375 m. with a depth of 11 m. and another of 230 m. with a depth of 13 m. will be made in an extension of 605 m.

A sugar export terminal is to be constructed within the port.

A grain terminal is to be built on the left bank. The depth at the quay will be 13.5 m. and will be able to receive vessels of 76,000 d.w.t. The capacity of the silos to be 100,000 tons.

AIRPORT: Situated at Sao Paulo, about 70 km. from Santos. Full international services.

TIME: GMT plus 3 hours.

HOLIDAYS: No work is accepted on the following days: Christmas Day; New Year's Day; Independence Day; Proclamation of the Republic Day; Easter; Good Friday; May 1st.

On Christmas Day, no work available except on passengers' luggage. Working overtime on holidays is possible provided application is made not later than 1500 hrs. on the preceding day. On Sundays work stops at 1900 hrs. for freighters, and is allowed to continue for passenger vessels when only handling luggage.

IDENTITY CARDS: I.D. cards not required.

TELEPHONES: Every vessel berthing between Sheds 1 to 30 will have a telephone on board, available only for local calls.

GENERAL: Flags to be shown by incoming/outgoing vessels: (*a*) National flag. (*b*) Brazilian flag. (*c*) Yellow flag – (Q) (whenever doctor's clearance is required and up to obtainment). (*d*) Customs flag (blue with a white star – to be flown 24 hours a day, after clearance is granted.)

AUTHORITY: Centro de Navegacao Transatlantica de Santos.

AGENT: L. Figueiredo S/A. R. Visc. Rio Branco, 2. Tel.: 3-8177 (PABX). Cables "Doralice". Telex 022841. P.O. Box 813.

SAO FRANCISCO DO SUL: 26.10 S. 48.34 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Not compulsory. Pilots join vessel at the Island Ilha da Paz about 5 km. East of bar, Pilot comes from inside with boat. Cables informing ETA to Agent.

ANCHORAGES: Channel low tide 30 ft. high tide 35 ft. Port: low tide 20 ft. high tide 23 ft.

RESTRICTIONS: Bar draft: max. 23 ft. Bottom: bar, channel and port: sand and mud. Speed of current: channel low water 4 knots high water 5 knots. Note: Reports received in August 1976 indicate that the bar has now been dredged to a depth of 8.50 m.

HEALTH: Vessel must present free pratique issued at first call-port. Port's doctor will visit vessel.

RADIO: Call Agent. Sao Francisco do Sul, via Florianopolis Radio.

TUGS: Two tugboats for shifting ships and barges.

BERTHING: Quay No. 1. Length 450 m., Quay No. 2. Length, 150 m. Depth alongside varies from 6.5 m. to 8 m.

CRANES: 7 cranes available with capacities between 3 and 8 tons.

STEVEDORES: Sufficient working force available, working hours 0700–1100, 1300–1700 normal period; 1700–1900 days-overtime; 1900–2300, 2400–0400 night-working; 0400–0600 night-overtime.

MEDICAL: Medical attendance available, 2 hospitals, all medical care available.

FRESH WATER: 13 hydrants on quays 1 and 2, American type thread 2 in., capable of supplying 14 to 30 t.p.h. Also a private water barge of 100 tons capacity.

FUEL: Oil for boilers, diesel engines, and gasoline are distributed by a private firm, Distribuidora Maritime Porto de Sao Francisco Ltda. by tanker trucks, coming from Itajai, where orders must be placed 12 hours in advance.

DEVELOPMENTS: An SBM terminal is under construction at Sao Francisco do Sul for Petrobras.

The terminal will handle tankers of 250,000 d.w.t. Discharging crude oil. The SBM is located 8 km. off the coast of Babitonga Bay, and the storage tanks at Enseada beach.

The bar is expected to be dredged to a depth of 9 m.

A new grain terminal is expected to be completed by 1979.

WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCE: 1 package of 200 cigarettes, and one bottle of spirits each man.

CONSULS: Chile.

REPAIRS: Deck and engine repairs possible, workshop in town.

REPATRIATION: No facilities for changing crews.

AIRPORT: None, nearest in Joinville, with regular traffic, about 40 miles distant.

HOLIDAYS: 1st January; 21st April; 1st May; 7th September; 15th November; 25th December; Holy Friday; Corpus Christi; 8th September; 8th December.

TELEPHONES: Available at dock entrance.
AUTHORITY: Port Captain.
AGENT: Empresa Maritima e Comercial Ltda., Rua Babitonga, No. 179, Post Box 43, Sao Francisco do Sul, State of Santa Catarina, Brazil. Cable "Maritima", Sao Francisco do Sul and "Realloyd" Tel. 161, 273, 139, 162.

SAO LUIZ, Maranhao: 02.30 S. 44.07 W.

(Including port of Itaqui, situated six miles by sea from Sao Luiz).

DOCUMENTS: See "General" before first port.
PILOTAGE: Approaching coast, the Master must inform Agency via Radio Marinha de Sao Luiz – PWM or cable directly to Pilot service, cable address: "Praticagem S. Luiz". No VHF available. Pilot launch painted red and provided with conventional lights. Launch awaits at Ponta D'Areia. Vessel to notify Pilot service of ETA 12 hours. before arrival.

The Pilot boards in position 02° 29′ 09″ S., 44° 20′ 01″ W.

ANCHORAGE:

Sao Luiz: The following areas are reserved for the anchorage of vessels awaiting to enter port.

(a) Location No. 1 for vessels of more than 2,000 g.r.t., up to 21 ft. draft and 135 m. overall (this is the nearest anchorage to the town).
Location No. 2 for vessels up to 18 ft. draft (and that which follows No. 2).
Location No. 3 for vessels up to 18 ft. draft (is the nearest to the bar).
These anchorages are situated between the parallels of 02° 30′ 5″ S. and 02° 31′ 5″ S.

(b) Vessels impounded or requiring extensive repairs:
Vessels up to 10 ft. – Lat. 02° 31′ 9″ S. Long. 44° 18′ 7″ W.
Larger vessels: Lat. 02° 30′ 0″ S. Long. 44° 20′ 0″ W.

(c) Anchorage for vessels of less than 2,000 g.r.t. To the South of the partly submerged hull of the *Maria Celeste* between the State Warehouse and the Customs Warehouse.

(d) Vessels in quarantine: Lat. 02° 29′ 5″ S. Long. 44° 20′ 5″ W. Vessels may not anchor in the approach channel or the turning basin.

Itaqui: The following anchorage zones for vessels arriving at Itaqui:

(a) Vessels over 5,000 g.r.t.: Lat. 02° 35′ 5″ S. Long. 44° 22′ 4″ W.
(b) Vessels impounded or requiring extensive repairs: Lat. 02° 35′ 1″ S. Long. 44° 22′ 3″ W.
(c) Vessels in quarantine: Lat. 02° 35′ 4″ S. Long. 44° 23′ 3″ W.
(d) Inspection anchorage: Lat. 02° 35′ 2″ S. Long. 44° 22′ 4″ W.

RESTRICTIONS:

Sao Luiz: May only be entered during daylight hours and near high water.

Itaqui: Cargo vessels may moor any time during the day or night depending on the state of the tide. Vessels bound for the oil terminal may only berth on the rising tide during the day. Berthing should commence one hour before high water.

HEALTH: (See "General" before first port.) Health Authorities visit compulsory, due to disinfection by Yellow Fever Service.

Tankers bound for the oil terminal will be inspected at the terminal after mooring is completed.

Vessels awaiting berths will be inspected at the inspection anchorages.

RADIO: Radio Marinha, code PWM, may be used for any message to the Agent.

TUGS: *Sao Luiz:* One tug 50 h.p. available.
Itaqui: None.

MAX. SIZE: For port of Itaqui, max. draft at LW is 31 ft. At HW, depth of 45 to 48 ft. available depending on height of tide.

BERTHING: *Sao Luiz:* See "Anchorage".

Itaqui: New quays in use and under construction, over 400 m. length. Initially vessels will use own gear for loading/discharging pending completion of port facilities.

CRANES: *Sao Luiz:* 8 portal cranes (2×6 tons, 6×3 tons) 1×50 tons, 2×3 tons, 1×6 ton on order.

BARGES: *Sao Luiz:* Eleven barges of 60 tons, five barges of 80 tons and one barge of 150 tons capacity. There are also five oil barges with a total capacity of 1,090 tons.

TANKERS: Discharge at port of Itaqui. One berth for up to 32 ft. draft.

Tank Capacities:

Esso, Gasoline 20,000 barrels; Diesel 15,000 barrels; Kerosene 20,000 barrels.

Texaco, Gasoline 25,000 barrels; Diesel 20,000 barrels; Aviation kerosene 10,000 barrels.

Petroleo Saba, Gasoline 20,000 barrels; Diesel 25,000 barrels; Kerosene 5,000 barrels; Fuel oil 20,000 barrels.

STEVEDORES: On rjeipt of vessel's ETA Agent provides the necessary gangs. Master to mention in his ETA cable the distribution in cargo hold enabling Agent to arrange for number of gangs required. When loading or discharging bagged cargo an average of 4,000 bags per eight hours work per gang handled.

MEDICAL: Advance notice by radio preferred, since medical assistance in S. Luiz is limited to one general clinic and three hospitals.

FRESH WATER: *Sao Luiz:* Fresh water available by barge, rate 60 tons per day. There is also an outlet at warehouse No. 4 on the quay.
Itaqui: Not available.

FUEL: *Sao Luiz:* Fuel oil available to vessels alongside, delivery by road tanker.
Itaqui: Fuel oil available to vessels alongside, delivery by road tanker. There is no fuel oil available for boilers.

GANGWAY/DECK WATCHMEN: Normally done by the crew.

OPENING/CLOSING HATCHES: Done by stevedores.

CUSTOMS ALLOWANCES: No limit or restrictions.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of Identity Card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The Identity Card must be given on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULATES:

France	Tel. 1117	Spain	Tel. 2664
Portugal	,, 1689	Norway	,, 1888
Denmark	,, 1507	Bolivia, no telephone	

REPAIRS: Shop for small repairs available.

REPATRIATION: Problematic because Maritime Police being inadequately equipped.

AIRPORT: 13 kms. from centre of town, with daily flights to North and South of country.

TIME: 1 March to 30 Nov. GMT minus 3 hours; 1 Dec. to 28 Feb. GMT minus 2 hours.

HOLIDAYS: January 1st; April 21st; May 1st; September 7th; November 15th; December 25th (National holidays). July 28th; September 8th (local holidays); Maundy Thursday; Good Friday (Church holidays). On all holidays, except Good Friday, work permitted.

POLICE/AMBULANCE/FIRE: Police Tel. 1150; First Aid Ambulance 1943; Fire Brigade 1753.

TELEPHONES: No facilities for placing telephones on board.

DEVELOPMENTS: Wharf at Itaqui to be extended to 1,068 m. Depth will vary from 30 to 40 ft.

The existing petroleum berth will be replaced by the final extension of the wharf, although plans indicate the intended construction of a new Petroleum Berth on Guapira Island.

An iron ore loader is to be built on Punta do Madeira, dredging will allow 300,000 d.w.t. vessels to use the berth.

AUTHORITY: Port Captain.

AGENT: Pedreiras, Transportes do Maranhao Ltda., Rua Dr. Tarquinio Lopes 241. A. Cable address: "Pedra". Tel. 2–1393 and 2–3282.

SAO SEBASTIAO: 23.48 S. 45.24 W. **(See Plan)**

LOCATION: Terminal Maritimo Almirante Barroso (TEBAR) is located on the West edge of the Sao Sebastiao Channel. Safe access is made through the South entrance. The approximate geographical position of berths is Lat. 23° 48′ 3″ S., Long. 45° 23′ 3″ W.

DOCUMENTS: Inward clearance is effected on board immediately after docking by Government Port Officials and Agent's representative. It is necessary that the following documents be ready on arrival.

Any document regarding outward clearance of the ship at last port of call.
5 copies Crew List.
2 copies Store List.
2 copies Personal Effects List.
3 copies Passenger List.
3 copies Cargo Manifest, (or more if available).
3 copies Bill of Lading, (or more if available).
2 copies Maritime Declaration of Health.
Notice of Readiness (Addressed to Petrobras)
List of vessel's particulars: call sign, n.r.t., g.r.t., d.w.t., speed, engine b.h.p., draft, total crew, officers, time of arrival, loading ports and dates of sailing, quantity of cargo for Sao Sebastiao, quantity of cargo in transit for other ports, etc.

PILOTAGE: Pilotage is compulsory for vessels calling at Sao Sebastiao as from the following limits:

South – line joining Ponta da Sela to Ponta Gaeca.
North – line joining Ponta das Canas to Ponta do Arpoar.

Pilots await near these limit lines. They meet the vessel via launch. Pilots may decline to moor the vessel if it is not equipped with satisfactory mooring equipment, lines, gear, etc., or if it is not sufficiently ballasted.

NAVIGATIONAL AIDS: The following easily identifiable navigating aids are visible:

(a) a white light on Ponta da Sela is exhibited from a tower painted with red and white stripes, marking the South entrance of the channel.
(b) 4 lights mark the deepest part of the channel: 2 lights towards the continent and 2 red lights towards the island.
(c) a white light is exhibited from a small rocky island with a white tower on Laje dos Moleques.
(d) a red light on Pontinha is exhibited from a white tower and
(e) 4 red lights are exhibited from the terminal's pier.

ANCHORAGES: Temporary anchorage for Port Authorities Clearance; located approx. 1.5 miles N.E. of Lage dos Moleques light.

Anchorage for Tankers Awaiting Berth: about 1 mile South of Ilha Bela village.

Anchorages for the Lightening of Tankers located about the joining line between Ponta da Sela and Ponta do Viana. Water depths of 25 m. to 35 m. (82 ft. – 115 ft.) with seabed of clayed/sanded mud.

RESTRICTIONS: The terminal normally operates around the clock. Ships are moored and unmoored at any hour except when an

unexpected event arises, such as breakdowns, gales, heavy squalls, and so on.

The safe draft for passing along the dredged channel is 23 m. (75.5 ft.), no matter what existing conditions are such as day or night, current set and drift, wind, tide or swell. However, at the discretion of Pilot, according to the prevailing above conditions vessels can use the channel with drafts up 24 m. (78.7 ft.) These figures are not final as they may change in time without previous notice.

Remarks: The limitations mentioned above could result in rejection of the ship as being unsuitable for this terminal.

MAX. SIZE:

Position 1 (external berth, South pier): 26 m. (85 ft.) depth, for tankers up to 300,000 d.w.t., with maximum draft of 21.5 m. (70.5 ft.).

Position 2 (internal berth, South pier): 19 m. (62 ft.) depth, for tankers up to 135,000 d.w.t., maximum draft of 16 m. (52.5 ft.).

Position 3 (external berth, North pier): 19 m. (62 ft.) depth, for tankers up to 135,000 d.w.t., maximum draft of 16.9 m. (55.5 ft.).

Position 4 (internal berth, North pier): 13.7 m. (45 ft.) depth, for tankers up to 65,000 d.w.t., maximum draft 12.2 m. (40 ft.).

HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Deratisation Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival.

RADIO: Vessels under time-charter to Petrobras bound for Sao Sebastiao should advise Company of ETA 48 hours before arrival direct to PPA 25 (Petrobras own radio station) as well as to Agent's cable address through PPR (Rio Radio Brazilian Post Office radio station). In turn they will pass message to the terminal. Confirmation or change of ETA should be cabled 24 hours prior to arrival. Vessels equipped with VHF radio telephone should call on Channel 16/DELTA: 156.8 mHz (and then change to another agreed channel) when within range for berthing instructions. All ETA's should indicate whether it is local time or GMT. English is generally understood by Pilots and terminal representatives. Weather forecasts as well as Notices to Mariners are transmitted by PWZ and PPR radio stations. Radio equipment should not be used at the piers. Communication ship-to-shore will be by telephone.

TUGS: 7 Tugs available. Rigel 3170 h.p., Vega 3170 h.p. Apolo 2,360 h.p., Orion 2,360 h.p. (owned by Petrobras). Servemar VIII 375 h.p., Servemar IX 550 h.p., Servemar X 650 h.p. (owned by private company). While rendering such assistance the tugboats act under orders of Harbour Pilot. These tugs are fitted with fire pumps and monitors (including mechanical foam) to assist in fighting fires.

The following tug signals which have been approved by the local Captain of the Port are listed below for a Shipmaster's guidance:

(a) For calling tugs: 4 long blasts followed by 1 or 2 short blasts of a ship's whistle will call 1 or 2 tugs respectively.

(b) Before towing line is made fast: 2 short blasts; prepare to push on bow or to pick up line from ship's bow. 3 short blasts; prepare to push on stern or to pick up line from ship's stern.

(c) After towing line is made fast: 1 long blast; pull to starboard. 2 short blasts; pull to port. 3 short blasts; give up pulling.

(d) Manoeuvring alongside ship's hull: 1 short blast; to pull, 2 short blasts; to push.

All orders received by tug will be acknowledged with a distinct short blast.

As both tugboats are provided with VHF, manoeuvring orders may be given by radio.

Usually orders to fore tug are given by mouth whistle and to aft tug by the ship's whistle. 2 long blasts followed by a short one is used either to call small craft or pilot launches. To call motor-boat (launch), 1 long blast followed by a short one; both tugs are fitted with blinker signal lamps.

GENERAL CARGO WHARF: *Commercial Quay*: Length 150 m., depth 8.2 m. Fresh water available, rate 10 t.p.h. Fuel available by road tanker in small quantities. 7 cranes, one of 11 tons and 6 of 4.5 tons.

BERTHING: The pier is located on the Western edge of the channel between the shore and Sao Sebastiao Island. Safe access for large tankers is possible through the South entrance but smaller tanker or draft 35 ft. or less may enter through the North entrance.

The head of the jetty which is "T" shaped is 1,690 m. (5,544 ft.) from the shore, in position 23° 48.2′ S. 45° 23.3′ W.

The South pier is 510 m. (1,673 ft.) length and the North pier 380 m. (1,246 ft.).

See also "Max. Size".

Loading arms:

Position 1	4×16″	(cargo hoses)
	2×12″	(diesel oil)
Position 2	3×16″	(cargo hoses)
	2×12″	(diesel oil)
Position 3	2×12″	(cargo hose)
	2× 8″	(diesel oil)
Position 4	Same as Position 3	

Reducers are available. All shore hoses are chiksan type arms.

Maximum Height: Max. height of hoses above platform: Position 1: 21.5 m. (70 ft.); Position 2: 17.8 m. (58 ft.); Position 3 and 4: 16 m. (52 ft.).

Pipe-lines: Two 34-in. diameter pipe-lines, 2,300 m. (7,500 ft.) link the South pier to the shore tanks. 2 24-in. diameter pipe-lines, 2,000 m. (6,500 ft.) link the North pier with the shore tanks.

LOADING: *Maximum permissible pressure*: Both piers 8 kg/cm^2. (120 p.s.i.).

Pumping Rates: South pier: 100,000 bbl/h. if using two 34 in. lines and 3 or 4 hoses; up to 50,000 bbl/h. if using one 34 in. line and 3 or 4 hoses.

North pier: up to 48,000 bbl/h. if using two 24 in. lines and 2 hoses; up to 28,000 bbl/h. if using one 24 in. line and 2 hoses.

BALLAST: Brazilian laws are very strict in regard to the pollution of harbour and coastal waters. Vessels should not discharge dirty ballast, ashes, refuses, etc., into the water. Heavy fines are imposed for violations. All overboard discharge valves from cargo tanks and bilges are to be secured before any loading or discharging commences. All deck scuppers should be plugged to avoid harbour contamination should an oil spill occur. To offenders, fines will be charged (besides resulting delays) according to the ship's tonnage. Facilities for receiving dirty ballast are available. However, amount is dependent on space in shore tanks at the time. Capacity of tanks 12,000 cu. metres (75,000 bbls).

MEDICAL: Medical treatment and/or hospitalisation, if required, is provided in the private local hospital. Dentists are available in the area. For emergency cases (serious illness or injury) TEBAR first medical aid may be requested by the Master. Internal telephone number is 20. If patient does not speak Spanish or Portuguese, an interpreter should accompany him.

FRESH WATER: Fresh water can be supplied, if necessary; however, supplies are limited to essential requirements (up to 400 tons). Rates: Minimum 91 t.p.h. Maximum 148 t.p.h.

FUEL: The Terminal is equipped with blending valves and is able to deliver Bunker C, Fuel Oil, Marine Gas Oil, Marine Diesel Oil and Intermediates of any grade – concurrently with working cargo at international prices.

The supply rates are about 300 t.p.h. for Bunker C, 180 t.p.h. for M.G.O. and 450 t.p.h. for intermediates.

Orders for Bunkers should be placed, with a minimum of 48 hours notice to:

Divisao de Abastercimento a Navios – Departamento Comercial, Av. Republica do Chile 65, 19.° andar, Rio de Janeiro – Brazil. Telegraphic address: PETROBRASECOPE Telex numbers: 031422 and 031423.

Lubricating Oils: Orders for marine lubricants should be placed at least 15 days in advance and subject to confirmation to: PETROBRAS DISTRIBUTIDORA, Praca 22 de Abril, 36, 4.° andar, Rio de Janeiro – Brazil. Telegraphic address: PETROEDIPE Telex numbers: 031422, 031423 and 031424. Telephone numbers: 242-9381 and 242-4901.

Simultaneous bunkering and discharging operations. Considering that the loading/discharging hoses cannot be crossed with bunkering hoses, the simultaneous bunkering and discharging operations will depend on the position of the ship's bunkering manifold. If the ship has 2 bunkerings manifolds at each board – 1 at each side of cargo manifolds – the bunkering and the discharging may be effected at the same time. However, supposing a tanker has only 1 bunkering manifold at each board (located to the aft part in relation to cargo manifolds), this simultaneous operation will only be possible if the ship, is berthed port side at position 3 or starboard side at positions 1, 2 and 4. Contrariwise, upon completion of loading/discharging the ship will have to be shifted a few metres forward to receive bunkers.

SURVEYORS: *Petroleum Inspectors*: None available in Sao Sebastiao. If required, arrangements should be made well in advance. A representative of Chas. Martin and Co. is based in Rio de Janeiro and E. W. Saybolt & Co. in Santos.

REPAIRS: Repairs of minor nature can be effected in Sao Sebastiao. When alongside pier, vessels must maintain engines and propulsion machinery in readiness to leave the berth under full power on short notice. No repairs are permitted which would interfere with this requirement. In the event of a ship unable to leave the pier under its own power, when requested to do so by the terminal, the terminal reserves the right to arrange to have the ship towed from the pier. Any expenses incurred or delays resulting from such an operation will be for the account of the ship.

CUSTOMS ALLOWANCES: For each Crew member, 2 packets of cigarettes and 1 bottle of wine or spirits. While the vessel is in port, Brazilian custom's officials are assigned on board to ensure compliance with customs regulations. Meals must be supplied to these officials during regular meal hours. Brazilian laws are strict in regard to smuggling and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, alcoholic drinks, souvenirs, etc., should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port. By no means will any commercial transactions be tolerated, be it either among terminal employees, Crew members or anyone else. Cigarettes or other stores in bond are not obtainable in Sao Sebastiao.

CONSULS: No consular representatives are reported to exist in the area.

TIME: Local time is GMT minus 3 hours.

SHORE LEAVE: The access pier is 1,600 m. long. The crew can use it to get ashore, but special passes are required for this purpose. There is, however, a launch service provided by Agent.

GENERAL:

Brazilian Flag: Authorities are exercising rigorous inspections as regards the condition and the correctness of measures, colours, etc., of the Brazilian flag flown by vessels in port. In principle, the flag should be flown from 0800 to 1800 hrs. Heavy fines are imposed on the ship if these instructions are disregarded. In case no suitable flag is found on board, a radio message should be sent a few days in advance, so that this item may be supplied upon arrival.

National Holidays: By order of the local Port Authorities it is

requested that all ships in port must be fully dressed on the following National Holidays: 7th September and 15th November.

Watches: An efficient watch must be maintained on board the ship, deck and engine room and a sufficient number of Crew members should always remain on board to cope with emergency or port operation situations.

Ratguards: Ratguards must be placed on all mooring lines.

Visit of Authorities: In case the ship enters and berths directly, the official visit of Authorities together with the Agents will take place as soon as she is tied up and the gangway is lowered. However, if the ship is not berthed immediately upon arrival (e.g. in view of the pier being occupied, or any other reason), the visiting party will proceed to the ship by motor-boat as soon as she drops anchor. If the ship arrives after 2100 hrs. it is possible that Authorities will decide to visit the ship next morning at 0800 hrs.; however, the ship is authorised to operate normally and Crew members are allowed to go ashore.

Seamen left ashore: Ships are not permitted to sail until all crew members are on board. Should, however, a Crew member definitely not be found, his passport (or seaman card) and his international vaccination certificates must be given to the Agents, together with a letter requesting him to be repatriated.

Weather and Tide Conditions: The weather at Sao Sebastiao is generally very favourable: no strong winds, no speedy currents and usually not even a swell is observed in the channel. The winds are unpredictable for more than a few hours in advance; usually it blows from N.N.W. or S.S.W. As regards rain, the annual precipitation averages 2,000 mm. The visibility is mostly fair, although in Autumn and Winter it may become rather poor in the early morning. The temperature ranges from 15°C (59°F) in July to 39°C (104°F) in January. The relative humidity of the air is usually high, often exceeding 85%. The normal range of tides is around 1.2 m. (4 ft.). Although higher ranges of 2 m. (6.5 ft.) have been noticed during Spring. The currents are irregular but usually follow the direction of the wind; according to the intensity and the duration of the wind, the drift may range from 1 to 4 knots.

Derating Certificate: In case the Derating Certificate has expired and needs to be renewed, a radio message should be sent to the Agent a few days before arrival, so that they are able to make the necessary arrangements with the Sao Sebastiao Port Health Inspector.

Renewal of Vaccination Certificates: For the same reason mentioned above, the Master should send, beforehand, a radio message stating how many vaccinations of each kind will be required. The vaccinator has to come from Santos.

Passengers: Passengers will be permitted to disembark if in possession of the required visa and documents for identification.

Visitors: Only the personnel duly authorised by Port Authorities may come on board the ships; this excludes all visitors. Relatives of Crew members may obtain from Port Authorities a licence to go on board.

Constant Readiness: During the time the ship is berthed alongside, her engine and propulsion machinery should be in readiness to leave the berth on short notice. No repairs are permitted which would interfere with this requirement.

Smoking: Smoking in open areas of the ship and on the pier, is strictly forbidden. The crew are not to throw lighted cigar or cigarette butts overboard.

Photography: The taking of photographs within the terminal is prohibited.

Emergency Towing Wires: 2 towing wire ropes should be always hanging to the water's surface so that the tugs can easily make fast should an emergency arise.

Gangways: All ships calling at Sao Sebastiao must provide a safe gangway. Authorities may refuse to board the ship if a safe gangway or accommodation ladder is not provided. At night, the pilot ladder must be adequately lit. The terminal is not equipped with platform ladder. The ship's ladder must be used.

Lifebuoy: A lifebuoy with 15 fathoms (27 m.) of rope should be kept nearby the gangway for use in case of emergency.

Ship's Fire-fighting Equipment: At least 2 fire hoses should be connected to hydrants on main deck: 1 forward and the other abaft the cargo valves manifolds. A third hose with an NPU nozzle and 2 mechanical foam containers should be kept nearby the pump-room. The ship's main fire-extinguishing system should be kept under constant pressure.

Minimum Draft for safe Manoeuvring: Although the amount of ballast carried on vessels is at the Master's discretion, the table below is recommended as a guide:

Vessels of 30–40,000 t.d.w. draft for'd 16' aft 20'
Vessels of 40–50,000 t.d.w. draft for'd 18' aft 24'
Vessels of 50–70,000 t.d.w. draft for'd 20' aft 28'
Vessels of 70–100,000 t.d.w. draft for'd 24' aft 32'

Vessels over 100,000 tons should be ballasted to approximately one third of the vessel's deadweight.

Bond Wire: Before the connection of shore hoses, the bonding wire will be connected, by a terminal employee, to ensure a good grounding electric contact.

Boiler Tubes and Sparks: Whilst alongside the pier, no boiler soot blowers may be used. The use of derricks is also forbidden (excepting the poop derrick, when lifting stores, provisions, etc.). Likewise, the use of objects and/or tools which may cause sparks is also forbidden.

Fire Signal: Should fire break out in any part of the ship, the fire alarm should be given: a continuous sounding of 7 short blasts on the whistle, followed by a long one.

Transportation of Stores, etc., from shore to ship: The terminal does not permit the carriage of items through the jetty. Consequently, the ship has to use the services of a motorboat, or a tugboat or of a floating craft (which is towed to the ship's side). The motorboat boat or the tugboat may only approach the ship by the sea side. No derricks may be used, although the terminal has no objection to the use of the poop derrick or crane (sea side). Depending on the nature and the weight of items involved, they may be taken on board using the gangway (sea side).

Laundry: No laundry facilities available at Sao Sebastiao, however, Las Vegas Lavanderia, located at Caraguatatuba (about 30km from Terminal) is equipped to handle laundry services for ships calling at Sao Sebastiao.

Provisions and Stores: Provisions and stores are supplied by shipchandlers contracted directly by Owners or Masters or through the Agents. Usually they have to be brought from Santos, which requires a radio advance request, in view of the distance involved. It is hoped that in the near future provisions and stores in large quantities may be easily obtainable in Sao Sebastiao. Some items may be obtained in Caraguatatuba.

SHIPMASTER'S REPORT:

Pilotage: Vessels normally sail and arrive by the Southern entrance.

Anchorages: The holding ground for VLCCs is not very good, but appears good for smaller vessels. (We had 3 cases of ships dragging during our 2 and a half weeks stay, all VLCCs.) The current runs Northerly or Southerly depending on the wind.

Tugs: 5 tugs normally used for berthing and unberthing irrespective of vessel's size.

Medical: Dental and routine medical matters available. Specialists are available some miles away. For inoculations the doctor comes from Santos.

Fresh Water: Rates are dependent on number of vessels watering and can be as low as 10 t.p.h.

Customs Allowances: 2 cartons cigarettes per man. Customs no longer stay on board the vessel.

Repatriation: Is possible, but involves lengthy car ride to Santos or Rio de Janeiro. The best and nearest airport is outside Sao Paulo, where International flights are available. This is quicker than going to Rio.

Telephone: Available in jetty control rooms.

Shore leave: When berthed the Agent can arrange a minibus service from the T-head of the jetty.

Port Regulations: Vessels throwing or discharging anything into Brazilian waters are subject to a fine equalling 2% of the minimum Brazilian basic wage multiplied by the vessel's gross tonnage. Garbage disposal is difficult to arrange and they will only accept dry garbage.

General: Communications are poor, no Telex and messages have to be telephoned to Santos. Best method is to use ship's equipment when at anchor.

AUTHORITY: Petroleo Brasileiro S.A.

AGENT: L. Figueiredo S/A. ave. Duque de Caxias, 384. Tel.: 5–0365. Cables: "Doralice" Sao Sebastiao.

SEPETIBA TERMINAL, Guaiba Island: 23.00 S. 44.02 W.

See "General" before first port.

LOCATION: About 50 miles West of Rio de Janeiro, is the site of a bulk iron ore terminal located off the S.E. end of Ilha Guaiba about seven miles due North of the bay entrance.

PILOTAGE: Compulsory for all ships entering the bay and berthing and unberthing at the ore facility. Pilots board in the vicinity of 23° 08′ 39″ S., 44° 04′ 36″ W. A pilot ladder, boat rope, and gangway must be properly rigged with the landing platform of the gangway lowered to within 5 m. (16.5 ft.) of the water. Adequate lighting should be provided at night.

ARRIVAL INFORMATION: Vessels bound for Baia de Sepetiba should send an ETA to their Rio Agents, via Rio Radio, six days, 48 hours, and 24 hours prior to arrival. Any significant change in this ETA should be corrected as soon as possible but not less than 8 hours prior to arrival. Also see "VHF".

ANCHORAGE: In the vicinity of the Pilot boarding area. Ships should not proceed beyond this point unless a Pilot is aboard and instructions have been received from Sepetiba Marine Operations to proceed.

HEALTH: Radio pratique should be requested 72 hours prior to arrival by transmitting a quarantine message to the Port Health Authorities through the the ship's Agent. This message should contain the following information: name and nationality of vessel; last port of call; number of crew and passengers; general conditions of health on board. Also see "General" before first port.

VHF: Vessels are requested to contact Sepetiba Marine Operations directly when within VHF radio-telephone range. Channel 16 is the calling channel and 11, 12 and 13 are the working channels. Anchoring or berthing instructions should be requested 4 hours prior to arrival or when within VHF radio-telephone range.

TUGS: Tug assistance is compulsory for all manoeuvring in the vicinity of the pier and 3 powerful twin screw tugs are available for this purpose. All ships should be equipped with a wire cable tow line with a nylon pendant. Radio-telephone communication is maintained between the tugs and the Pilots on Channel 6.

BERTHING: Facilities consist of a deep-water pier located about 400 m. (1,312 ft.) South of the island. The South berth has a depth of 24 m. (78.75 ft.) alongside and the North berth has a depth of 19 m. (62 ft.). A mooring dolphin at the West end of the pier provides an overall mooring length of 470 m. (1,541 ft.) alongside the South

berth. Bollards are spaced along both pier faces and quick release hooks and capstans are fitted for breast, bow and stern lines.
BULK HANDLING FACILITIES: One travelling shiploader serves both berths and has a boom clearance of 22 m. (72 ft.) at shipside. Ore is stacked in a storage area and is delivered to the shiploader by conveyor belt which is loaded by either of 2 stackers having an average capacity of about 7,000 metric t.p.h. each.

TRAMANDAI (Porto Alegre): 30.01 S. 50.06 W. (See Plan)

ALMIRANTE SOARES DUTRA TERMINAL: Terminal Maritimo Almirante Soares Dutra – TEDUT, is located 6 km. from Tramandai, which is 134 km. from Porto Alegre, Capital of the state of Rio Grande do Sul. The Buoys (SBMs) are positioned 1.9 and 2.4 miles from the beach and their geographical co-ordinates are:
SBM–1 (W.), Lat. 30° 00′ 40″ S., Long. 50° 05′ 42″ W.
SBM–2 (E.), Lat. 30° 01′ 06″ S., Long. 50° 05′ 10″ W.
DOCUMENTS: See "General" before first port.
PILOTAGE: Sea Pilot not required. All manoeuvres will be undertaken by the vessel's Master with the help of a TEDUT Mooring Master who will board the vessel in the anchorage area and advise the vessel's Master on all operations such as mooring, connecting hoses, unloading, unmooring, etc.
ANCHORAGE: The advisable anchorage site is 1.5 miles N.E. of SBM–2 (E.), geographical position, Lat., 29° 59′ 30″ S., Long. 50° 04′ 30″ W. Depths, 21 m. Seabed, fine sand and mud. Mooring Masters will board arriving tankers in this area.
APPROACHES: There are 3 conspicuous water towers named *Tourist, Agrimer* and *Tramandai.* There is also a small radar and meteorological watch steel tower nearby the pier in position Lat. 29° 58′ 34″ S., Long. 59° 07′ 18″ W.
RESTRICTIONS: Due to the peculiar conditions of the terminal, mooring undertaken only at daytime. Sometimes the leaving of launches seawards depends on the height of tide and the strength of the waves. Tankers may have to wait for favourable weather conditions so that mooring may safely be started.
MAX. SIZE: SBM– (W.), designed for 105,000 d.w.t. tankers, max. draft 16 m. (52 ft.). SBM–2 (E.), designed for 200,000 d.w.t. tankers, max. draft 17 m. (55 ft.). The distance between the vessel's bow and manifold must not be more than 140 m. for mooring to the SBM–1 (W.) or 180 m. for mooring to the SBM–2 (E.).
RADIO: Vessels bound for Tramandai should advise their ETA 48 hours prior to arrival direct to PPA 25 (Petrobras own radio station) as well as to their Agents (through PPR – Rio Radio – government station). In turn these stations will send messages to the terminal. Confirmation or change of ETA should be cabled 24 hours before arrival. Vessels may also contact TEDUT's radio-telephony station either in AM or SSB on the following channels and frequencies:
VHF, conventional frequencies, Channels 11, 13, 14 and 16 on 156, 55/165, 65/165, 70/156 mHz respectively.
SSB, frequencies 2182/2815/4383.38/8770.8 and 2647.5/4.078.8 8120.8 kHz for listening.
When within range, vessels equipped with radio-telephone should call first on Channel 16/DELTA-156.8 mHz and then change to another agreed channel, preferably 14/CHARLIE-156.7 mHz for mooring instruction. All ETA's should indicate whether it is local time or GMT. Weather forecasts as well as Notices to Mariners are transmitted by PWZ and PPR radio stations.
PRATIQUE: Display of quarantine signal – "Q" flag – on approach Tramandai must be maintained until free pratique is granted. The National Brazilian flag should remain hoisted throughout vessel's stay in the terminal. Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Deratisation Certificate, two Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board, it is advisable to cable Agent before arrival. Also see "General" before first port.
LAUNCHES: Mooring, unmooring and connection operations are assisted by the terminal's launches. While rendering such assistance the boats act under orders of the Mooring Master. Usually two service boats are at his disposition. Besides operational assistance they undertake transportation of Mooring Masters, personnel, Agents, ship chandlers, port authorities, etc.
ARRIVAL: Arrival time is considered to be the time the vessel reaches the anchorage vicinity or the time the Mooring Master boards the vessel, whichever occurs first. However, notice of readiness will not be considered as the time of arrival unless the vessel is in all respects ready to discharge. In the event berthing is delayed by weather conditions, tankers will be unloaded in turn. If, however, the weather is so bad that the port is closed and vessels awaiting discharge have to go out to sea, TEDUT may discharge another vessel on reopening if it arrives before the return of other waiting vessels. More rarely, the terminal Superintendent may grant priority to a particular vessel out of turn, in special circumstances only. Exceptionally, and at the discretion of the Superintendent, two tankers will discharge at the same time.
MOORING: The Mooring Master will advise on the method of securing the ship. Tankers are usually moored by two bow nylon hawsers of 13 in. diameter and 45 m. length. Vessel's messenger nylon lines are shackled – one at a time – to the pick-up wires of the chafing chains by the launch crew and hove in (through the vessel's windlass warping bollard) until the lengths of the chafing chains are brought over the vessel's roller chocks/fairleads. Ship's engines may help the lead-in ropes (vessel's messenger) in coming up to the SBM.
The following items must be observed: Anchors must be well at home and secured with stoppers and brakes. Windlass warping bollards must also be ready to lift chain stoppers, wire strops, shackles, senhouse slips, crowbar, hammer, spikes and other gear to be placed on board for mooring purpose (equipment supplied by TEDUT). Two good eye-spliced (9 in. at least) nylon hand-inlines must be be ready, at each side, on the fo'castle head, to be given to the launch, who in turn will shackle them to the hawser's pick-up wires (marked by little spar buoys).
HOSE CONNECTION: The Mooring Master will direct the terminal's working men in lifting, connecting and lowering the hoses. After the vessel is securely moored, the 16 in. floating hoses must be individually lifted to the rail by the ship's gear. Sundry hose securing and connecting equipment (strops, gaskets, nuts, bolts, wrenches, etc.) will be supplied by the terminal and put aboard the ship just after arrival. Hoses will be lifted by ship's derrick, preferably on the port side. Minimum lift of 5 tons capacity required. When wind force reaches about 8 Beaufort Scale and waves are 2.5 m. high, emergency disconnecting operation will take place, even at night time.
LOADING: Pumping must not be started without permission of the Mooring Master. The max. allowable pressure is 10 kg/sq. cm. (150 p.s.i.). While the vessel is moored, the vertical angle formed by the nylon hawsers and the sea level should not exceed 30 degrees, for safety of the SBM's turntable. When necessary, due either to excessive pitching or by being too much trimmed by the stern, pumping of ballast must be concentrated in the fore-tanks, even if interruption of unloading becomes mandatory. So the Mooring Master may require cargo to be discharged, in certain stages, either from aft or for'd compartments.
As a rule, when unloading is over, the ship should have ballast on board at least 40% of her total d.w.t. tonnage. Besides the Mooring Master himself, some terminal workmen stay aboard ship. Therefore, room and meals for one officer and six crewmen should be supplied. Upon completion of discharge the Mooring Master will require the ship to pump sea water through the submarine pipelines to displace the remaining oil.
BALLAST: No slop facilities are available for dirty ballast. Brazilian laws are very strict with regard to the pollution of coastal waters. Vessels are not allowed to discharge dirty ballast into the water. Heavy fines are imposed for violations.
Tramandai is the largest Rio Grande do Sul seaside resort and any pollution of the sea in this area will cause damage to the beaches. Hence, no dirty ballast or any oily residues must be pumped overboard within a range of over 50 miles, if no safer alternative exists.
MEDICAL: Medical treatment and/or hospitalisation, if required, are provided at Tramandai or Osorio private hospitals. Serious illness will usually be treated in Porto Alegre. Dentists are also available in Tramandai. For emergency cases (injury, etc.) TEDUT first medical aid may be requested by the Master. As usual, Agent will make such arrangements.
FUEL: Not available.
FRESH WATER: Not available.
CONSTANT READINESS: Since moorings are in open roadstead, vessel's engines and gear must be ready with full power for immediate use through the period the vessel is moored and the ship must be able to clear the mooring immediately on the advice of the Mooring Master or Superintendent of the Terminal.
Whenever necessary, vessels may use their own power to prevent riding upon the SBM.
CUSTOMS REQUIREMENTS: Brazilian laws are strict with regard to smuggling and Masters are requested to instruct their crews not to retain cigarettes in carton lots, cigars, tobacco, alcoholic drinks, drugs, souvenirs, etc. These should be collected prior to arrival, listed with the items in the slop chest and placed in the custody of the Master for deposit in the chest or closet which will then be sealed for the duration of the vessel's stay at the mooring.
By no means will any commercial transactions be tolerated, be it either among terminal employees, crew members or anyone else.
CONSULATES: No consular representatives are reported to exist in the area; however, there are consulates of most maritime nations in Porto Alegre.
TIME: Local time is GMT minus 3 hours.
GENERAL: Lighters not available. Launch connection with shore is entirely dependent on weather conditions and must be considered unreliable.
SHORE LEAVE: Not possible.
AUTHORITY: Petroleo Brasileiro, S.A.

VITORIA (including Tubarao): 20.19 S. 40.20 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Vessel approaching port should communicate with Agent through local radio station, giving date and hour of arrival at pilot station so that they can arrange for a Pilot to be at the roads on arrival. Communicate direct to Pilot Association through VHF Channel 16.
Vessels taking on or dropping Pilots outside the official limits of the port (see below) are charged extra.
ANCHORAGE: The official limits of the port are:
Vitoria: Arc of a circle of 1 mile radius, seaward, with centre at Santa Luzia Lighthouse.
Tubarao: Arc of a circle 2.5 miles radius, seaward, with centre at Tubarao South Light Beacon.
Notice of Readiness is accepted as at time the Master radios

advising vessel has anchored, SHINC, lay time starting 3 hours afterwards (subject to C/P).

No draft limitations at anchorages.

RESTRICTIONS: *Vitoria:* All sailings are to take place on a rising tide. Vessels of up to 205 m. can enter day or night.

Vessels from 205 to 240 m. can enter during daylight hours, weather permitting. Vessels of this length must be assisted by three tugs, two of which must be of at least 1,000 h.p. and the other of at least 400 h.p.

For turning in the manoeuvring basin, two tugs are required, one to be of at least 1,000 h.p. and the other of at least 400 h.p.

Tubarao: Access Channel, depth 17 m. Manoeuvring basin, depth 17 m. Protected area of basin, depth 16 m.

MAX. SIZE: *Vitoria:* 36 ft. draft at high water and 32 ft. at low water. *Tubarao:* Max. draft 50 ft. but vessels may continue loading on rising tide to a max. of 55 ft. sailing at high tide. Max. length 1,050 ft. Also see "Tankers" and "Developments".

HEALTH: Free pratique obtained by radio to Agents, addressed for "Saportos Vitoria" followed by ship's name, last port, ETA, and the letters ZT (meaning "my replies to the 6 questions on the port health declaration are negative"), and ZS (meaning "the sanitary condition of my ship is satisfactory"). Pratique is granted when this message is delivered by Agent to the port doctor. Also see "General" before first port.

The Agent may send a reply containing the group ZY, meaning "you have free pratique". In any case the time of pratique is registered as time that the ship's cable was received by the Health Authorities. This pratique does not allow the crew to go ashore until after customs clearance.

Crew vaccinations are done free.

The Port Doctor usually arrives onboard some time after the visit of Authorities and it is important to have the Health Declaration ready for handing to him by a responsible person (to avoid a fine).

RADIO: Local radio station, Vitoria Radio, call sign PPT. This radio station normally used by Agents when cabling vessels.

TUGS: Tugs join vessels at anchorage. Ship's lines used. Tugs have no lines on board. The lines given to tug-boats should be without wire as the swell usually prevailing causes severe sudden stresses on the tow lines.

Vitoria: Three tugs of 480 h.p., one tug of 1,530 h.p. and one tug of 1,600 h.p.

Tubarao: Two tugs, 1,530 h.p. and 1,600 h.p.

BERTHING: Also see "Developments".

Commercial Quay: No restrictions for vessels berthing at Nos. 4 and 5 warehouse, entrance and sailing at any stage of tide. Max. drafts are:

No. 5 warehouse – 28 ft., max. length 597 ft. 2 in.
No. 4 warehouse – 26 ft., max. length 597 ft. 2 in.
No. 3 warehouse – 24 ft., max. length 508 ft. 9 in.
No. 2 warehouse – 14 ft., max. length 393 ft. 9 in.

Vessels at Nos. 2 and 3 restricted to sail on flood tide only.

Usiminas Quay – Coal Discharge: Max. draft 35 ft., max. length 853 ft. Limited to entry only at beginning of ebb tide; sailing at any stage of tide. Discharge by two mechanical grabs, daily unloading rate, 8.400 LT.

Iron Ore Berths:

Atalaia Quay: Max. draft 36 ft., max. length 787 ft. 5 in. Vessels berth and sail on flood tide. Entering and sailing during night or day; max. length 657 ft. 10 in. during the day only, 787 ft. 5 in.

Paul Quay: Max. draft 31 ft., length (as for Atalaia). There is one loading area with a capacity of 600/900 t.p.h. depending on type of ore. Max. reach beyond quay edge, 49 ft. Max. height extremity of hook at 18 in. elevation, 52 ft. at HW, 59 ft. at LW. Width of pontoon, 14 ft.

Tubarao: *Ship Loader No. 1:* Max. height of hatch coaming above sea level 12.50 m. Max. outreach of loading boom 24 m. Nominal capacity of loader 6,000 t.p.h. Vessels max. LOA 330 m. Max. sailing draft 15.20 m. plus height of tide.

Ship Loader No. 2: Maximum height of hatch coaming above sea level 17 m. Max. outreach of loading boom 33.50 m. Nominal capacity of loader 8,000 t.p.h. Max. length 330 m. Max. sailing draft 15.20 m. plus height of tide.

CRANES: *Vitoria:* Twenty-three electric gantry cranes 1.5-12.5 tons capacity and five mobile cranes 10–30 tons capacity.

TANKERS: *Esso Terminal.* Berthing and unberthing can take place during day or night period, provided vessels draft does not exceed 22 ft. Max. length permitted 524 ft. 11 in. with max. draft of 27 ft. Vessels must enter on ebb tide and sail at high tide.

Texaco Terminal. For ships discharging for Shell, Atlantic and Texaco. Discharge handled through a common line, except for fuel oil, handled on a separate line. All lines 6 in. du. Max. pressure from shore 80 lb. producing average discharging rate of 1,500–2,000 barrels per hour. Vessels may enter or sail on any daylight tide, max. draft permitted 32 ft., max. length 597 ft.

Petrobras have quay at Tubarao, max. draft 25 ft., max. LOA 492 ft.

STEVEDORES: On ETA cable general cargo ships should include number of gangs required.

MEDICAL: No advance notice of required medical attention. Hospital facilities available.

DENSITY: Average density at Vitoria 1025. Somewhat lower during rainy season. At Tubarao the density varies from 1025 to 1028 depending on tide and weather conditions.

FRESH WATER: Fresh water available at Commercial Quay, Vitoria iron ore berths, Usiminas Quay and Esso Terminal. Rate of delivery 15 t.p.h. At Tubarao up to 50 t.p.h. No water barge available.

FUEL: *Esso Berth.* Bunkers can be taken here, supplied under gravity only.

Max. draft 27 ft., and length restricted to 164 m. Due to various factors, the taking of bunkers in Vitoria is not recommended.

Esso and Petrobras can supply Bunker "C", fuel oil and diesel oil, the last two being available by truck.

DEVELOPMENTS: *Tubarao:*

A new pier now completed parallel and inshore of the existing pier for vessels of 250,000 d.w.t. Intended max. draft 20 m. Vessels berth at seaward side only to avoid ranging. 2 shiploaders, swivelling (20 m. airdraft). Load rate 12/16,000 t.p.h. Second belt to be installed to increase load rate to 25/30,000 t.p.h. No dirty ballast facilities. Heavy fines for pollution.

Pelletising factory is producing at the rate of 2,000,000 tons per year. Two additional factories are to be constructed each to produce 3,000,000 tons per year.

A pier, depth alongside 13 m., to be constructed at Capuaba, completion expected 1976/77. Dredging has commenced at the port with planned depths as follows:

Manoeuvring basin	13.5 m.
Commercial quays	10.3 m.
Atalaya	11.0 m.
Jabour	8.5 m.
Access channel	12.5 m.
Capuala	12.5 m.

WATCHMEN: Compulsory at commercial quay in Vitoria. Not available at Tubarao or Vitoria Ore Terminals.

OPENING/CLOSING HATCHES: Normally done by stevedores except in cases of modern vessels using MacGregor hatch covers, when crew asked to close hatches.

CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes out of the bond. One bottle, wine or spirits opened, for each crew member.

REPAIRS: Deck and engine repairs available.

REPATRIATION: *Crew joining vessel:* Destination should be given as Vitoria, Espirito Santo for crew members joining vessels at Tubarao.

There are three flights daily from Rio de Janeiro to Vitoria.

AIRPORT: Airport located 8 km. from centre of town and is served by three airlines with daily flights to Rio de Janeiro, Salvador, Recife.

TIME: Local time GMT minus 3 hours. Summertime usually 1st November up to 31st March when time is GMT minus 2 hours.

HOLIDAYS: January 1st; April 21st; May 1st; September 7th and 8th; November 2nd and 15th; December 25th; Good Friday; Nossa Senhora da Penha and Corpus Christi. Only holiday when no stevedore work is possible Good Friday; exception made to iron-ore loading.

WATCHMEN: Not compulsory but available.

IDENTIFICATION CARDS: Required with photographs to enable officers and crew members to go ashore. Agents supply forms.

CONSULS: The following countries have consular representatives in Vitoria:

Great Britain	Holland	West Germany
Argentina	Italy	Portugal
Belgium	France	Uruguay
Finland	Lebanon	

POLICE/AMBULANCE/FIRE: Maritime Police 3–0173; Radio Patrol 7–0992; Ambulance 2–4646; Emergency Hospital 3–0203; Fire Brigade 3–0202.

TELEPHONES: No facilities for placing telephones on board.

AUTHORITY: Port Captain.

AGENT: Prado Agencia Maritima Ltda. Av. Governador Bley 186, salas 808/9. Telegraphic address: "Pranave" PO Box No. 1087, and "Realloyd". Tel. 3–0004, 3–2230 and 3– 348.

Brunei State

BANDAR SERI BEGAWEN: 04.53 N. 114.56 E.

Brunei State is an independent country governed by H.H. the Sultan with a Council of Ministers and Legislative Assembly, under British protection. The capital town of Bandar Seri Begawan (formerly known as Brunei Town) is situated 16 miles upriver from Muara Harbour which is at the mouth of the Brunei River. Use of the town wharf at Bandar Seri Begawan is restricted to small wooden coastal vessels operating within the Brunei Bay area not exceeding 80 ft. in length overall and 50 tons gross registered tons. The port of Bandar Seri Begawan comprises a reinforced concrete wharf 730 ft. long with a wharf apron 76 ft. wide and a passenger pier 124 ft. long with a wharf apron 63 ft. wide. Three transit godowns are provided.

MUARA PORT: 05.01 N. 115.04 E.

PORT LIMITS: The sea area within Lat. 4° 58′ N. and 5° 05′ N. and Long. 115° 03′ E. and 115° 10′ E.
DOCUMENTS:
Two Crew Lists.
Two Passenger Lists.
Two Dangerous Goods Lists.
Two Manifests.
One Health Document.
PILOTAGE: Application for Pilot 24 hours in advance by telegraph through ship's Agents. Pilot boat awaits at Beacon No. 1, Lat 5° 03.5′ N., Long. 115° 06′ E. Pilot boat painted white with green awning. If on arrival No. 1 Beacon pilot boat not visible then ships should call "Muara Port" on VHF Channel 16. Pilotage compulsory and available daylight hours only. Vessel should anchor in vicinity No. 1 Beacon awaiting Pilot.
ANCHORAGES: Safe anchorages available vicinity No. 1 Beacon, S.E. of Tanjong Sapo height (Lat. 4° 59.7′ N. Long. 115° 07.6′ E.) and in Muara Harbour.
RESTRICTIONS/MAX. SIZE: Entrance to Muara Harbour restricted to daylight hours only at present. Minimum depth in dredged channel 27 ft. ACD. Maximum length of vessel 600 ft.
RADIO: Messages to Agents through Singapore or Miri Radio.
VHF: Ports Department VHF Channels 11, 13, 14 and 16 in operation Mondays to Thursdays and Saturdays from 0730 to 1600 hrs. local time. Fridays, Sundays and Public Holidays from 0800 to 0900 hrs. and 1300 to 1400 hrs. local time. Call sign "Muara Port".
RADAR: No port radar service available.
TUGS: No tugs normally available.
BERTHING: Marginal wharf 1,400 ft. long with depth 30 ft. ACD alongside. Mobile shore cranes available up to 30 tons capacity.
STEVEDORES: Provided by ship's Agents from private mandores. Major commodities general cargo and cement, oil well cement and tubulars.
MEDICAL: Hospital available 16 miles distant from port. Port Health Clinic outside port main gate.
DENSITY: Salt water.
FRESH WATER: Readily available at wharf, cost Brunei $4 per 1,000 gallons.
FUEL: Not available.
CONSULS: There is a British High Commissioner in the town of Bandar Seri Begawan 16 miles distant from the port.
REPAIRS: Minor deck and engine room repairs possible.
DRY DOCKS: None.
SURVEYORS: Lloyds and American Bureau are represented.
GANGWAY/DECK WATCHMEN: Not available or compulsory.
HATCHES: Opening and closing by crew or stevedores at ship's option.
CARGO GEAR: Loading/discharging effected by ship's gear.
REPATRIATION: There is no Shipping Office but ship's articles are countersigned by the Director of Marine on request.
AIRPORT: International airport 12 miles distant from port. Regular services to Singapore, Hong Kong, Manila and direct flights once weekly to United Kingdom.
TIME: Local time is GMT plus eight hours. No alterations in clocks throughout year.
POLICE/AMBULANCE/FIRE: Police 333. Ambulance 9.2366. Fire 255.
TELEPHONES: No telephones placed on board.
SERVICES: Diver available.
SHORE LEAVE/IDENTIFICATION CARDS: After clearance inwards Crew members are allowed ashore if in possession of discharge book, identity card or passport.
HOLIDAYS: Hari Raya Puasa, Hari Raya Haji, Chinese New Year (all dates moveable) Christmas Day. Work can usually be arranged on all holidays with exception of Chinese New Year when direct delivery to vehicles only available.
AUTHORITY: Controller of Ports, Ports Department, Muara, State of Brunei.

SERIA, Brunei: 04.43 N. 114.19 E. **(See Plan)**

SHIPMASTER'S REPORT

LOCATION: SBM in position Lat. 04° 42′ 50″ N., Long. 114° 18′ 54″ E.
DOCUMENTS:
International Maritime Declaration of Health.
6 copies of Crew List.
4 copies Crew Vaccination List.
Clearance from last port.
If vessel is stemmed for Japan, 6 extra copies of Crew Lists are required from non-Japanese flag vessels.
PILOTAGE: Compulsory. Berthing possible day and night, any stage of tide. The berthing Master will board incoming vessels about 2 miles N.N.W. of the SBM. Masters are requested to provide a good lee for launch to facilitate the boarding of the berthing Master and lifting on board of mooring equipment.
Derrick to be rigged and topped on starboard side prior to arrival. The pilot ladder should be rigged well aft on the starboard side. The accommodation ladder is not required.
ANCHORAGE: A tanker anchorage is located approximately 3 miles North of the SBM. In the area contained by the following limits: Lat. 04° 45′ N. and 04° 47′ N., Long. 114° 17′ E. and 114° 19′ E. Controlling depth is 80 ft. at MLW, mean tidal range 6 ft., velocity of current 0.5-1 knot. Nature of bottom is mud.
MAX. SIZE: Max. d.w.t. 200,000 tons. Draft 65 ft.
PRATIQUE: Available day and night. Immigration and Customs do not board. A detailed shipping report has to be completed for the Government Marine Department. Agent will provide the forms for completion.
If the vessel arrives from an infected port or its state of health is suspect, the Medical Officer may board in order to inspect crew and relevant international medical certificates.
RADIO: Confirm ETA at least 48 hours in advance also declaring Bill of Health and Quantity of Cargo required. W/T traffic should be passed through Singapore Radio, and addressed to Agent. When within range, vessels are requested to make direct W/T contact with Brunei Shell Petroleum Company (call signal BSP ONE) at the following local times (GMT plus 8 hours) 1000 hrs., 1400 hrs., 1800 hrs. B.S.P. will transmit on 8558 kHz call signal BSP ONE and listen out on 8354 to 8374 kHz. When contact is made on this frequency a standard information cable will be transmitted to the ship. Accurate ETA's are very important as mooring launches may be required to put to sea as much as 12 hours before a vessel is expected. A VHF station at Seria (call signal BSP ONE) maintains a continuous watch on Channel 16 with Channel 19 as a working channel. Contact with this station also can be made on Shell Private Channel, transmitting on 162.9 mHz, receiving on 158.3 mHz.
Standard Information Cable to Incoming Tankers from Station BSP-1

TO: Master S.S./M.V. .....
You will be berthed on arrival/delay of..... hours expected before berthing due awaiting berth/shortage of cargo.
Our instructions from London are to load you with full/part cargo Seria Light Crude tons..... destination .....A.P.I. ..... Loading Temperature .....degrees Fahrenheit Max. loading rate 5,000 t.p.h. vessel moored to single buoy mooring. On arrival have 5 ton derrick rigged and topped starboard side for lifting mooring equipment and connecting 2×12″ hoses. Mooring to buoy is with 2 lines provided by terminal. You should have rope messenger available on Forecastle. Mooring and hose connection is by ship's crew. Contact BSP ONE on VHF Channel 16 approx. 40 miles range and advise your ETA. Please acknowledge. BRUNSHELL

TUGS: None available.
MEDICAL: Doctor available.
TANKERS: *Berth:* A single buoy mooring with two 645 ft. floating hose strings. Each hose string consists of 16 in. hoses terminated by a 16 in. flange for connection to the vessels manifold. We used a 16 to 12 in. shore reducer.
Mooring: two 15 in. circumference 110 ft. nylon mooring lines from the buoy are secured on the forecastle head, using equipment provided by the terminal. A suitable rope messenger should be ready for use, preferably a standard mooring rope. Mooring is carried out by ship's crew.
Hose connection: Starboard side amidships. Hose derrick should be rigged and topped to lift least 8 tons and vessel to have appropriate reducers fitted for connecting two 16 in. manifold hoses. Hose connecting is carried out by the vessel's crew.
Shoreline: The submarine pipe-line is 32 in. diameter and 30,000 ft. in length.
Loading rate: The maximum loading rate of Seria light crude is 4500–5000 t.p.h. (approx. A.P.I. 39.4).
There are no facilities available for dirty ballast. Vessels must arrive with clean ballast, lines and pumps. The controlling depth at the berth is 73 ft. at MLW, tidal range 6 ft., velocity of current 0.5 to 1 knot and the nature of the bottom is mud.
DENSITY: 1020–1025.
FRESH WATER: Not available.
FUEL: Not available at Seria, may be obtained at Lutong (Miri).
REPAIRS: Small emergency repairs may be carried out in Brunei Shell Petroleum company workshops.
SERVICES: Stores, laundry services and shore steam not available.
TIME: GMT plus 8 hours.
REGULATIONS: Smoking is permitted only in places jointly approved by Master and Mooring Master. No smoking allowed on the open decks. Galley fires allowed if of approved type.
The Brunei National flag should be flown during hours of daylight. The vessel's radio station must not be used whilst at the SBM. Vessels are not permitted to immobilise main engines whilst at the berth.
GENERAL: Ship to shore communication during loading is by portable R/T. No shore leave. Shore personnel remain on board during loading operations.

TANJONG SALIRONG: 04.53 N. 115.06 E.

The log-loading anchorage at Tanjong Salirong is situated 12 miles above the Outer Bar at the mouth of the Brunei River. Vessels of up to 21 ft. draft may cross the bar at high water.

DOCUMENTS: *(a)* To be produced on arrival:
Marine Department
Boarding Report.
1 Crew List.
1 Passenger List.
Customs Department
2 Inward Manifests.
1 Crew List.
1 Passenger List.
1 Port Clearance.
1 Stores List.
1 Arms List.
Agents
2 Inward Manifests.
1 Crew List.
1 Passenger List.
2 Hatch Lists.
1 Arms List.

(b) To be supplied before ship's departure:
Customs Department
1 Outward Manifest.
1 Passenger List.
1 Crew List.
1 Export Declaration.
Immigration Department
1 Passenger List.
2 Crew Lists.
Vessels
2 Outward Manifests.
Port Clearance.

PILOTAGE: *Bandar Seri Begawan:* Pilotage is not compulsory. If a Pilot is required by a vessel proceeding to Bandar Seri Begawan a written request must be made at least 24 hours before ship is scheduled to arrive. This must include position where Pilot is required to embark (i.e. at Outer Bar or Sapo Point).
Muara Harbour: Pilotage is compulsory. Application for a Pilot for entering Muara Harbour must be made by written request at least 24 hours before arrival. Pilots board vessels in Brunei Bay at the Northern end of the entrance channel through Pelompong Spit.
Tanjong Salirong: Pilotage is not compulsory. If a Pilot is required for vessels loading logs at Tanjong Salirong then application must be made 24 hours in advance of arrival stating position where it is required for Pilot to embark (i.e. at Outer Bar or Sapo Point). A Customs Officer and Agent's clerk will proceed to Tanjong Salirong from Muara Harbour or Bandar Seri Begawan and will remain on board whilst vessel is loading, accommodation and food provided by ship. Stevedores and tally clerks provide their own food.
ANCHORAGE: Vessels entering Muara Harbour without berthing space will be anchored 5 cables S.S.W. of wharf. If so desired ships may discharge perishable cargo at anchorage into lighters. Consignees must make arrangements with Agent to obtain permission from Customs, who will provide a Customs Officer to attend to discharge.
HEALTH: *(a)* Immigration: Immigration Officer will board vessel and clear her inward after pratique granted by Port Health Authority. Immigration will require 2 copies of passenger lists and 2 copies of crew list. Vessels inward are cleared up to 2000 hrs. only.
(b) Quarantine: For vessels coming from outside State of Brunei, Port Health Authority will board on arrival at wharf or anchorage. Port Health Authority requires complete copy of Entry Declaration of Health and copies of passenger and crew lists.
STEVEDORES: Stevedoring is in the hands of contractors who supply gangs as required. Working hours are 0730 hrs. to 1215 hrs., 1315 hrs. to 1600 hrs., 1900 to 2300 hrs. (overtime). Overtime is usually worked from 1900 to 2300 hrs., permission to work overtime is required from the Customs Department. No tally clerks available. All tallies to be made by ship's own tally clerks.
MEDICAL: Government General Hospital is situated in Bandar Seri Begawan 16 miles from Muara Harbour. General Hospital is well equipped with facilities to carry out normal surgery. Inoculations and vaccinations given free of charge.
FRESH WATER: Can be supplied from the wharf at Muara Harbour and Bandar Seri Begawan. No fresh water is supplied at Tanjong Salirong. No water-boat in State.
FIRE PRECAUTIONS: Fire-floats are stationed at Fire Brigade sub-station near Customs sub-station in Bandar Seri Begawan. No fire-floats at Muara Harbour.
CONSULS: British High Commission: Jalan Residency, tel. 2231.
HOLIDAYS: The Brunei Government working days are Monday to Thursday and Saturday. Friday and Sunday being holidays. Application must be made to Customs for working on Friday and Sunday and other public holidays. Brunei being a Muslim State, insists on strict observation of all Muslim rites such as The Sultan's Birthday, Har Raya Puasa, Hari Raya Haji, etc. Chinese New Year is also observed.
POLICE/AMBULANCE/FIRE: General Hospital, Jalan Stoney, Bandar Seri Begawan, office tel. 3521; residence tel. 2422. Police HQ, Jalan Gadong, Bandar Seri Begawan, office tel. 3901; residence tel. 3901 Ex. 245. Fire Brigade, Muara, tel. 8755, Bandar Seri Begawan, tel. 2555; residence tel. 2772.

AUTHORITY: The Director of Marine. Bandar Seri Begawan.
AGENT: Harrisons and Crosfield (Sabah) Sdn. Bhd., Bandar Seri Begawan. Telegraphic address: "Crosfield", tel. 2361, 3011. Manager's residence tel. 2220. Code Bentley's second phase.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Bulgaria

BOURGAS (including Drujba): 42.30 N. 27.29 E.

Well protected port at inner-end of Bourgas Bay, with good roads, anchorage.

DOCUMENTS:
Master's Declaration.
Cargo Plan.
Customs Manifest.
Bill of Health.
Health Condition Certificates of crew members.
Manifest and consignment of cargo.
Provision List.
Crew List.
Passenger List.

PILOTAGE: Pilotage in Inner Roads compulsory for vessels above 100 g.r.t.

Application for Inner Roads Pilot must be made to Agents "Inflot" at least two hours prior arrival. (If incorrect ETA given – pilotage fee doubled.)

Outer Roads pilotage not compulsory. Vessels requiring Outer Roads pilotage must advise Agents "Inflot" at least 12 hours before time pilotage required and give position of required pick-up point.

Applications for Pilot should include Nationality and call letters; gross tonnage; date (2 figures); Time (4 figures) when Pilot required; Draft in metres (4 figures).

APPROACHES: Through fairway, depth of channel 29 ft. L.W.

ANCHORAGE: Outer Roads. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp.

RESTRICTIONS: Arrival and sailing from oil port of Drujba and fish port of Slavianka permitted only in daylight.

RADIO: Bourgas – 500 KNC.

TUGS: Available and compulsory for vessels over 1,000 g.r.t. Tug's lines used.

BERTHING: Compulsory berthing for vessels over 50 g.r.t. (Between 1800 and 0600 hrs. – mooring fee increased 50%.) Container handling facilities available.

STEVEDORES: Available to work day and night.

RADAR/VHF: None.

MEDICAL: Hospital and dispensary available.

TANKERS: Oil port Drujba. Permissible draft 33 ft. Height of quay 2 m. No slop discharge facilities.

DENSITY: 1017.

FRESH WATER: From S.E.E. "Balkanstrans", tel. 45751. Available through hose hydrants or ex-barge. 24 hours notice required.

FUEL: From S.E.E. "Balkanstrans", tel. 45751. 72 hours notice diesel, and gas oil available. Shell and Castrol lubricants available.

FIRE PRECAUTIONS: Constant day and night duty, and direct telephone connection with port fire service.

GANGWAY/DECK WATCHMEN: Vessels in Roads not permitted to have gangways down. Vessels alongside quay with lowered gangway must have manropes, safety-net, life-buoys with rope of at least 30 m. length attached, an officer on duty at the gangway and must be lit at night.

OPENING/CLOSING HATCHES: Accordance charter party.

CERTIFICATES:

Construction.	Hull and Machinery.
Safety Radio.	Load-line.
Classification.	Cargo Gear.

CUSTOMS ALLOWANCES: Tobacco – 2 packets per crew member per day. Wines/spirits – for Master, as required; for crew – one opened bottle.

IDENTIFICATION CARDS: Required.

CONSULS: Turkish.

REPAIRS: Small repairs only.

DRY DOCKS: A floating dock, lifting capacity 4,500 tons available.

REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is impossible.

AIRPORT: Connections with Berlin, Prague, Budapest, Bucharest, Warsaw, London, Copenhagen, Vienna.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year (1st January); May Day (1st/2nd May); Day of Slav written language (24th May); Day of Freedom (9th/10th September); October Revolution (7th November). Time from 1300 hrs. on day before Sundays and holidays until 0800 hrs. day after is non-working time but loading and discharging carried out at overtime rates.

TELEPHONES: Captain of the Port, 431–40; Pilots, 420–90/49, 423–52/49; Soviet Shipping Register, 454–34; Bulgarian Shipping Register, 471–32; Shipping Agency "Inflot", 455–06, 28–79; Military Office, 426–84; Ambulance, Fire 05.

SHORE LEAVE: Allowed. With permission of CPP, and seaman's book. Transport from Roads by motor boat according to timetable of Shipping Administration.

REGULATIONS: Given to Master on arrival.

DELAYS: Possible while waiting for Pilot owing to bad weather or waiting turn for berth.

SHIPMASTER'S REPORT (Vessel 107,023 d.w.t.).

Danger Area: Minefield area 43, see Nemedri.

Documents:
Bill of Health.
6 Crew Lists.
3 Stores Lists.
3 Personal effects Lists.
Ship's documents (Register, Certificates, etc.).
No money list required.

Upon arrival Master receives Port Regulations (re: watchmen, ratguards, stoppage of propeller, waste disposal, pollution, etc.).

Radio: Bourgas Radio, port control VHF Channels 16 and 10; Pilots VHF Channel 14.

Density: Average 1012.

Identification Cards: Crew members are given shore passes and are allowed ashore until midnight. Persons with long hair are refused passes.

Custom Allowances: No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.

Repatriation: No difficulties.

Airport: Daily flights to Sofia with connecting international flights.

Tugs: Four available.

Anchorage: Vessel ordered by authorities to proceed to position 43.39 N. 27.56 E. for clearance and Pilot. After clearance vessel proceeded to 42.40 N. 27.49 E. for lightening.

Lightening: Vessel required to be lightened to 39 ft. Tankers come alongside; they carry good rubber fenders and one 10-in. discharge hose. Discharge rate varies from 1,500–1,800 t.p.h. according to tanker's requirements.

Berthing: At the SW corner of the bay. There are two "T" shaped berths, max. depth 40 ft. Each berth consists of 3 platforms connected by a catwalk. Length of berth used was 125 m.There are mooring dolphins but the length of vessel is 259 m. so all lines were breast ropes and springs.

Discharging: Two 8-in. hoses are connected to the pipe-line on the catwalk. Discharge rate, 1,800 to 2,000 t.p.h. depending on the back pressure. The height limit of the hoses is about 54 ft. above sea-level. Vessels are required to ballast if necessary before reaching this level. The Berth is protected from the prevailing N.E. wind.

Dardanelles Entrance: (Canakkale, Turkey) Pilot station is at Seddulbahir. Call sign "Canakkale Pilot" VHF Channel 16. During Southerly gales Pilot boards close to Kanakkale Town.

Bosporus: North entrance, pilot station at Kavagi, Pilot boards off Dikilikaya Light. Call Pilot on VHF Channel 16.

AUTHORITY: Region Port Administration, Bourgas.

AGENT: "Inflot", Bourgas. Tel. 455–06, 428.79.

VARNA: 43.12 N. 27.57 E.

Well-protected port at inner-end of Varna Bay.

DOCUMENTS:
Master's Declaration.
Cargo Plan.
Customs Manifest.
Charter Party.
Disinfection Certificate.
Health Condition Certificate for crew members.
Manifest and consignment of cargo.
Provision List.
Crew List.
Passenger List.
Crew passports (Seaman's Books).

PILOTAGE: Pilotage in Inner Roads compulsory, but not compulsory for Outer Roads. Vessels requiring pilotage at Outer Roads must radio Agents "Inflot" 24 and 8 hours prior arrival giving position of required pick-up point, also: name of vessel, nationality and call letters, GRT, length, draft in m. (4 figures), date (2 figures), time (4 figures).

Pilot comes from inside Port of Varna (there are no permanent pilot stations at Capes Emine or Caliacra). In bad weather impossible for pilot boat to reach Outer Roads and vessel will be so informed by Agents "Inflot" and instructed to proceed anchorage in Varna Bay.

Pilot boat is patrol boat with yellow funnel and letter "P". Carries international recognition signals by day and night.

APPROACHES: Through fairway, depth of channel 39 ft.

ANCHORAGES: Outer Roads in area East of meridian 27.56 E., beyond fairways. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp.

RESTRICTIONS: Entering and leaving oil quay, ship repairing plant and lake permitted only in daytime.

RADIO: Radio Varna LZW – 500 kHz. LZW_4 – send 8607 kHz, receives 8447 kHz. LZW_5 – sends 13078 kHz, receives 12612 kHz.

TUGS: Compulsory for vessels over 1,000 g.r.t. Tug's lines used.

BERTHING: Compulsory berthing for vessels over 50 g.r.t. Depths at quays up to 39 ft.

BRIDGES: When proceeding to and from Varna lake, vessel passes under Asparuhov bridge. Bridge is raised to 70°. Use of Pilot, tugs, and patrol boat obligatory. Max. size of ship passing under bridge: length 126 m., draft 7 m.

STEVEDORES: Liner ships and chartered vessels on liner terms are obliged to use stevedore and tallyman service.

MEDICAL: All facilities available. Attendance to urgent cases given free of charge.

TANKERS: Discharge berths only. Drafts 29 ft. and 18 ft.

DENSITY: 1013.

FRESH WATER: Available through shore hydrants or ex-barge. 24 hrs. notice required.

FUEL: From S.E.E. "Ship Bunkering", tel. 2.29.27; N. J. Vaptqarov. str. No. 3, 72 hours notice required, Bunker "C", diesel, and gas oil available. Lubricants: Shell and Castrol – 48 hours notice required.

FIRE PRECAUTIONS: Assistance obtainable from shore hydrants, town fire brigade and water cannons on tugs.

GANGWAY/DECK WATCHMEN: Vessels in Roads not permitted to have gangways down. Vessels alongside quay with lowered gangway must have manropes, safety-net, life-buoys with rope of at least 30 m. length attached, an officer on duty at the gangway, and must be lit at night.
OPENING/CLOSING HATCHES: To be performed by crew on initial commencement and final completion of cargo work. During work periods in port, performed by stevedores.
CERTIFICATES:
Construction.
Safety Radio.
Classification.
Hull and Machinery.
Load-line.
Cargo gear.
CUSTOMS ALLOWANCES: Tobacco – 2 packets per crew member per day. Wine/spirits – for Master, as required; for crew – one opened bottle.
IDENTIFICATION CARDS: Required.
CONSULS: U.S.S.R. and D.D.R.
REPAIRS: All manner of repairs possible in ship-repair plant. Tel. 2.27.01 and 2.35.48/49.
DRY DOCKS: Suitable for vessels up to 30,000 d.w.t.
REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is impossible.
AIRPORT: Connections with Berlin, Prague, Budapest, Bucharest, Warsaw, London, Copenhagen, Vienna.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year (1st January); May Day (1st/2nd May); Day of Slav written language (24th May); Day of Freedom (9th/10th September); October Revolution (7th November). Time from 1300 hrs. on day before Sundays and holidays until 0800 hrs. day after is non-working time, but loading and discharging carried out at overtime rates.
SERVICES: Tank cleaning and removal of sludge. Compass adjusting.
TELEPHONES: No facilities for connection on board.
Captain of he Port, 2.23.72; Pilots, 2.27.21,2,3/292/; Custom House, 2.23.87; Lloyd representative, 2.26.21,2,3/395/; Soviet Register, 2.26.51; Bulgarian Shipping Register, 2.41.21; Inflot, 2.26.69; 2.26.36; Military office, 2.27.21,2,3/236/; Ambulance, 2.27.21,2,3/213/; Fire, 2.27.21,2,3/222/.
SHORE LEAVE: Permitted day and night except that all crew to be back aboard at 0500 hrs. – but may then go ashore again at 0505 hrs.
REGULATIONS: Given to Master on arrival.
DELAYS: Possible whilst waiting for Pilot owing to bad weather, or waiting turn for berth.
AGENT: "Inflot" State Shipping Agency. Cables: "Bolinflot", Telex: 021516.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Burma

RANGOON: 16.47 N. 96.15 E.

DOCUMENTS:
Ship's Register.
Crew and Passenger List.
Dangerous Cargo List, if any.
Customs Declaration for Crew and Ship.

PILOTAGE: Compulsory. The services of Assistant Harbour Masters are required to bring ships alongside.

Vessels bound for the port of Rangoon should make for the *Dagon* lightvessel (China Bakir) Lat. 15° 59.9′ N., Long. 96° 14.5′ E. and then proceed towards *Lanthaya* lightvessel. Vessels of 26 ft. draft and over should anchor off *Dagon* lightvessel due to insufficiency of depths at the pilot station at low water, and await instructions from the pilot vessel for embarking Pilot.

Vessels below 26 ft. draft may proceed direct to the pilot vessel for embarkation of Pilot.

The pilot vessel or its relief is normally cruising or anchored at Lat. 16° 11.0′ N., Long. 96° 19.6′ E. approximately 10 miles North of *Dagon* light vessel and 42 miles from the Port of Rangoon.

ANCHORAGES: Specific areas of the port are reserved for special anchorages as follows:

(a) *Petroleum Anchorage* at Liffey Reach just below Syriam, accommodating two vessels.
(b) *Explosives Anchorage* below Admiralty Jetty near Chokey Point.
(c) *Small Craft Anchorage* at King's Bank accommodating 20 inland vessels and schooners, etc.

ETA: Forty-eight hours advance notice of ETA required, confirmation to be made 24 hours later or one working day ahead of the ship's ETA to enable necessary arrangements to be made regarding Pilots. Information required in the advance notice are: *(a)* ETA, *(b)* Draft, *(c)* Speed, *(d)* Gross tonnage, *(e)* Length OA.

RESTRICTIONS: Generally on a flood tide between the time of low water to high water at the pilot station, depending on ship's actual draft and speed in order to obtain sufficient depths at the Outer Bar.

Navigation day and night during river passage, but entry into Inner Harbour is normally restricted to daylight hours.

The Master Attendant regularly issues Draft Forecasts to all steamer Agents advising them of the drafts to be obtained within the next 2 months.

MAX. SIZE: The port is accessible to vessel of 540 ft. length OA, and draft up to 28 ft. at Spring tides. The draft of the vessel entering the river is controlled by the depth available at the Outer Bar, carrying 11 ft. depth at datum. Entry into the harbour is controlled by the Inner Bar off Monkey Point, carrying from 11 ft. to 12 ft. depth at datum. These depths are subject to seasonal variations and are least during the dry season from November to May.

HEALTH:

(a) Maritime Declaration of Health signed by the Master and also by a Ship's Surgeon if one is available.
(b) Valid Derating or Derating Exemption Certificate.
(c) Valid Vaccination Certificates against cholera and smallpox of crew and passengers (if a certified list of date of expiry of these Certificates is available, the issue of pratique will be expedited).
(d) Pratique is issued by the Medical Officer on duty, after examination of the crew and passengers of the ship. The pratique is automatic if the vessel arrives after touching other ports in the country. NO RADIO PRATIQUE IS ISSUED.
(e) Quarantine Clearance on sailing is essential.

RADIO: International single operator watch period for zone "C". Assigned frequencies are 425, 454, 468, 512, 500 kc/s. and 2.8, 4.26 mc/s, call sign XYCZ.

In cases of inability to contact the pilot vessel by wireless the Master should send cable to the Harbour Master "Portrust" via Rangoon Radio Station, call sign XYR.

Within harbour limits contact can be made with Port Tower by light visual signalling. VHF contact can also be made with Port Tower, call sign XYU, Channel 16 (calling frequency). The working frequencies are Channels 14, 12 and 6 (Hague Convention).

TUGS: Generally not used for mooring and berthing purposes, but available in emergency.

BERTHING: There are eleven wharf berths and two pontoon berths for seagoing vessels:

Rice Loading Berths:

(a) *Sule Pagoda Wharf*, Berths No. 1 & 2 accommodating two vessels of 450 ft. each. LWOST varies from 24 ft. to 28 ft. approx.

(b) *Ahlone Wharf*, length 440 ft. accommodating a vessel of 440 ft. LWOST varies from 26 ft. to 28 ft. approx.

(c) *Hteedan No. 1*, length 456 ft. accommodating a vessel of 460 ft. LWOST varies from 26 ft. to 30 ft. approx.

General Cargo Berths:

Sule Pagoda Wharf Berths Nos. 3, 4, 5, 6 and 7 accommodating five vessels ranging from 450 ft. to 520 ft. LWOST varies from 24 ft. to 30 ft. approx. Berth Nos. 3 and 4 are generally reserved for coastal vessels.

Timber Export Berths:

Brooking Street Wharf: Berths Nos. 1 and 2, accommodating two vessels of 450 ft. each. LWOST varies from 26 ft. to 29 ft. approx.

Passenger Berth:

The Port Health Station. A Pontoon Jetty equipped with a large floating pontoon 500 ft. length and accommodating vessels of 520 ft. to 595 ft. LWOST varies from 25 ft. to 28 ft.

Moorings:

The port is equipped with 13 swinging moorings and two sets of fixed moorings in the Inner Harbour; three swinging mooring buoys at Hastings, and two fixed moorings for Oil Tankers. In addition, a number of mooring buoys are provided for small sized seagoing vessels.

Mooring and Berthing Procedure:

While in port, ships tie alongside wharves or moorings. The procedure is as follows:

(a) *Single Buoy Mooring* – Vessels moored with ships' own cable which is led through hawse pipe and shackled on to buoy cable. The shackle is provided by the Board.

(b) *Fixed Mooring* – Same procedure as above but the vessel is moored to four buoys.

(c) *Berthing* – Normal ship's ropes and wires are used for berthing at wharves. In addition wharves' mooring chains are also provided for securing to ship's bollards.

FUEL: Fuel, diesel and gas oil (HSD) from Myanma Oil Corporation. Fuel oil provided by barges of 150 to 180 tons capacity alongside vessel during daylight hours. Coal supplied by Government Trade Corporation No. 17.

FRESH WATER: Available either directly alongside the wharves or in midstream, delivered by water boats.

CARGO HANDLING EQUIPMENT: The heaviest lifting capacity of the port is a 40-ton crane at the Brooking Street Wharf.

Heavy packages may be landed or shipped by a vessel's own tackle at the wharves subject to prior notice being given to the Traffic Manager.

STEVEDORES: In two shifts of 0800 hrs. to 1600 hrs., and 2000 hrs. to 0400 hrs. Overtime work is arranged on special request from Agents. Stevedoring undertaken by Port Authority. To enable ship's Agents to order labour gangs in time, it is important to obtain in advance the accurate ETA of vessels. Latest time to order gangs is 1100 hrs. for booking for that night and the next day. For Sundays and Holidays bookings must be made before 1100 hrs. of the preceding working day.

GANGWAY/DECK WATCHMEN: Available on application to the Traffic Manager.

The working hours of a watchman are the same as the wharf working hours.

OPENING/CLOSING HATCHES: Undertaken by port labour.

REPAIRS: Deep-sea repairs are undertaken by Board's engineers. The "Setsan Dry Dock", a tidal dock owned by the Board, can take vessels up to 1,000 tons and 250 ft. in length.

The Sinmalaik Dry Dock can take vessels up to 2,000 tons and 300 ft. in length.

FIRE PRECAUTIONS: A special land-based Port Fire Brigade is maintained by the Port Authority supplemented by a fire-fighting vessel and tugs for emergencies in the river.

CONSULS: The following countries are represented by consulates or embassies at Rangoon:

Australia
Belgium
Bulgaria
Cambodia
Ceylon
China
Czechoslovakia
France
Fed. Republic of Germany
German Democr. Republic
Hungary
India
Indonesia
Israel
Japan
People's Rep. of Korea
Republic of Korea
Malaysia
Nepal
Norway
Pakistan
Philippines
Poland
Thailand
U.S.S.R.
United Arab Republic
Great Britain
Vietnam
Yugoslavia

POLICE/AMBULANCE/FIRE: Port Police 14520; Ambulance 008; Port Fire Brigade 18653.

TELEPHONES: Ship to shore telephones are available on request.

HOLIDAYS: Independence Day; Karen New Year; Union Day; Peasant's Day; Full moon of Tabaung; Resistance Day; Thingyan; Burmese New Year; Labour Day; Full moon of Kason; Full moon of Wazo; Martyr's Day; Thadingyut; Dewali; Tazaungdaing; National Day; Christmas.

Ships may work on Sundays and holidays on application to the Traffic Manager and on payment of Sunday or holiday fees.

AUTHORITY: Board of Management for the Port of Rangoon.

Cameroon Republic

DOUALA: 04.00 N. 09.40 E.
TIKO: 04.00 N. 09.24 E.
VICTORIA: 04.01 N. 09.13 E.
KRIBI: 02.56 N. 09.54 E.

DOCUMENTS:
5 Crew Lists.
5 Lists of Port of Call.
5 Passengers' Lists.
2 Crew Customs Declarations.
2 Declaration of Provisions on Board.
1 Arms and Ammunition.

PILOTAGE: (With the exception of Kribi and Victoria where ships work cargo at anchorage); Compulsory at Douala and Tiko. Ship's arrival must be notified at least 24 hrs. in advance. This must be confirmed.

For Douala waiting anchorage at base buoy (3° 54.1′ N. 9° 32.2′ E.). Pilot called by phone (21–82) or by VHF (16–14). For entry of Tiko waiting is at Victoria anchorage.

ANCHORAGE: Base buoy for entry at Douala (see "Pilotage") 12 m. depth approx. For Victoria anchorage on roads in Bay Ambas about 9 m. depth. Anchorage for Tiko on the Bimbia. Kribi anchorage by red conical buoy (02° 56′ 35″ N. 09° 53″ E.) depth 6.30 m. to 7 m.

RESTRICTIONS: Draft only, for ports of Douala and Tiko. For Wouri Channel official level is 4.80 m.

MAX. SIZE: At Kribi and Victoria anchorage, no restrictions. Douala max. length 200 m. Draft varies from 6.60 m. to 7.40 m. At Tiko there is only one pier of 150 m. the depth is between 5.50 m. and 5.80 m.

HEALTH: Free pratique granted after compulsory checking of vaccination certificates against yellow fever and smallpox. Health Officials hand the Master a special Health form to fill in.

RADIO: (See "Pilotage"). Douala Radio Station limited to broadcasting of news bulletins for private individuals which are communicated to the station on the spot. VHF Channels 16 and 14.

For vessels arriving at Douala, Masters should send a message to their Agent at least 48 hours prior to arrival, giving the following information. (1) ETA at base buoy (given in local time). (2) Cargo tonnage for discharge, and hatch distribution. (3) Number of gangs required. (4) Vessel's draft. (5) Any other requirements, e.g. money, medical attendance, etc.

For vessels arriving on a Sunday or Holiday Agents must be informed by 1100 hrs., the day before arrival, if overtime work is required. If night work is required by vessels arriving in the afternoon or evening, the Agent must be informed by 1700 hrs. the day before arrival. It is also advisable to telex all information from the last port of call as Douala Radio Station can be difficult to contact.

TUGS: One tug, 880 h.p. Obtained on demand to Tugs Union of Douala. Towage is optional and subject to Pilot's advice.

BERTHING: For Douala there are 11 berths equal to length of 1,675 m. approximately.

Two of these berths have priority berthing for mailboats, Alumine carriers and occasionally tankers. There is a berth consisting of two piles in the river used for oil discharge. All the berths have a depth alongside of 7.5 m. at LW.

Another berth on the right bank at Bonaberi, 150 m. long, mainly used by banana cargoes and butane tankers.

STEVEDORES: Number of stevedore gangs is requested from Charterer's Agents, taking into account size of cargo.

MEDICAL: An appropriate Medical Service can be set up on demand in case of an emergency, such as an epidemic on board.

TANKERS: At Douala Harbour a berth of 153 m. approximately and draft 6.60 m. This berth can accommodate oil tankers of 12,000 tons. No slop discharge. See "Shipmaster's Report".

DENSITY: 1012.

FRESH WATER: Available at berth; supplied by hoses at 20 t.p.h.

FUEL: Supplies arranged by Charterer's Agent who have their particular suppliers.

FIRE PRECAUTIONS: In addition to the usual measures, the quay station for oil tankers is isolated during discharging, and there is also a watch by tugs.

GANGWAY/DECK WATCHMEN: Ship's crew or arranged by Charterer's Agents.

OPENING/CLOSING HATCHES: At option of Master.

CERTIFICATES: Safety, Radio, Sea-worthiness, Freeboard, Derricks, etc.

CUSTOMS ALLOWANCE: 1,000 cigarettes per person, two bottles of spirits per person.

IDENTITY CARDS: A check could be made inside the harbour area as well as in town.

CONSULS: At Douala.
Germany, P.O. Box 1127. Tel. 47–09
Austria, P.O. Box 4017. Tel. 34–52
Belgium, P.O. Box 263. Tel. 44–25
Denmark, P.O Box 215. Tel. 38–76
Spain, P.O. Box 352. Tel. 49–23
U.S.A., P.O. Box 4006. Tel. 40–93
Finland, P.O. Box 98. Tel. 44–50
France, P.O. Box 5365. Tel. 48–79
U.K., P.O. Box 5348. Tel. 34–78
Greece, P.O. Box 4009. Tel. 47–91
Italy, P.O. Box 4015. Tel. 36–35
Lebanon, P.O. Box 5447. Tel. 36–35
Norway, P.O. Box 320. Tel. 31–02
Netherlands, P.O. Box 159. Tel. 33–83
Sweden, P.O. Box 320. Tel. 31–02

AIRPORT: Situated about 3 km. from Douala. Regular international airlines during whole year.

TIME: Local time GMT plus 1. No change during year.

HOLIDAYS: Official holidays: Independence Day (1st January); Youth Day (11th February); Labour Day (1st May); Reunification Day (1st October); Human Rights Day (10th December). Religious Holidays: Easter Monday; Ascension Day; Whit Monday; Assumption (15th December); All Saints Day (1st November); Christmas; End of Ramadan; Festival of the Sheep.

POLICE/AMBULANCE/FIRE: Central Police Station 42–22; Ambulance (Laquintinis Hospital) 48–84; Fire Brigade 32–32.

TELEPHONES: No possibility of telephone connection on board.

SERVICES: Deratisation and fumigation.

SHORE-LEAVE: Permitted.

SHIPMASTER'S REPORT:

Developments: Tanker berth (2 dolphins) is now in use. Tankers moor with 3 head and stern lines on mooring buoys, 1 breast line on another buoy and the springs on the dolphins (4 buoys altogether).

Three connections: 8 in. for white products. About 250–300 t.p.h. for these products. Bunkers can be supplied on this berth but are not always available.

Restrictions: Max. allowable draft depends on the state of the tide and the season (dry or rain).

According to information received 23 ft. is the maximum at this moment. With this draft a ship can pass safely from seabuoy to base buoy on any state of the tide.

Sailing from the tanker berth: subject draft, always on flood tide, between 2 hours before HW and LW, sailing/mooring, day and night. 1 tug assists in mooring and sailing procedures.

A special boat keeps contact with the shore from this dolphin berth (for crew and stores).

Currency: CFA francs = (100 CFA = 2 Fr. Francs).

DELAYS: No unusual delays.

AUTHORITY: Management of Ports and Seaways of Cameroun.

AGENT: Socopao Cameroun – BP 215 – Douala. Tel. 42–64–64. Telex: 5252 KN, 5214 KN.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Canada

GENERAL: *Pilotage Regulations:* Vessels arriving from any point *East* of the Strait of Belle Isle, Cabot Strait or the Strait of Canso is required to give notice of ETA 24 hours in advance, second notice of ETA 12 hours in advance and Final notice confirming or correcting the ETA 4 hours in advance. With the first notice the following information should be supplied:

(a) in the case of the first arrival of the ship in the compulsory pilotage area in any calendar year,
  (1) the name, nationality, call sign and Agent of the ship,
  (2) the length, breadth, moulded depth, deepest draft, speed and the largest net registered tonnage of the ship, and
  (3) the immediate and the ultimate destinations of the ship within the compulsory pilotage area, and

(b) in the case of any subsequent arrival, movage or departure of the ship in the compulsory pilotage area in any calendar year,
  (1) the name, call sign, deepest draft, the speed of the ship and any changes in the information provided under paragraph *(a)*, and
  (2) the immediate and ultimate destinations of the ship within the compulsory pilotage area

The Laurentian Pilotage Authority advises that, where there is failure to give the required notices, without reasonable cause, the Authority is *not* required to provide the vessel with the services of a Pilot.

AMHERSTBURG, Ontario: 42.06 N. 83.08 W.

PORT LIMITS: Southerly Port Limits commence at Buoys 43D and 44D and extend on the Canadian side of the International Boundary Line, northerly to the southerly limits of Windsor Harbour.
DOCUMENTS: Amherstburg is not a port of entry, but a Customs Officer is available upon notice 24 hours a day. Foreign Ships, on arrival, are required to present Canadian Customs Form A-6 inward and A-6 outwards.
PILOTAGE: Pilotage is compulsory as required by Seaway Regulations.
ANCHORAGES: Windsor Harbour is the only recognized anchorage in Detroit River.
RESTRICTIONS: Seaway draft is maintained in main channel and shallow draft channel of 21 ft. Water levels are affected by fluctuation of Lake Erie. A Low Water Warning is broadcast from Belle Isle on 2670 kHz and 156.6 mHz on the odd hour plus 55 minutes when the water level in the West end of Lake Erie falls 1 inch or more below the lower level of the Lake Survey Centre's predicted range of levels shown in bulletins issued the 5th and 20th of each month during navigation season. An Occulting Amber Light is shown from Detroit River Light (U.S. Light List 850) during these conditions. When the water level is at, or above the lower level of the predicted range a fixed amber light is shown from Detroit River Light.
MAX. SIZE: About 432 ft. long and 21 ft. draft is maximum for Allied Chemical Dock.
HEALTH: Pratique is not necessary as vessel has passed all health requirements before entering Canada.
RADIO: Messages may be sent and received via VBE Sarnia Radio.
VHF: None available for port movement, except as established between vessels in Harbour.
TUGS: Available, but not usually used.
BERTHING: Public Wharf has a frontage of 250 ft. with large warehouse on it. Vessels draft for approach 17 ft. North is Department of Transport Wharf and Buoy Depot, length 291 ft., draft approach 17 ft. North of this dock is McQueen's, 17 ft. draft. The old Town Coal Dock is about 1,500 ft., but is old and dilapidated and has not been used for cargo for several years, draft approach 17 ft. Allied Chemical is a private dock which consists of a floating barge secured to pile clusters. Import fuel oil and export liquid calcium. Vessels of 412 ft. length call here regularly, draft approach along side 21 ft.
CRANES: Shore cranes are available for hire from private contractors, also floating barges with cranes, 100 ton capacity and 200 ft. boom if required.
BULK CARGO FACILITIES: Conditions of various wharves does not warrant any usage for bulk cargoes.
BRIDGES: No bridges within Amherstburg Harbour area.
STEVEDORES: Stevedoring is arranged through Agents in Windsor.
MEDICAL: Should medical attention be required it can be arranged through radio station VBE Sarnia by message to Canadian Coast Guard Base Amherstburg. Hospitals are available in Windsor with Ambulance service. Injured seaman can be taken off if necessary by Canadian Coast Guard in vicinity of Amherstburg, when notified via VBE Radio Sarnia.
TANKERS: Use private wharf of Allied Chemical Limited.
DENSITY: Fresh water only.
FRESH WATER: Fresh water could be supplied in an emergency by tank truck or contacting Public Utilities Commission.
FUEL: Not available on docks, except by truck.
FIRE PRECAUTIONS: Usual ship board fire precautions on board.
CONSULS: None.
REPAIRS: Small ship repairs can be carried out by local firms from Windsor.
DRY DOCK: None.
SURVEYORS: None stationed in port, but arrangements can be made to have an inspector when required.
GANGWAY/DECK WATCHMEN: No regulations requiring watchman.
CUSTOMS ALLOWANCES: Same as all Canadian Customs Regulations.
CARGO GEAR: Ship's gear, unless pallets are used.
REPATRIATION: Arrangements for crew change can be made.
AIRPORT: Windsor Airport is 20 miles distance and service is by Air Canada, Nordair and numerous charter companies.
TIME: Local time is GMT plus 5 hours and Summer time plus 4 hours.
HOLIDAYS: All Canadian Holidays, working time requires negotiating with local unions.
POLICE/AMBULANCE/FIRE: Police – 736-3622, Ambulance – 736-5411, Fire – 736-6500.
TELEPHONES: No telephone jacks available on any dock.
SERVICES: Laundry can be done, but takes considerable time. Food stuffs are available, including fresh produce.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Seaman's I.D. card is sufficient.
REGULATIONS: No unusual regulations.
DELAYS: Private owner's dock is only dock being used for cargo.
DEVELOPMENTS: None, except Government Wharf and Shed is being taken over for extended Buoy Depot and Shed will be demolished and Wharf will be used by Government vessels.
AUTHORITY: Canadian Coast Guard Base, Harbour Master, Amherstburg.

BADDECK, N.S.: 46.06 N. 60.44 W.

DOCUMENTS:
4 Crew Lists.
Customs Documents.
Harbour Dues Receipt.
Stores List.
Derating Certificate.
Safety Regulations.
Clearance from Last Port.
PILOTAGE: Compulsory. Pilot station at Table Head, see Canadian chart 4367.
ANCHORAGE: Good anchorage in lake. Depths 50 to 500 ft.
RESTRICTIONS: Can be restricted by heavy fog, tide, ice.
MAX. SIZE: Largest vessel to dock 497 ft. long, 66.7 ft. wide. Draft 28 ft.
HEALTH: Pratique obtained at Sydney, N.S.
RADIO: Sydney Radio
BERTHING: The dock is 330 ft. in length, with an approach way of 80 ft. length, making an "L" shape. Depth alongside at LW is 15 ft. at the inner end and 25 ft. at the outer end.
TUGS: None.
MEDICAL: No advance notice required. Hospital available.
DENSITY: In sea 35/1000. In lake 25/1000.
FRESH WATER: Supplied at 20 t.p.h.
FUEL: None available.
CERTIFICATES: Registry, Derating and Safety Certificates.
CUSTOMS ALLOWANCE: Tobacco, 100 cigarettes per week or 0.5 lb. tobacco. Wine/spirit: None.
CONSULS: None.
REPAIRS: Minor repairs only.
HATCHES: Normally opened and closed by crew.
AIRPORT: 55 miles. Served by regular airlines.
TIME: GMT minus 4 hours. Advance 1 hour in Summer.
HOLIDAYS: Sundays and Statutory holidays; New Year's Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day.
POLICE/AMBULANCE/FIRE: 295 2350, 292 2032, 295 2110.
TELEPHONES: None available for placing on board.
AUTHORITY: Dept. of Transport.

BAIE COMEAU, Quebec: 49.15 N. 68.09 W.

PORT LIMITS: Starting from a point on the Southern limit of Baie Comeau at Pointe St. Gilles 49° 12′ 10″ N., 68° 08′ 41″ W. Thence, North-eastward to Pointe St. Pancrace, 49° 15′ 14″ N., 68° 04′ 43″ W.
All waters inside of these points are understood to be part of Baie Comeau Harbour.
DOCUMENTS: Baie Comeau is a Port of Entry. Custom and Immigration facilities are located in the Town of Baie Comeau. All vessels arriving from Foreign Ports will be boarded by Custom and Immigration Officers.
The following forms are to be completed prior to arrival at the first Canadian Port:
3 copies Immigration Crew List, IMM-200
3 copies Crew Declaration, Y-14
3 copies Ship's Stores, E-1
3 copies Passenger List, IMM-264
2 copies Quarantine Service, *Q-S-1
*To be supplied by Quarantine Officer on arrival.
ETA: Advise Agent 72, 24 and 4 hours before arrival. Include fuel and stores requirements.
PILOTAGE: Not compulsory. The services of a qualified Docking Master are available through the facilities of Cargill Grain Company. Docker instructions will be given by radio after receiving vessel's ETA.
Normally the Docking Master boards from tug approximately 0.5 mile S.W. of Pointe St. Pancrace.

RESTRICTIONS: Port open for shipping all year round. Deep water approaches without restrictions for any vessel able to berth alongside.
ICE ADVISORY SERVICE: Ships inbound for Baie Comeau from seaward between December 15th and April 15th should advise the Ice Information Officer, Sydney, N.S., 36 hours prior to entering Cabot Strait stating their position, destination, whether loaded or in ballast. This procedure will facilitate the passing of ice information to the ship as necessary.

On request, ice information is also available from Marine Radio Stations at Halifax, Camperdown, Seven Islands, Twillingate and Grindstone. The Canadian Broadcasting Corporation Maritime network also broadcasts ice information daily during the Winter navigation season. Supplementary ice information may also be obtained from Canadian Marine Service icebrakers.

During the ice season, radio broadcasts of ice information are made twice daily from Marine Radio Stations as follows:

	Call	*Frequencies*	
Cape Race, Nfld.	VCE	420	kc/s CW
		2582	kc/s RT
Fox River, Que.	VCG	434	kc/s CW
		2582	kc/s RT
Mont-Joli, Que.	VCF	446	kc/s CW
		2582	kc/s RT
North Sydney, N.S.	VCO	489	kc/s CW
		2582	kc/s RT
Halifax	CFH	115.3	kc/s CW
		6949.5	kc/s
		8662	
		12984	
		17218.4	

MAX. SIZE: Up to 40 ft. draft at Docks No. 1 and 2. Size limited only by berth depth.
RADIO: Mont-Joli Radio VCF 2582 kc/s (VHF, CRM Co. Ltd., Wharf Office, base to ships on marine frequencies) (Channel 7A – 156.350 mHz and Channel 16 – 156.800 mHz, call XJS94).
HEALTH: Incoming vessels making Baie Comeau port of entry must obtain pratique by wireless. Radio pratique may be obtained between 0900 hrs. and 1700 hrs. the day preceding arrival. Address message "Quarantine Quebec": For the purpose of radio pratique, vessels are required to give the following information:

1. Name and nationality of vessel.
2. Ports called at during voyage.
3. Nature of cargo.
4. Number of crew.
5. Number of passengers.
6. Port of destination and name of Agent.
7. Number of persons without valid certificates.
8. Condition of health of all on board with details of any sickness or death which has occurred during the voyage.

Ships arriving in English Bay in Quarantine will be inspected by Health Officer at anchorage or on arrival alongside. Should Officer board vessel at anchorage, proper accommodation ladder must be provided.

Smallpox Vaccination Certificates to be ready for inspection on arrival.
TUGS: Available. Not compulsory except for Cargill Grain Terminal.
BERTHING:

Dock No. 1: Department of Transport Wharf: berth 456 ft. long, depth 28 ft.; berth 360 ft. long, depth 25 ft. North Shore Paper Company: 1,000 ft. wharf, depth 27 ft. Dock Pier: 2 berths, 422 ft. long, 20 ft. depth.

Dock No. 2: Canadian Reynolds Metals Co., Ltd. Wharves consist of breakwater and approach jetty called Berth No. 1, 540 ft. long. Berth Nos. 2 and 3 in slip, 587 ft. and 551 ft. long respectively. The docking area is dredged to 30 ft. at low water at Berth No. 1 and 31 ft. at Berths Nos. 2 and 3 and flares out to marker buoy (Fl. red Ev. 12 secs.) at Northern extremity and 1,000 ft. to its Southern extremity, where depth of water increases rapidly off shore from approximately 400ft. East of breakwater. A port hand can buoy marks dredging out from S.E. corner of No. 1 Berth.

Dock No. 3: Cargill Grain Terminal, North Pier, 2 loading berths, length 585 ft., North side dredged to 40 ft., South side dredged to 38 ft. Loading capacity 2,000 long t.p.h.

South Pier, 1 unloading berth, length 720 ft., North side only dredged to 29 ft. Discharge rate 1,000 long t.p.h.
STEVEDORES: Each terminal employs own stevedores.
MEDICAL: All facilities available. Local Hospital in Baie Comeau and Hotel-Dieu, Hauterive, 5 miles.
DENSITY: 1000–1025.
FRESH WATER: Delivered by pipe-line to the berths.
FUEL: Available by pipe-line to Cargill Grain Terminal.
REPAIRS: Minor repairs may be effected through local contractors.
IDENTIFICATION CARDS: Gate passes are issued at the gate to all Crew members when going ashore for the purpose of identity on their return.
AIRPORT: Daily service to Quebec and Montreal.
CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed 1 bottle wine/spirits, Master up to 5 bottles.
TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.
SHORE LEAVE: Crew members allowed ashore. No restrictions.
HOLIDAYS: New Year's Day; Epiphany; Good Friday; Ascension Day; St. John the Baptist Day; Labour Day; All Saints' Day; Christmas Day. No work performed on these holidays.
AUTHORITY: Canadian Department of Transport.

BELLEDUNE, N.B.: 47.55 N. 65.51 E.

A deep water harbour administered from Saint John, N.B. and serving Belledune Fertilizers and other projects in the Bathurst area. This harbour is free of ice in the Winter and open to shipping all the year round.
DOCUMENTS: See Saint John.
PILOTAGE: Pilotage is not compulsory, however, should a Pilot be required, the services of a local Berthing Master Mariner are available on request.

Regardless of pilotage, estimated times of arrival should be given to Belledune Fertilizers Ltd. 72, 48 and 24 hrs. before.
ANCHORAGE: Vessels wishing to anchor will find no difficulty in obtaining an anchorage in more than 10 fathoms, approximately one mile to the northward of the Belledune Breakwater.
TUGS: None available.
BERTHING: One berth, length 550 ft., depth at LW, 34 ft.
TIDES: Tides normally rise 6 ft. at springs and 3 ft. at neaps. Tidal current seldom exceeds one knot.
STEVEDORES: Bulk cargoes handled by Belledune Fertilizer Ltd., and general cargo by Longshoremen.
CRANES: Heavy-lift equipment available from private companies. Cranes up to 25 tons available.
MEDICAL: Hospital at Bathurst.
FRESH WATER: Available. Delivered by tank trucks upon arrangement with Belledune Fertilizers Ltd.
FUEL: None locally. Can be obtained and delivered by tank trucks.
CONSULS: None.
REPAIRS: Minor repair facilities at Belledune Fertilizers Ltd. machine shop.
STORES: All types of provisions as well as deck and engine stores can be obtained at Bathurst for delivery to Belledune.
AUTHORITY: National Harbours Board, Saint John.
Local Representative: Belledune Fertilizers Ltd.

BOTWOOD, Newfoundland: 49.09 N. 55.20 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crews Declaration (Can. Form Y14).
3 Stores Lists (Can. Form E.1).
Health Declaration (Can. Form QS. 2001).
3 Cargo Manifests.
3 Bills of Lading.
PILOTAGE: Compulsory. Pilot boards off Surgeons Head Light, Exploits Burnt Island day or night. Pilot station and boat equipped with VHF. Coastal pilotage service from St. Johns to Botwood available on request.
RESTRICTIONS: Navigation season from mid-April to mid-January approximately. Ice-breaker assistance may be necessary in Winter months. Deep water approaches.
ANCHORAGE: In Botwood Harbour, off the oil dock in depths of 10–20 fathoms.
MAX. SIZE: Up to 32 ft. draft.
RADIO: Comfort Cove, St. John's, St. Lawrence or Corner Brook.
HEALTH: Health Officer boards on arrival. Valid smallpox vaccination certificates required.
TUGS: None available.
BERTHING: *Pier No. 1:* owned by Price (Nfld.) Pulp & Paper Ltd., used exclusively for handling newsprint outward and caustic soda inward. Is 500 ft. long; min. depth alongside 32 ft., is adjacent to newsprint storage shed. capacity 20.000 tons (standard newsprint).
Pier No. 2: Layberth only, 900 ft. long, min. depth alongside 32/35 ft., owned by Price (Nfld.) Pulp & Paper Ltd.
Pier No. 3: 600 ft., owned by American Smelting & Refining Co., used for shipping concentrates, and discharging Bunker "C" fuel and Sulphur inward. Min. depth alongside 32 ft. Concentrates loaded by one fixed conveyor.
Ministry of Transport finger pier: Length 150 ft., min. depth alongside 35 ft. Face is 23/25 ft. Is connected by pipe-line to bulk fuel storage tanks, owned by Golden Eagle Refining Co. Ltd., and is used primarily for discharging of clean fuels.
Ministry on Transport general cargo wharf and shed: Wharf 269 ft. long, 103 ft. in breadth, cargo shed 200×70 ft., 20 ft. clear height below steel girders. Apron of wharf is 33 ft. wide with access driveway extending around each end of shed to main roadway. Rear cargo doors from shed open at truck level to facilitate mechanical handling. Front and end doors are wharf level.
MEDICAL: Doctors, hospital facilities available.
FRESH WATER: Available at all berths.
FUEL: Only light diesel available.
REPAIRS: Minor repair and diving services only.
SURVEYORS: Lloyd's and Norske Veritas at St. John's.
CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed one bottle wine/spirits, Master up to five bottles.
TIME: GMT minus five hours. Daylight Saving Time: GMT minus four hours, applied from last Saturday of April until last Saturday of October each year.
SHORE LEAVE: Allowed. No restrictions.
HOLIDAYS: Good Friday; Labour Day; Christmas Day and Boxing Day. No work performed on these holidays.
AIRPORT: Gander International Airport, 60 miles away.
AUTHORITY: Ministry of Transport.

BRIDGEWATER, N.S.: 44.23 N. 64.31 W. (See Plan)

DOCUMENTS: See "Halifax".
PILOTAGE: Not compulsory. Report ETA by radio-telephone or radio-telegraph to Superintendent of Pilots, Halifax, N.S. at least 12 hours before arrival at boarding station. ETA to be confirmed 3 hours before arrival. Pilot boards off Moshers Island Light.
RESTRICTIONS: Port is situated on La Have River, 10 miles from the sea. Channel path at low water, 20 ft.
ANCHORAGE: At Dayspring, 2 miles below Bridgewater.
MAX. SIZE: Length 325 ft. Draft 20 ft.
RADIO: Halifax Radio.
HEALTH: Pratique granted by Customs officer who boards on arrival at the berth. Also see Montreal.
BERTHING: Dept. of Transport wharf, berthing length, 1,073 ft. Depth alongside 20 ft.
FRESH WATER: Available ex wharf only on West side of river.
FUEL: Not available.
REPAIRS: Limited facilities for engine repairs.
STEVEDORES: Available.
MEDICAL: Hospital facilities available.
HOLIDAYS: Dominion Legal holidays.
AIRPORT: Nearest approximately 90 miles away.
AUTHORITY: Harbour Master, Glayden Conrad.

CHARLOTTETOWN, P.E.I.: 46.14 N. 63.07 W.

DOCUMENTS:
Port clearance from previous port.
3 QS.2001 Quarantine, if from other than U.S. port or St. Pierre et Miquelon.
3 HA.282 Garbage Disposal Warning.
2 IMM.200 Crew List, only Canadian documentation acceptable.
3 E1 List of Ship's Stores. May use own documentation.
3 71 Crew's Declarations. May use own documentation.
2 A6 Report Inwards.
PILOTAGE: Compulsory. Only one Pilot active with privately owned boat. Pilot taken on board at Fitzroy Rock buoy. No alternate area in event of bad weather. Vessels anchor 4 cables South of Fitzroy Rock buoy to await Pilot.
ANCHORAGES: Anchorage inside harbour at Three Tides – 46° 13′ N. 63° 08′ 30″ W. Average depth of water 30 ft.
MAX. SIZE: Draft 31 ft.
HEALTH: Pratique procedure carried out by Customs Officers. (Form QS1).
RADIO: VCA Charlottetown Marine Radio.
TUGS: None.
STEVEDORES: No prior advice required.
MEDICAL: Several hospitals and ambulance facilities available if required.
TANKERS: Three discharging docks – one at Railway Wharf, Imperial Oil pipe-lines as follows: one 12 in., two 10 in. and two 6 in., draft at dock 32 ft. (2) Texaco Canada Ltd., private dock – two 8 in. pipe-lines, draft 24 ft. (3) Irving Oil Co. Ltd., private dock, two 8 in. and two 10 in. lines, 32 ft. draft.
FRESH WATER: Available at Railway Wharf.
FUEL: Diesel and bunker fuels available by tank wagon.
GANGWAY/DECK WATCHMEN: Watchmen service if required. Not necessary.
OPENING/CLOSING HATCHES: Stevedores work hatches which are not mechanically operated.
CUSTOMS ALLOWANCES: Tobacco 200 cigarettes or 0.5 lb. tobacco or 15 cigars per man per week. Wine and/or Spirit: 40 oz. per week, but issues of liquor in port will be restricted to ship's officers.
IDENTIFICATION CARDS: Not required unless disembarking. Crew members then should possess Seaman's Book and/or Passports.
REPAIRS: Minor repairs only.
REPATRIATION: Facilities are available.
AIRPORT: 4 miles distant with daily flights by Eastern Provincial Airways and Air Canada.
TIME: GMT minus 4 hours, May to October GMT minus 3 hours.
HOLIDAYS: New Year's Day (January 1st); Easter – varies (Good Friday); Victoria Day – Monday prior to May 24th; Dominion Day (July 1st); Labour Day (1st Monday in September); Thanksgiving (2nd Monday October); Remembrance Day (November 11th); Christmas Day (December 25th). Christmas Day is the only holiday stevedores will not work.
POLICE/AMBULANCE/FIRE: Police, 894–5513; Ambulance, Call operator "O", Fire, 894–3113.
TELEPHONES: No hookup available.
GENERAL: Passenger vessels – a list of all saleable articles contained in barber shops, souvenir stands, display cases, company operated outlets, etc. to be attached to Stores Lists to facilitate sealing by customs. Responsible ship's officer to advise location of outlets.
SHORE LEAVE: No restrictions.
AUTHORITY: District Manager, Dept. of Transport.

CHATHAM and NEWCASTLE, N.B.: 47.00 N. 65.33 W. 47.02 N. 65.28 W.

DOCUMENTS:
Previous port clearance.
2 Immigration Crew Lists.
3 Ship Stores Lists.
3 Crew Declaration.
(Other papers completed by Agent).
PILOTAGE: Contact Agent for Pilot at least 12 hrs. in advance. Pilot boat, wooden hull, length 44 ft., grey, Pilot flag about 20 ft. above sea-level. Apr. 16 to Dec. 9 Pilot taken aboard 2 miles North of Escuminac Breakwater. In event of very bad weather good anchorage Edmond Bay, PEI. Dec. 10–Apr. 15 Pilot boards at Eddy Point NS when inbound from East. In other cases Pilot boards at point of departure in Canada.
MAX. SIZE: Max. length 550 ft., max. draft 21 ft. 06 in.
HEALTH: Pratique procedure carried out by Customs Officer (complete form QS 1).
RADIO: Use Grindstone, Halifax or Charlottetown Radio, depending on location.
TUGS: Not available.
BERTHING: Approx. 3 hrs. from Pilot station to Berth.
BRIDGES: Bridge at Chatham 127 ft. clearance high tide. Hydro wires at Middle Island 125 ft. at 60 degrees Fahrenheit at lowest point, channel wide at this point, able to get 180 ft. clearance. Morrisey Bridge, max. span opening is 99 ft. Overhead cables at Morrisey Bridge.
STEVEDORES: Notice at least 12 hrs. before arrival.
MEDICAL: Hospitals at Chatham and Newcastle.
TANKERS: Hose connections 6 in.; no slop discharge facilities.
FRESH WATER: Available only at Government piers at Chatham and Newcastle.
FUEL: By tanker truck.
GANGWAY/DECK WATCHMEN: Not necessary.
SHIP CERTIFICATES: Harbour dues, Load line, Radio Safety, Safety equipment, Deratting.
CUSTOMS ALLOWANCES: 200 cigarettes/man/week. Spirits: 40oz./man/week.
CREW IDENTIFICATION CARDS: Not needed.
CONSUL: Danish Consul, tel. 622–1199.
REPAIRS: Limited to welding and machine work.
REPATRIATION: Facilities good.
AIRPORT: Chatham.
TIME: Atlantic Standard, 4 hours difference GMT. Change from Standard to Daylight Saving last Sunday in April through last Sunday in October. (1 hour forward).
HOLIDAYS: No work Labour Day, Armistice Day, New Brunswick Day. Other statutory holidays may be worked on overtime.
POLICE/AMBULANCE/FIRE:

	Newcastle	*Chatham*
Police:	622–2111	773–4436
Ambulance:	622–1340	773–3492/733–4321
Fire:	622–2500	7773–5856

SHORE LEAVE: No restrictions.
AUTHORITY: Port Manager.
AGENT: John Lockerbie, 245 Sweeney Lane, Newcastle, N.B. Tel. 622–1338. Cables: Via C.N. Telecommunications, Newcastle, New Brunswick, Canada.

CHEMAINUS and CROFTON, B.C.: 48.55 N. 123.42 W.

DOCUMENTS, PILOTAGE, HEALTH, CONSULS etc.: Refer to "Vancouver, B.C.".
ANCHORAGE: Available in Houston Passage.
RESTRICTIONS: Channel depth 48 ft. MLLW. Restricted by berth size only.
TUGS: Available. Tugs for Crofton are ordered from Chemainus.
BERTHING:

		Berth length	*Depth alongside MLW*
Chemainus:	Wharf A	515′	35′
	Wharf B	490′	40′
Crofton:	Lumber Berth	400′	35′
	Pulp Dock	457′	35′

No loading gear installed at Crofton berths.
STEVEDORES: 22 gangs available. Refer to "Vancouver, B.C.", for holidays, etc.
MEDICAL: Doctors and hospitals facilities available at Chemainus, 5 miles from Crofton.
DENSITY: Salt water.
FRESH WATER: Available at wharves.
FUEL: Supplied by barge from Vancouver, B.C.
CUSTOMS ALLOWANCES: See "Vancouver, B.C.".
REPAIRS: Minor repair facilities only.
AUTHORITY: Department of Transport, Harbour Master.

CHICOUTIMI, Quebec: 48.25 N. 71.02 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crews Declaration (Can. Form Y14).
3 Stores Lists (Can. Form E.1).
Health Declaration (Can. Form QS. 2001).
3 Cargo Manifests.
3 Bills of Lading.
PILOTAGE: Pilotage is compulsory. Pilots board vessels that are Westerly-bound at Anse-aux-Basques and Easterly-bound at Quebec City. The Master of every ship inward bound in the Gulf of St. Lawrence and destined for ports West of Anse-aux-Basques must report his ETA to Pilots Montreal via Marine Traffic Control on VHF radio Channel 14 (156.7 mHz) or by other means of

communication to Seven Islands radio station VCK giving his ETA to Escoumains pilotage station and the net registered tonnage of his vessel.

A minimum notice of 12 hours must be given to ensure the availability of Pilots at Anse-aux-Basques for vessels proceeding from the Gulf to Chicoutimi.

This notice must be confirmed 3 hours prior to arrival at the Pilot station by radio-telegraph or radio-telephone as mentioned above.

The Pilot station for vessels upbound to Chicoutimi is located at Anse-aux-Basques, charted 2 miles S.W. of Les Escoumains Wharf on the North shore of the St. Lawrence River. Two Pilot boats are constantly on service.

ANCHORAGE: At St. Fulgence, 6 miles before Chicoutimi.
RESTRICTIONS: Navigation season from mid-April to end November approximately. Channel depths 20 ft. LW up to oil terminal and 16 ft. low water above oil terminal.
MAX. SIZE: Up to 27 ft. draft.
RADIO: Riviere du Loup Radio Station.
HEALTH: Pratique may be obtained by radio to Quarantine Quebec. Health Officer boards on arrival. Valid smallpox vaccination certificates required.
TUGS: None available.
BERTHING: Harbour wharves, 2,750 ft. berthing length, 30 ft. depth alongside; oil berth 20 ft. depth alongside.
CRANES: Two cranes available for bulk cargoes 25 ton×1.75 yards and 40 ton×3.25 yards.
DENSITY: Fresh water.
MEDICAL: Doctors, hospital facilities available.
FRESH WATER: Available at all berths.
FUEL: Available at oil berth.
REPAIRS: Minor machine shop repairs only.
CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed 1 bottle wine/spirits, Master up to 5 bottles.
TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.
SHORE LEAVE: Allowed. No restrictions.
HOLIDAYS: New Year's Day; Epiphany; Good Friday; Ascension Day; St. John the Baptist Day; Labour Day. All Saints' Day; Christmas Day. No work performed on these holidays.
AUTHORITY: National Harbours Board.

CHURCHILL, Man.: 58.47 N. 94.12 W. (See Plan)

DOCUMENTS: 1 Certificate giving following details: Name; official number; port of registry; gross tonnage; dimensions of vessel; draft on arrival; place from which vessel arrived; date of departure from the aforesaid place; places of call en route; name of Master or person in charge; name of owner or Agent; name of Pilot; number of crew; tonnage of goods to unload; number of passengers to be landed; and number of bags of mail to be landed.

A certified copy of the manifest of such vessel giving weight or measurement for each bill of lading and certified by Collector of Customs.

Certificate that gyro compass is in good order.

PILOTAGE: Pilotage is not compulsory, but the pilotage fee is compulsory. Pilots board ships outside the harbour within a radius of 5 miles from Eskimo Point. The fee is $100 per ship inward and $100 dollars per ship outward. Moving vessel within harbour is $70.

Vessels must advise their ETA at the port, and should also advise their time of arrival at Fairway Buoy.

Requests for Pilots should be submitted through the local marine radio. Pilots embark from vessels at the Fairway Buoy. The tug "Twolan" is used as pilot boat.

ANCHORAGES: Inside the harbour, there is anchorage room for one small vessel in 30 ft. of water about 0.75 miles N.W. of wharf. There is insufficient swinging room at this anchorage for large vessels. Large vessels anchor outside the harbour. The outside anchorage is exposed and vessels in a light condition may find it difficult to maintain their anchorage, particularly with a strong N.E. wind.
RESTRICTIONS: Vessels are usually brought in just before high tide, although vessels may enter any time. One spot in channel is 26 ft. at zero tide. All buoys and range lights are lighted.
MAX. SIZE: Max. length 600 ft. width 100 ft. and depth alongside wharf at zero tide is 31 ft. at three berths, 33 ft. at one berth, 22 ft. at Wolfe Berth and 20 ft. at the coastal Berth.
HEALTH: All vessels must fly yellow flag until cleared by authorities after docking.
RADIO: Department of Transport, Marine Aeradio Station call sign VAP, Channels to be used: 16 for calls and replies, 12 for harbour control, as well as Channel 26.
TUGS: Tugs usually join vessels inside the harbour. Two tugs available. Ship's lines used.
BERTHING: Max. allowable salt water draft at sulphur berth 32 ft., thereafter topping-up with the tide for a few more inches. Sulphur is brought by rail truck from Alberta Mines, and loading rate 4,000 tons per day.

Loading capacity for bulk grain is 60,000 bushels/hour.

CRANES: Heavy lift crane of 35 tons capacity.
STEVEDORES: Gangs are available during whole of shipping season, no advance notice required.
MEDICAL: Fully staffed and equipped hospital available, approximately 1 mile from harbour.
TANKERS: Discharge pipes 4 in. diameter. One berth available with max. depth of 33 ft. at zero tide.
FRESH WATER: Fresh water available at all berths. Water pumped through 2.5 in. pipe connected directly to ship, discharged at rate of approximately 1 ton/min.
FUEL: Bunker fuel requires 30 days advance notice. Arctic fuel available all times.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Carried out by ship's crew.
CUSTOMS ALLOWANCES: See "Montreal".
CONSULS: None.
REPAIRS: Most repair work. Fully equipped machine shop available.
DRY DOCKS: None.
SURVEYORS: By arrangement.
CARGO GEAR: Ship's gear.
AIRPORT: Airport situated 5 miles from the harbour and served by TransAir, with 2 flights going North and 6 flights South every week.
TIME: GMT minus 6 hours. Daylight Saving Time (1 hour forward starts first Sunday in May and ends last Sunday in October).
HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Victoria Day (May 24th); Dominion Day (July 1st); Civic Holiday (1st Monday in August); Labour Day (First Monday in September); Thanksgiving Day (Second Monday in October); Remembrance Day (November 11th); Christmas Day (December 25th); Boxing Day (December 26th).

Arrangements normally made to have crews available for those days.

POLICE/AMBULANCE/FIRE: Police, 675-2422; Ambulance, 675–8881, Fire, 675–2424.
TELEPHONES: No facilities.
SHORE LEAVE: Allowed no restrictions.
DEVELOPMENTS: Dredging underway.
DELAYS: Little delay.
AUTHORITY: The Port Manager, National Harbours Board.

CLARENVILLE, Newfoundland: 48.08 N. 53.56 W.

DOCUMENTS:
Crew List, Form 200 in duplicate.
List of Ship's Stores, Form E1 in duplicate.
Crew Declarations, Form Y.14 in duplicate.
Manifests in triplicate.
Bills of Lading in duplicate.

PILOTAGE: Contact Pilot through St. John's Radio. VON.
MAX. SIZE: Largest ship 600 ft. long, breadth 74 ft., draft 26 ft.
HEALTH: See "Montreal".
RADIO: St. John's Radio. VON.
TUGS: No tugs available from St. John's.
STEVEDORES: Available. 48 hours notice required.
MEDICAL: Necessary for Agents to receive advance notice of medical attention required. Hospitals available at Come By Chance (30 minutes distance by road) and St. John's Vaccination/Fever Certificates necessary for pratique.
FRESH WATER: Limited supplies available.
FUEL: Light fuels only (no bunkers).
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Load Line, Safety Equipment, Deratting Certificates.
CUSTOMS ALLOWANCES: Tobacco 200 cigarettes allowed per crew member per week. Wine and/or Spirit, 1 bottle of spirit allowed per crew member on the first voyage in each year. Each subsequent voyage in one year, 1 bottle allowed only to officers.
IDENTIFICATION CARDS: Not required.
CONSULS: At St. John's.
REPAIRS: Temporary only.
REPATRIATION: Only available by air.
AIRPORT: Gander International Airport located about 2 hours distance by road/served by regular airlines.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: See "Montreal".
POLICE/AMBULANCE/FIRE: Police 7830; Fire 7777; Ambulance 466–2400.
TELEPHONES: No facilities for placing on board.
SERVICES: Only limited services available.
SHORE LEAVE: Allowed.
AGENT: Newfoundland Hardwoods Ltd.

COME BY CHANCE, Newfoundland: 47.48 N. 54.01 W. (See Plan)

LOCATION: The Come By Chance oil terminal operated by Provincial Refining Co. is located in Placentia Bay, Lat. 47° 48′ 18″ N. Long. 54° 00′ 35″ W.
DOCUMENTS:
3 copies Crew Declaration (Form Y14).
3 copies Ship Stores List (Form E1).
3 copies Immigration Crew List (Form IMM 200) only Canadian form accepted.
2 copies of Bill of Lading or Manifest.

In addition, clearance from last port, Deratisation Certificate, extra copy of Crew List, Vaccination List, Ship's Register, Radio Equipment Certificate, Safety Equipment Certificate, Load Line Certificate and Non-Canadian Ship Compliance Certificate. Oil record log book should be up to date and readily available for inspection by Government steamship inspectors.
PILOTAGE: *Ship's Officer's Report:* Pilotage is compulsory. Pilots

board off Argentia (position 47° 21.9′ N., 54° 04.6′ W.) by prior arrangement with St. John's Pilotage. An ETA message (preferably in GMT) should be sent at least 12 hours before arrival to "Coast Guard Traffic Centre St. John's". The message should state the following:

Name of ship. Call letters. Draft. Gross tonnage. Length. Breadth. Moulded depth. Destination.

Confirmation or amendment of the ETA should be sent 6 hours prior to arrival.

The pilot boat is approximately 50 ft. long with a black hull and white housing. It has "Pilot" painted on the housing and flies the pilot flag – white over red horizontal stripe.

VHF channels are allotted to various areas in Canadian waters but in the absence of this information contact can be established in the first instance on Channel 16. The most frequently used Channels are numbers 6, 11, 12 and 14. In general Channel 6 is used by tugs and 11 by Pilots in pilotage waters.

It is anticipated that there will be no pilotage in Placentia Bay during the hours of darkness for a period of at least two years for vessels of over 50,000 d.w.t.

The pilotage routes used are as follows:

Latine Pt. (Argentia)	097°×4.6′	Co 019°
to		
Margery Cove (N. of Red Is.)	291°×2.7′	Co 021°
to		
Buffett Is. (E. of Long Is.)	275°×2.7′	Co 350°
to		
Green Is. (Off Long Is.)	260°×2.8′	Co 351°
to		
Cheese Is. – N. End (N. of Long Is.)	261°×1.6′	Co 000°
to		
Grassy Pt.	090°×1.2′	Co 022°

COAST GUARD TRAFFIC CENTRE: A vessel traffic management centre is being established at Argentia. Operation on a 24-hr. basis; this centre will provide radar surveillance off Placentia Bay. Masters are required to establish communication with this station when in VHF range on Channel 16, in order to provide vessel's identification and obtain information regarding pilotage, buoyage, weather conditions, etc.

ANCHORAGE: Will be assigned by the pilot in conjunction with the Department of Transport.

Ship's Officer's Report: The following areas have been designated as anchorages:

Area A 47° 43′ 45″ N. 54° 01′ 40″ W.
Area B 47° 45′ 45″ N. 54° 09′ 15″ W.
Area C 47° 43′ 22″ N. 54° 10′ 45″ W.

RESTRICTIONS: Will be dispatched by the Department of Transport to ship's Agent.

MAX. SIZE: Tankers of 327,000 d.w.t., can be accommodated.

Also see "Berthing".

HEALTH: Vessels arriving from a foreign port may obtain pratique by radio from "Quarantine St. John's" at least 12 hrs. before arrival. Information required by Quarantine Officer shall include:

Name and nationality of the vessel.
Last port of call.
Nature of cargo.
Number of crew and passengers.
Port of destination.
Name of Agent.
Conditions of health of all on board with details of any sickness or death incurred during the voyage.
Animals if any.

RADIO: The best radio stations to use en route to Come By Chance are:

St. John's Marine Radio – call sign VON.
Halifax Marine Radio – call sign VCS.
St. Lawrence Marine Radio – call sign VCP.

TUGS: Four tugs available to assist berthing and unberthing. Each is equipped with 2,640 h.p. drive and capable of a bollard pull of 37 tons. Two are equipped for fire fighting and the other two suitably designed for ocean towing. Tugs lines are used.

Tugs will meet the ship off Bordeau Island, approximately 4.5 miles from the berth.

BERTHING: The jetty extends 3,000 ft. from the shore. Berth No. 1 (outside) can accommodate 327,000 d.w.t. tankers. Depth of water alongside 100 ft. Berth No. 2 (inside) can accommodate tankers up to 67,000 d.w.t. Depth of water alongside 52 ft. This berth used mainly for refined products.

Ship's Officer's Report:

The quay is designed for the use of tankers. There are no provisions for general cargo ships. Tankers of up to 500,000 d.w.t. with a max. draft of 90 ft. can be accommodated on the West side, and on the East side ships of up to 60,000 d.w.t. with a max. draft of 48 ft.

The length of the quay is 1,520 ft. and the height was measured at HW and LW and found to be 19 ft. 6 in. and 25 ft. respectively. High water was taken to be half an hour later than the predictions at Argentia.

The bollards are of a German manufacture and each consists of a group of three hooks with quick-release mechanism. Each hook is designed to take a strain of 100 tons and is mounted in such a way as to be able to swivel independently in any direction towards the ship. An electric capstan is situated behind each bollard.

There are adequate fenders of the compression type.

A depth of 22 fathoms was recorded by echo sounder when alongside, the transmission unit being situated 52 ft. from the quayside.

MEDICAL: Masters are asked to notify their Agents at least 72 hours prior to arrival, advising the number of men to see the doctor and their complaint. The doctors work out of hospital which is about 10 miles from the berth.

TANKERS: No. 1 berth 4×16 in. arms which run into 42 in. lines. Bunkers 1×10 in. arm.

No. 2 berth 4×10 in. arms, bunkers 1×8 in. arm. Dirty ballast facilities on either berth. All ballast must be pumped ashore.

FRESH WATER: Available. If for any reason there is no water available, vessels will be advised by their Agent. Rate approximately 20 t.p.h.

FUEL: Ship's bunkers are available. Bunker requirements, including quantities and specifications, should be made known in the 72 hour message.

Bunkers are delivered concurrent with cargo operations. Bunkers should be stemmed by owners or charters before arrival.

FIRE PRECAUTIONS: Usual precautions for a refinery.

CONSULS: The following countries have consular offices in St. John's:

Brazil	Netherlands
Denmark	Norway
Dominican Republic	Portual
Germany (West)	Spain

REPAIRS: The Agent should receive early advice of requirements, as most repairs are only available at St. John's. Radio, radar, gyro, navigator and loran, etc., the technicians for such equipment work out of St. John's. The following brand names have representatives in St. John's: Decca, Marconi, Kelvin Hughes, Furono, Atlas and Sperry.

SURVEYORS: Stationed in St. John's, Lloyds, N.V. and B.V.

GANGWAY/DECK WATCHMEN: Usually ship's crew.

CUSTOMS ALLOWANCES: Each man 200 cigarettes and one 40-oz. bottle of wine or spirits per week.

Ship's Officer's Report: There are no Customs and Immigration offices in the port at present. Officials will therefore come from St. John's and board the ship on arrival alongside.

REPATRIATION: No formal facilities, but with little difficulty crew changes and repatriation can be carried out. Prior notice to Agent is required.

AIRPORT: Nearest airports presently at St. John's, 94 miles away, and the Gander International Airport, 128 miles away.

Ship's Officer's Report: There is a good road to St. John's which is 86 miles from the port. A passenger bus service is available and also a railway for goods only.

The nearest airport is at St. John's although there is a helicopter landing area within the refinery grounds.

TIME: GMT less 3.5 hrs. Last Sunday in April clocks advanced 1 hr. First Sunday in October clocks retarded 1 hr.

SUPPLIES & LAUNDRY: Stores and provisions have to be obtained in St. Jonn's. In order to avoid delays, Agents should be notified prior to arrival, of the vessels requirements. Stores and supplies will be delivered by barge, tug, or small boat. Laundry facilities are not available in Come By Chance, but if required will have to be sent to St. John's. Therefore, early notification is required.

TELEPHONES: Not available at present.

POLICE/AMBULANCE/FIRE: The police are located in Clarenville – tel. 466–7830. Ambulance is available on site – tel. 463–2458. Fire Department located in Clarenville – tel. 466–7777. Also Fire Department located on site – tel. 463–2458.

SHORE LEAVE: In order to comply with immigration regulations, crews should be carefully checked before sailing, and any missing seamen reported to Agent.

In case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances (if any) and also instructions for repatriation.

GENERAL: Masters are strongly advised to contact their Agent 72, 48, 36, 24, 12 and 6 hours with ETAs. On the 72 hour message Masters should advise all port requirements.

Gangway: Ship's gangway.

WEATHER: *Ship's Officer's Report:* The prevailing winds are from the S.W. in Summer and N.W. in winter. Fog is experienced regularly in April, May, June and July, the latter two months being the worst. The fog is usually associated with a Southerly wind.

There is no shelter afforded on the North, East and South sides of the quay and only a nominal amount on the West side.

Local pilots report that the range of tide is between 5.5 and 8.5 ft. which can increase if the wind has been blowing from the South for any length of time.

AUTHORITY: Department of Transport, Southside Road, St. John's, Newfoundland, and Provincial Refining Company, Come By Chance, Newfoundland. Tel. 463–8811. In Port – VHF Channel 16, Call sign VCA741.

AGENT: Blue Peter Steamship Limited, Come By Chance, Newfoundland. Tel. 463–8511. Telex 016–4755. Cable Address – Bluepeter Come By Chance. In Port – VHF Channel 16; After hours – 466–2913 or 466–7500.

Ship's mail should be sent to: Blue Peter Steamships Limited, P.O. Box 698, Clarenville, Newfoundland.

CONTRECOUER, Quebec: 45.53 N. 73.12 W. (See Plan)

DOCUMENTS, HEALTH, RADIO, etc.: Refer to "Montreal" and "Quebec".

PILOTAGE: Compulsory, Pilot meets vessel at Anse-aux-Basques. Boarding at all hours.

ANCHORAGE: Available at Lanoraie 15 miles East of dock and Sorel 20 miles East of dock. Also at Contrecouer, off the berth.
RESTRICTIONS: Hatch openings must not be less than 25 ft.×35 ft. Vessels will be required to vacate the berth immediately after completion of loading and/or discharging. Masters and/or Agents to advise ETA 36 hours, 24 hours and 12 hours. If any change after 12 hours notice, Terminal to be advised immediately, otherwise charges for waiting time will be assessed.
MAX. SIZE: 800 ft. length; 102 ft. beam; 35 ft. draft; fresh water.
BERTHING: Ships will be berthed in regular turn of vessels, providing they present with hatches open, ready for discharging and/or loading.
STEVEDORES: Available at following times: Regular working periods are from 0800 to 1600 and from 1600 to 0000 hours, Monday-Friday. Under special arrangement, work performed from 0000 to 0800 hours, also on Saturdays, Sundays and legal holidays.
The arrival time will be when the vessel arrives alongside the berth, with all lines made fast. The departure time will be when the last line is let go.
MEDICAL: Doctor and hospital available.
FRESH WATER: Available.
FUEL: Available.
TIME: GMT minus 4 hours.
HOLIDAYS: Legal holidays are as follows: Good Friday, St. Jean Baptiste Day, Dominion Day, Labour Day, Thanksgiving Day, Ascension Day, Victoria Day, Remembrance Day.
AUTHORITY: This a private port owned by the Iron Ore Company of Canada.

CORNER BROOK, Newfoundland: 48.57 N. 57.57 W.

DOCUMENTS:
3 Crew Lists Form: IMM.200.
5 Passenger Lists.
3 Crew Declaration Y.14.
3 Bonded Store List E.1.
2 Maritime Declaration of Health Form QS 2001. (Not required from USA port).
2 Manifests of Cargo (In Transit) and Manifest of cargo for discharge.
Bill of Lading.
All Crew members require valid smallpox vaccination certificates.
1 Clearance from Last Port. A.6.
Required by Agents – Vessel expiry dates for Canadian Customs
1. Load Line Certificate
2. Radio Equipment Certificate
3. Safety Equipment Certificate
4. Deratting Certificate
5. Safety Construction Certificate
6. Non-Canadian Compliance Certificate (Tankers only)

PILOTAGE: Pilot launch is called *Clenkim* fitted with radio telephone, receives on 2182, 2558, 2134 and 2582 kc/s. Radar and VHF onboard. Pilot Station, Frenchman's Head. Pilotage compulsory, operated by Atlantic Pilotage Authority with head office in Halifax. During the ice season, Pilots will board from tug *Indian Lake* approximately 1 mile from Bowater's berths. The tug is also fitted with VHF. Also see "Radio".
APPROACHES: The Corner Brook waterfront exends along the South shore of the Humber Arm for approximately 6 miles Westward from Humbermouth. The centre of the City waterfront is 21 miles from South Head. South Head commands the Southern entrance to the Bay of Islands. There are no off-lying shoals near the approaches.
ANCHORAGES: Good anchorages in Outer Bay. Most convenient is in Humber Arm off Petitpas Cove in 15 to 20 fathoms . Masters requested to contact local Pilots regarding anchorage as a submarine cable enters waters of Humber Arm and South Head.
HEALTH: Pratique is granted when all crew have been vaccinated and no suspected sickness on board. Pratique is automatic when from a quarantine port or non-quarantine port, provided Port Health Authorities have been established. Also see "Montreal".
MAX. SIZE: See "Berthing".
RADIO: For short range: Stephenville Marine Radio operated by DOT. WT 500, 416, and 40 kc/s. RT call letters VOJ. Receives 2182, 2558, 2134, 2582 kc/s. For long range: Via Halifax Marine Radio.
Advise of arrival: ETA messages should be sent in GMT, 72, 48, 24 and 12 hours notice recommended. All messages sent to Agents will be given local Pilots and Customs. Cash requirements and other items requiring immediate attention on arrival should be given in the 48 hours ETA.
It is also recommended that notices advise number of gangs vessel can work, also if there is cargo for discharge, quantity and holds stowed.
TUGS: See "Pilotage".
BERTHING: Oil tankers for Humbermouth only docked and sailed in daylight.
Bowater's wharves: Tankers berth port side to No. 4 berth. Max. length 620 ft., max. draft 32 ft.
Bowater's wharves located near centre of city waterfront. Consist of four berths, and are continuous. Run parallel with shore line. Total length 1,650 ft. Min. depth of water 28 ft. in No. 1 berth, elsewhere 30 ft. to 32 ft. at low tide. Fresh water and electric power available.
Bowater Older Sheds (Formerly Managed and Operated by Western Terminals Limited): 1 wharf consisting of two berths. Total length is 660 ft. Depth of water is 22 ft. Fresh water available as well as electric light and power.
New Canadian National Railway wharf and shed. Steel and concrete structure. Length of wharf 600 ft. Depth alongside 35 ft.
North Star Cement wharf annexed to small Government wharf. Combined length 400 ft. Depth of water 24 ft. at Western end and 17 ft. on inner end. Partly laden tankers of T-2 class discharge at this wharf.
Imperial Oil Ltd. discharging pier depth of 30 ft. min. at low tide. Full laden tankers of the T-2 class can discharge.
Irving Oil Company Ltd. discharging pier with depth of water at Eastern end of 30 ft. and at Western end 26 ft. Tankers discharge with the forward draft restricted to 26 ft.
Gulf Oil Ltd. discharging pier has a depth at Eastern end of 28 ft. and at Western end 22 ft. T-2 tankers may discharge with restricted drafts accordingly.
Golden Eagle Refinery Co. discharge oil at North Star Cement wharf.
Department of Transport Wharf. Length of wharf is 600 ft. 6 in., joined to Canadian National Railway wharf. Steel and concrete structure. Depth of water alongside is 32 ft. to 34 ft. Wharf is equipped with three side-loader ramps tested for 25 ton capacity. Managing operators are Western Terminals Limited. Fresh water is available. General cargo is handled.
At Bowaters, vessels loading normally dock starboard side to No. 1 Berth and port side to No. 2 Berth. Oil and caustic soda tankers discharge port side to No. 4 Berth. General cargo, such as alum, is normally discharged port side to No. 3 Berth.
CRANES: Mobile crane available at Bowater – capacity 11 tons from ship's hold, 18 tons from deck.
STEVEDORES:
Working Hours:

0800 to 1200	– 2 gangs
1200 to 1230	– Lunch break
1230 to 1620	– 2 gangs
1630 to 2030	– 2 gangs
2030 to 2100	– Lunch break
2100 to 0100	– 2 gangs

Overtime: Can be worked Mondays to Fridays (day gangs) 1630 to 2100 hrs. if requested. Lunch break 1800 to 1830 hrs., but gangs are paid for 4.5 hours at time and a half rate.
Tankers: Under extenuating circumstances, tankers being discharged prior to a Statutory Holiday could be completed on a Statutory Holiday at double time and a half rates, but under no circumstances will work commence if vessel arrives on a Statutory Day.
MEDICAL: Hospital and Ambulance service available. If ships' Crew members require emergency medical attention *on board immediately on arrival,* this should be stated in message to Agents, together with ETA. Otherwise, doctor appointments can be arranged during regular office hours.
DENSITY: Average 1015. High water, Easterly wind 1025. High water, Westerly wind 1008. Low water 1005.
FRESH WATER: Fresh water available at Bowaters berths – 50c per ton first 20 tons or part thereof and 25c per ton for each additional ton.
FUEL: Bunker "C" fuel oil 300 secs. SSF available at Bowaters No. 4 berth. 24 hours notice required. Gas oil and Marine diesel available by truck delivery. Castrol lubricants available at 72 hours notice.
GANGWAY/DECK WATCHMEN: Not required but recommended.
OPENING/CLOSING HATCHES: Opening and closing hatches is normally done by ship's crew. Rigging ship's gear is normally done by stevedores. Loading gear consists of single 8 in. wooden blocks with 1 in. diameter ropefalls, which should be set up at the head of all working derricks to permit storm tents to be rigged on both the amidships and yardarm derricks at each hatch.
CUSTOMS ALLOWANCES: Tobacco: 3 lb. limit per crew member or 300 cigarettes or 75 cigars. Wine and/or Spirit: 2 doz. beer or 60 oz. spirit per crew member. All other placed under seal. Slightly smaller issues after 7 days.
CARGO GEAR: If at Bowaters berths, single 8 in. wood blocks with 1 in. diameter manila rope falls should be set up at heads of all working derricks to permit tents to be rigged on both midship and yardarm derricks at each hatch.
IDENTITY CARDS: Every Crew member should be in possession of some form of identity card.
CONSULS: Nearest consuls are in St. John's approximately 450 miles.
REPAIRS: Minor repairs carried out.
REPATRIATION: All necessary crew changes and repatriation facilities available.
AIRPORTS: International Airport, 222 miles from Corner Brook, at Gander. Stephenville Airport, Air Canada and EPA, 50 miles from Corner Brook. Deer Lake Airport, EPA service available, 30 miles from Corner Brook.
TIME: NST–GMT less 3.5 hours. Newfoundland Daylight Saving Time – GMT less 2.5 hours, last Sunday in April to last Sunday in October.
HOLIDAYS: *Bowater Newfoundland Limited:*
January 1st – New Year's Day
July – Dominion Day (normally first Monday in July)
September – Labour Day (first Monday in September)
December 25th – Christmas Day. No work is performed after 1600 hrs. on Christmas Eve (December 24th), nor on New Year's Eve (December 31st). Plus an additional day as agreed with Unions.
Friday – Ordinary working day except that overtime rates are payable when stevedores have worked each of the 5 preceding days in the week.
Saturday – Ordinary working day except that overtime rates are

payable when stevedores have worked either 5 or 6 of the preceding days.

Sunday – As per Union agreement. Work can be performed at time and a half rates as follows:

July and August – a maximum of 2 consecutive Sundays Remainder of the year a maximum of 3 consecutive Sundays.

POLICE/AMBULANCE/FIRE: *Police:* Alongside Bowaters Ext. 274 Mill Guards. Local Police area code 709-634-8236.

Ambulance: Alongside Bowaters Ext. 274 Elizabeth Ambulance. City area code 709-634-7009, 634-5611.

Fire: Alongside Bowaters 274 Mill Brigade. City Area code 709-634-4333.

Hospital: 634-4393 or 634-5101.

TELEPHONES: None available on board ships, but phones are on the wharf in nearby offices.

GENERAL: Ice coverage can be expected between January 1st and April 15th. Shipmasters should get in touch with Ice Information Office, Halifax, Nova Scotia, Telephone (Area code 902) 526-5664 or 426-5665. Telex No. 019-22625 for routing and Icebreaker assistance. 36 hours ETA in Cabot Strait is required.

SERVICES: Compass adjuster can be engaged.

SHORE LEAVE: Discretion of Master. No port regulations.

AUTHORITIES: Harbour Master and Bowaters Newfoundland Ltd.

DALHOUSIE, N.B.: 48.04 N. 66.22 W.

DOCUMENTS:

Ship's Register.
Load Line.
Safety Radio and Safety Equipment Certificates.
Stores List and Crew Declaration (E–17, Y–14), if from foreign port.
Pratique, if from a Foreign Port.
Immigration Clearance from last Canadian Port.
If from a Foreign Port, 2 copies of crew list.

For Shipping Master: Ship's Articles if British or Canadian Registry.

PILOTAGE: Telegram sent to Restigouche Pilots, Dalhousie, N.B., or to vessel's Agent. 6 hours minimum notice required except during Winter operations (January–April). Pilot vessel is a 40 ft. steel hull, black, grey superstructure, displays proper flag by day and proper lights by night. Pilots meet and board all inbound vessels 1.5 miles due East of Bon Ami Point lighthouse. Pilots prefer pilot ladder for boarding.

ANCHORAGES: Safe anchorage 1.5 miles offshore due East of harbour entrance. Pilots will board vessels for anchorage in from 6 to 12 fathoms.

RESTRICTIONS: Tide restricted if vessel exceeds 28 ft. on arrival.

MAX. SIZE: Max. length 750 ft., beam 100 ft., draft 36 ft. at the Government Wharf including oil and bulk carriers. Vessels approaching these dimensions must berth at high water, port side to. Max. draft entering harbour and berthed starboard side to is 28 ft. because of restricted turning basin.

HEALTH: See "Montreal".

RADIO: ETA through Grindstone.

TUGS: Not necessary.

BERTHING: To berth starboard side to at any berth vessel is requested to arrive 3 hours before high water.

STEVEDORES: Contact Agents.

MEDICAL: Hospital and doctors available.

TANKERS: One 12-in. line with three 8-in. connections is laid to the Government Wharf. Depth alongside 34 ft. LWOST.

DENSITY: Average density 1008.

FRESH WATER: Available at all berths from hose lines on the dock. 50 t.p.h.

FUEL: Available by truck if necessary. Advance notice required.

GANGWAY/DECK WATCHMEN: Available if requested.

OPENING/CLOSING HATCHES: As in Charter Party.

IDENTIFICATION CARDS: Not needed.

CONSULS: None.

REPATRIATION: Facilities exist providing sufficent notice given.

AIRPORT: 7 miles, 2 flights daily.

TIME: Daylight Saving during Summer months. Atlantic Standard otherwise.

HOLIDAYS: Official Holidays: New Year's Day; Christmas Day; Dominion Day; Labour Day.

POLICE: Telephone 684–2167.

TELEPHONES: Made available upon prior arrangement.

SHORE LEAVE: Allowed.

AUTHORITY: Dept. of Transport, Saint John.

DIGBY, N.S.: 44.38 N. 65.45 W.

DOCUMENTS: See "Montreal".

PILOTAGE: Usually contacted through St. John radio station by VHF. 12 hours notice required. Pilot usually meets ships at entrance to Digby. As long as adequate notice is given no waiting is experienced.

ANCHORAGE: Good Anchorage N.E. from town 15 to 25 fathoms.

MAX. SIZE: Length 400 ft. and 28 ft. depth at low water.

HEALTH: See "Montreal".

RADIO/VHF: St. John Radio call sign VAR.

TUGS: Not normally necessary, light towing available in case of necessity.

BERTHING: Transport wharf main pier with berthing length 400 ft. and 28 ft. alongside at low tide, also Transport Spur Pier 330 ft. long and 50 ft. wide, 22 ft. depth alongside at low tide (21 to 28 ft. rise and fall in tide).

FRESH WATER: Supplied by pipe-line on wharf.

FUEL: Diesel oil available only.

DEVELOPMENTS: Construction of new Dock for St. John N.B. to Digby ferry service.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Usually carried out by crew.

CUSTOMS ALLOWANCES: 200 cigarettes per man, per week; 40 oz. alcohol per man per week for crew.

IDENTIFICATION CARDS: Required or passport.

CONSULS: None.

REPAIRS: No major repair facilities available.

REPATRIATION: Can be arranged.

AIRPORT: Small local line based at St. John N.B. supplies service between St. John and Digby. Halifax International Airport 180 miles away.

TIME: GMT minus 4 hours.

HOLIDAYS: New Year's Day (Jan. 1st); Good Friday; Easter Monday; Victoria Day and Queen Elizabeth Day (May 19th); Canada Day (July 1st); Labour Day (Sept. 1st); Thanksgiving Day (Oct. 13th); Remembrance Day (Nov. 11th); Christmas Day (Dec. 25th).

POLICE/FIRE/AMBULANCE: Police 245–4162; Fire 245–2121; Ambulance 245–2205.

TELEPHONES: Available at cost of installation.

SHORE LEAVE: Allowed.

AUTHORITY: Dept. of Transport, Saint John.

FRASER PORT, B.C.: 49.12 N. 122.55 W.

(See Plan)

DOCUMENTS, ANCHORAGE, and further information: Refer to "Vancouver, B.C.".

PILOTAGE: Compulsory from Fraser River Sands Heads.

MAX. SIZE: Draft limited to 33 ft. on 12 ft. tide.

HEALTH: Pratique and quarantine at Victoria B.C.

TUGS: Available, normally join vessel on arrival.

BERTHING: (North and South side of river).

Pacific Coast Terminals Co. Ltd.: 8 berths for vessels up to 35 ft. draft. Covered storage for general cargo, pulp and mineral concentrates.

Fraser–Surrey Docks Ltd.: 5 general berths, total length 3,300 ft., 1 sawdust/woodpulp bulk cargo berth and 1 tranship berth, Depth at low water 33 ft. Water, power and telephone connections at all berths. Cargoes handled include forest products, steel, heavy lifts bulk and general cargo, as well as roll-on/roll-off cargoes and containers. Terminal well equipped with fork lifts, front-end loaders and cranes to 250 tons. Operators are Fraser Surrey Docks Ltd.

Fraser Wharves Ltd.: 1 berth, length 500 ft., width 45 ft. Berth for loading and unloading cars.

Annacias Marine Terminals.: 1 Berth, length 552 ft., width 60 ft. Situated at East end of Annacis Island for discharging of cars.

Domtar Chemicals Ltd.: 1 berth, length 610 ft., depth 27 ft. Berth connected to plant by 30 in. conveyor belt system for transfer of crude rock gypsum to the plant.

Crown Zellerbach Building Materials Ltd.: 2 berths, total length 1,300 ft., depth at LW 30 ft. Berth is upstream of the Patullo bridge.

Canadian Rice Mills Ltd.: Situated on North side of river at Richmond. 1 Berth, length 400 ft., depth at low water 30 ft.

MEDICAL: All services available.

DENSITY: Varies with location and season.

FRESH WATER: Available.

FUEL: All grades availeble.

DEVELOPMENTS: Future developments call for 35 ft. draft and expanded berthing facilities.

CONSULS: At Vancouver.

REPAIRS: Engine repairs only.

AIRPORT: Nearest at Vancouver.

TIME: Pacific Standard Time, GMT minus 8.

POLICE/AMBULANCE/FIRE: Police 521–7711; Ambulance 872–5151; Fire 526–4411.

SHORE LEAVE: Allowed.

AUTHORITY: Fraser River Harbour Commission, New Westminster.

FROBISHER BAY, N.W.T.: 63.44 N. 68.32 W.

DOCUMENTS: See "Montreal".

PILOTAGE: No Pilot service.

ANCHORAGES: Best-known anchorage in depths of 21 and 22 fathoms approximately 5 cables East of Monument Island.

RESTRICTIONS: Low-powered vessels generally navigate Pike Resor Channel at slack water, high or low tide.

MAX. SIZE: Tankers with dimensions 525 ft. long, breadth 58 ft., draft 30 ft. 2 in. discharge in a position approximately 800 ft. off Innuit Head. Method of mooring is to stream both anchors in anchorage area and stern lines to mooring bollards situated on Innuit Head for this purpose. General cargo ships up to 12,000 tons also moor in this position. Masters advised to be prepared for quick departure in event of storm warnings especially if winds expected from Northerly and Southerly directions.

HEALTH: Free pratique, if health certificate is in order. In the event of suspected disease or fever on board, report to Frobisher Bay Telecommunications Branch call sign VFF R/T or W/T.

RADIO: Frobisher Bay R/S VFF. Resolution Island R/S VAW.

TUGS: 2 landing craft (LCM's) each powered with two 130 h.p. diesel engines assist vessels in mooring, acting as tugs and running ship's stern lines to Innuit Head.

STEVEDORES: Special arrangements are necessary for these services.
MEDICAL: Hospital facilities available.
DENSITY: From August 1 to September 15 mean approx. 1.02477 increasing slightly as season advances.
FRESH WATER: Small quantity in emergency. Approximately 50 gallons per minute. *Note:* Due to tidal conditions considerable delay could result in delivering fresh water.
FUEL: Only supplied in emergency, Arctic diesel grade 1, viscosity quoted as minus 60.
OPENING/CLOSING HATCHES: According to agreements.
IDENTIFICATION CARDS: Required if arriving from a foreign country.
REPAIRS: Limited repairs, i.e. welding, R/T and radar.
REPATRIATION: Crew changes can be effected by air passage to or from Montreal.
AIRPORT: Distance approximately 0.5 mile from landing beach, 5 flights weekly to and from Montreal, weather permitting.
TIME: GMT minus 4 hours.
POLICE/AMBULANCE/FIRE: RCMP 5202; Ambulance 979–5231; Fire 6666.
AUTHORITY: Harbour Master.

GASPE, Quebec: 48.50 N. 64.29 W. **(See Plan)**

DOCUMENTS:
Immigration Documents:
Passenger landing cards (Tourist) 1 each passenger.
2 Crew Lists from Immigration.
2 Passenger Lists.
Customs Documents:
2 Inward Reports.
2 Outward Reports.
3 Ship Stores Lists (Form E.1).
3 Crew Declarations (Form Y.14).
National Health and Welfare:
2 QS.1 Maritime Declarations of Health.
Manifests required for cargo unloaded only.
PILOTAGE: Not compulsory but recommended. No licensed Pilots available, but men recommendable for guidance to harbour and wharf. To obtain Pilot, arrange by radio phone through marine radio station VCG at Fox River Gaspe PQ or by CN Telegraph, on receipt of message either to Agent or Port Authority, Pilot and other arrangements can be made.
MAX. SIZE: Vessels of 650 ft. and over have both docked and anchored. Tide has no effect as it is very sheltered. Government wharf depth 35 ft. LW.
HEALTH: On arrival in Canadian waters Master applies for Radio Pratique by radio to quarantine officer at Quebec City. Master flies yellow flag on arrival and until medical officer decides it can be lowered or otherwise according to regulations. See also "Montreal".
RADIO: VCG Marine Station Fox River Gaspe PQ.
TUGS: Not necessary, no tugs available unless called for in emergency. Line boats available for docking, by arrangement.
BRIDGES: Bridge in inner harbour with opening span to allow through vessels of approx. 40 ft. beam, and 25 ft. draft. Call to open bridge, three blasts.
BERTHING: *M.O.T. (Sandy Beach) wharf,* berthing length 600 ft., depth alongside at low water 33 to 35 ft. outer face and about 26 ft. inner side; railroad tracks on wharf, oil tanks, electric light and water.
Ministry of Transport wharf, berthing length 400 ft. depth alongside at low water 25 ft.; electric power, but no railroad tracks. All wharves used for general freight. This wharf is not in good condition.
Canadian International Paper Co., and several fish companies have wharves with depths of 16.5 to 25 ft. alongside, but not considered suitable for berthing.
STEVEDORES: Good stevedoring available at all times and hours.
MEDICAL: Hospital and ambulance service.
TANKERS: Oil lines on Department of Transport Government Wharf owned and used by Gulf Oil Canada, Irving Oil, Shell Canada Limited and Imperial Oil. These lines are privately owned.
FRESH WATER: Available, arranged through ship's Agent.
FUEL: Light and medium diesel available at all times. If bunker fuel required on request, brought in by tanker car.
GANGWAY/DECK WATCHMEN: Recommended watchmen necessary, may be obtained.
OPENING/CLOSING HATCHES: Done by ship's crew.
CUSTOMS ALLOWANCE: On arrival officers and crew permitted one bottle and 200 cigarettes and one pound of tobacco for period of one week, further allowances of tobacco given after one week, as well as spirits for senior officers.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Only minor repairs.
REPATRIATION: May be arranged by Agent subject to Immigration control.
AIRPORT: Situated about 7 miles from the dock. Twice daily service to Quebec, except Saturday and Sunday. Connections to all parts from Quebec. Charter passengers and freight flights also available.
TIME: GMT minus 4 hours in Summer. GMT minus 5 hours in Winter time.
HOLIDAYS: Saturday, New Year (January 1st); Good Friday; Victoria Day (May 19th); Confederation Day (July 1st); Labour Day (September 1st); Thanksgiving Day (about October 13th); Remembrance Day (November 11th); Christmas Day (December 25th). There are a few other R.C. Church days on which some men are not obtainable. Most of these holidays stevedores and men are available.
POLICE/AMBULANCE/FIRE: Police area 418 call 368–2311. Local RCMP area 418 call 368–2543. Ambulance Area 418 call 368–2835.
TELEPHONES: Possible arrangements may be made with local telephone company for installations to vessel.
GENERAL: Radar repairman available if matter not too serious.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: Customs and Immigration Officer, and Harbour Master and Government Wharfinger.

GOOSE BAY, Labrador: 53.22 N. 60.22 W.

DOCUMENTS, HEALTH: See "Montreal".
PILOTAGE: Two Pilots available; 24 hours notice of arrival required. Contact Pilot on radio-telephone 2182 kc/s., calling "Victor Gulf Whiskey".
RESTRICTIONS: Navigation season early June to end November depending on pack ice movements. Approach – Sandy Point Channel at entrance to Goose Bay and 15 miles from the dock has a width of 300 ft. Harbour Master advises draft of 31 ft. HWF. Groves Point Channel at entrance to Terrington Basin and 1.5 miles from Main Dock has depth of 32 ft. HWF and width of 300 ft.
TUGS: There are no tugs. Three landing craft available to assist.
BERTHING: Main wharf length 810 ft. depth alongside increased to 30 ft.
Government Dock, 190 ft. long, depth 19 ft. 6 in. LWOST.
DENSITY: 1000, fresh water.
FUEL: Diesel oil only, supplied by tank truck and pipe-line.
FRESH WATER: Available alongside berths.
REPAIRS: Only minor repairs may be effected in emergency.
AIRPORT: 1.5 miles distant.
HOLIDAYS: New Year's Day; Good Friday; July 1st; Labour Day; November 11th; Christmas Day; Boxing Day.
AUTHORITY: District Manager, Canadian Coast Guard, Goose Bay.

HALIFAX, N.S.: 44.38 N. 63.33 W. **(See Plan)**

DOCUMENTS:
Port doctor: Form QS1; Crew Vaccination Certificates, Deratisation Certificate.
Customs: Customs clearance or certificate from last port; Cargo List (if no cargo, words "In Ballast" entered); Bonded Stores List (Form E.1); Crew Declaration for each crew member (Form Y14). Ship's Register; Safety Radio, Load Line and Safety Equipment Certificates.
Immigration: Crew List (Form 200) in duplicate in English; all crew Passports (returned prior to sailing).
PILOTAGE: Compulsory. Essential send arrival notice by radio to avoid delay in waiting Pilot. 12-hour notice of ETA required and confirmed or corrected 4 hours before arrival. All times must be GMT. Radio messages should be addressed Marine Aid Centre, Chebucto Head. All pilotage messages subject to full tolls.
When possible, Pilots will board in vicinity of Inner Automatic Light and Whistle Buoy situated about 2 miles North-Eastward of Chebucto Head. In heavy weather not always possible for pilot vessel to take up station at above position, but will proceed as far seaward as feasible to embark or disembark Pilot.
In normal weather pilot vessel shall, in daytime, fly pilot flag, and at night will show lights required by international regulations. In abnormal weather – fog, mist, snow, heavy rainstorms – when on station on pilotage duty, in addition to regular signals, will blow four long blasts at regular intervals. Vessel requiring Pilot should blow four short blasts on whistle at intervals until pilot boat sighted. Pilot boats equipped with radar and stand-by on radio telephone operating on frequency of 156.8 m/cs or Channel 16 under international VHF designations.
ETA: For provisional clearance to enter the Halifax Marine Traffic Regulating zone, vessels should supply the following information to "Halifax Traffic":
1. Position.
2. ETA Zone Limit (Zone boundary is approximately 16 miles radius from Chebucto Head).
3. Destination and last port.
4. Draft.
5. Description and weight of pollutants or any dirty cargo carried.
6. Deficiencies in ship's navigational equipment, engine's steering gear or anchors.
7. Any leakage of pollutants or any damage which may result in pollution.
8. Pilots must be advised ETA 12 and 3 hours prior arrival at the Pilots boarding station, using GMT, to "Pilots Halifax".

For final clearance to enter the Halifax Marine Traffic Regulation Zone:
1. Report to "Halifax Traffic" on VHF Channel 14 or 2182 kHz, when approaching the zone boundary.
2. Report to "Halifax Traffic" when approaching zone boundaries approximately 8 and 4 miles radius from Chebucto Head.

Vessels leaving Halifax are to report to "Halifax Traffic" when approaching zone boundaries.
ANCHORAGE: Vessels anchor in harbour in areas designated by National Harbours Board.
RESTRICTIONS: Controlling depth in channels of approach 60 ft. in main harbour as far as the Narrows. Ice free all year. Ample turning room for the longest vessel.

MAX. SIZE: Length and breadth unlimited. Can berth ships up to 60 ft. draft. Channel depth 60 ft. Tide range 6 to 7 ft. 110,000 ton tankers with drafts 50 ft. enter harbour regularly.
HEALTH: Quarantine – every vessel coming from port outside Canada shall be inspected by Quarantine Officer at a place specified by him. (Quarantine Station in anchorage No. 1). Where sufficient information can be given by radio, Radio Pratique may be given between 0900 hrs. and 1700 hrs. local time (address "Quarantine Halifax") and message should include (i) name and nationality of vessel, (ii) ports of call during voyage, (iii) nature of cargo, (iv) number of crew and passengers, (v) statement of health, (vi) name of Agent, (vii) ETA pilot station in GMT. A coastwise vessel, free from disease and arriving from a disease-free coastwise port, may be exempted quarantine inspection.
TUGS: Join vessel inside harbour at quarantine anchorage. Tugs towing use vessel's lines. Tugs made fast alongside vessel for docking or undocking use their own lines at no extra charge.
RADIO: Halifax Marine Radio Station, Ketch Harbour. Radiotelephone and other services. Masters may contact Halifax Marine Radio on 500 or 2,182 kHz, VHF on 156.8, working Channel 26 (161.9 and 157.3 mHz).
RADAR: Marine Traffic Regulating Center at Chebucto Head. Working frequencies Sector One 156.7 mHz (Channel 14) Sector Two 156.6 mHz (Channel 12). Call sign "Halifax Traffic".
BERTHING: Total length of berthing 17,030 ft.; min. depth 30 ft.
Ocean Terminals:

Berth	Length (ft.)	Depth at LW (ft.)	Remarks
20, 21, 22	2,007	45	
23	720	35	
24	440	35	
25	625	45	Grain
26	625	45	Grain
27	625	45	
28	625	45	Grain
29	400	30	Fish Pier
30	250 375	23 35	
31	175 450	35 45	
32	290	45	
33	625	45	
34	225 400	18 35	
35	340	35	
36	625	35	
37	625	42	
38	300	42	
39	625	42	
41	850	50	3×45 tons gantry cranes.
42	850	40	
Dartmouth			
Pier W.	500	25–30	
E.	500	25–30	

Richmond Terminals:

9	700	30	Leased to Volvo, Canada Cement Co. Ltd., Texaco Canada and Canadian Petrofina Ltd.
9a	730	30	Equipped with 4 side loading ramps. Capacity 12 tons.
9b	758	30	
9c	505	30	Canadian Petrofina Ltd.

CARGO FACILITIES: (West Side of Harbour) 13 Shedded Berths. Each shed 50,000 sq. ft. or more 9 with dockside rail track.
6 Open Area Berths
1 – 70,000 sq. ft. storage area. Dockside rail track
1 – 60,000 sq. ft. storage area. Ro/ro ramp
2 – 48,000 sq. ft. storage area. Dockside rail track
1 – 58,000 sq. ft. storage area. Dockside rail track
1 – 40,000 sq. ft. storage area. Dockside rail track
AUTOPORT FACILITY: (East Side of Harbour) 2 berth facility with ro/ro capability. 80 acres for vehicle storage with pre-service available for import vehicles.
BRIDGES: There are two: Angus L. MacDonald bridge (Halifax-Dartmouth) min. vertical clearance at high water 158 ft.; A. Murray MacKay Bridge (narrows) min. vertical clearance at high water 157.7 ft.
TANKERS: 110,000 ton tankers, 50 ft. draft, use port regularly. Terminals – nine berths operated by four oil companies.
Imperial Oil, South Dartmouth, three piers, vessels up to 925 ft.; max. draft 50 ft., bunkering vessel also provides barge service.
Irving Oil Co. Ltd.: South Dartmouth, three berths, ocean vessels any length, max. draft 36.6 ft.; located at Woodside.
Texaco Canada Ltd.: Eastern Passage, two berths (one berth any length vessel) draft up to 38 ft., barge service provided in harbour.
Gulf Oil Canada Ltd.: Bedford Basin; 360 ft. wharf (no restriction vessel length) max. draft 32 ft.; located Burnside, Halifax – Dartmouth Marine Terminal.
BULK HANDLING FACILITIES: Two-berth container ship-rail interface at Pier "C". Served by three 45-ton container gantry cranes, two railcar loading transtainers, 30 tons each, 22 straddle carriers, 30 tons each. Total quay length 1,762 ft., minimum depth, North end 50 ft., South end 40 ft.; one ro-ro berth. New container facilities are under active consideration.
Grain Handling Facilities: Storage capacity over 5,000,000 bushels. Max. capacity
Berth 25 60,000 bu/hr. (loading)
Berth 28 72,000 bu/hr. (loading)
Berth 26 34,000 bu/hr. (unloading)
MEDICAL: Sick Mariners' Service may be obtained for venereal disease only at the Federal Building, Suite 620, Bedford Row, Monday through Friday, Tel. 426-3998. Doctor always available either by telephone or telephone answering service. Information for emergency treatment outside these hours may be obtained from ship's Agent. Emergency hospitalisation can be obtained only at Camp Hill Hospital.
STEVEDORES: Available from several private companies.
DENSITY: Salt water all tides.
FRESH WATER: Dock side only. No water barges. 50 t.p.h. per hose.
FUEL: See "Tankers".
GANGWAY/DECK WATCHMEN: Can be provided.
OPENING/CLOSING HATCHES: Patent mechanical hatches by ship's crew. Wood and canvas hatch covers by stevedores.
CUSTOMS ALLOWANCES: Tobacco: 1 lb. per man per week; 200 cigarettes per man per week. Wine/spirit allowance: 40 oz. bottle per man per week.
CARGO GEAR: All ships liable to inspection by government inspectors. Gear certificates to be produced, if required. Heavy-lift equipment: 59 pieces ranging in single lift capacity to 140 short tons. Normally available on a few hours notice, including floating cranes.
CONSULS: The following countries are represented in Halifax:

Austria	Japan	Peru
Belgium	Germany	Portugal
Britain	Iceland	Spain
Brazil	Italy	Sweden
Denmark	Netherlands	United States of America
Finland	Norway	

REPAIRS: All types of repairs possible.
DRY DOCKS: Floating dock – 600 ft. by 100 ft. by 31 ft. deep; lifting capacity 25,000 tons. Graving dock – 567 ft. long, 80 ft. wide at keel blocks, clearance at top 102 ft. 6 in.; max. draft over keel blocks 26 ft., capacity 25,000 tons. Marine Railways, six. Complete machine shop and other repair facilities as well as Salvage equipment available.
AIRPORT: Halifax International. Regular services to Canada, USA and Europe.
TIME: Standard Time GMT minus 4 hours. Daylight Saving Time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: New Year's Day (January 1st); Good Friday; Queen's Birthday (May 20th); Dominion Day (July 1st); Labour Day (September 2nd); Thanksgiving Day (October 14th); Remembrance Day (November 11th); Christmas Day (December 25th). Cargo work can be arranged on all holidays except Labour Day.
POLICE/AMBULANCE/FIRE: Police 4105; Harbour Police (NHB) 426–3629; Ambulance 429–5151; Fire 4103.
TELEPHONES: Service available at all berths.
GENERAL: Extensive rail and road services plus extensive transit sheds, cold storage with 1,719,000 cu. ft. storage space.
SERVICES: All services available including compass adjusting, tank cleaning, etc.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: National Harbour Board.

HAMILTON, Ontario: 43.16 N. 79.54 W.

For important General Information refer to St. Lawrence Seaway.
DOCUMENTS:
Inward manifest 3 days prior to arrival of vessel.
1 Steamship company release covering inward shipment.
1 Loading list, 24 hours prior to vessel loading.
1 Customs report outwards (A.7).
3 Vessel's outward manifest within 3 days after departure of vessel.
PILOTAGE: Pilotage to be arranged 24 hrs. in advance. Pilot normally boards just inside harbour entrance. Contact VHF 16-156.8 mc/s.
MAX. SIZE: 730 ft. LOA. Max. draft 26 ft.
HEALTH: First port of entry. See "Montreal".
RADIO: VBG Toronto.
TUGS: Join inside harbour entrance – ship's lines used.
BERTHING: Arrangements made with Harbour Master.
BRIDGES: Lift bridge at harbour entrance can be raised any time.
STEVEDORES: Must be ordered prior to 1600 hrs. on previous day.
MEDICAL: Hospital services available and doctors can be arranged.
FRESH WATER: Available.
FUEL: All types available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCES: See "Montreal".
IDENTIFICATION CARDS: Not required.
CONSULS: Consuls located in Toronto.
REPAIRS: Possible.
AIRPORT: 10 miles, 4 connecting flights per day.
TIME: GMT minus 5 hrs.
HOLIDAYS: Normal Canadian statutory holidays apply and labour can be arranged at extra cost. See "Montreal" for details.

POLICE/AMBULANCE/FIRE: Telephone 529-L.
TELEPHONES: Can be arranged on board.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: The Hamilton Harbour Commissioners.

HANTSPORT, N.S.: 45.04 N. 64.10 W.

DOCUMENTS: See "Montreal".
PILOTAGE: Non-compulsory, but advisable. Rates by agreement.
MAX. SIZE: Tidal port and no shipping arrives or departs at low water. Draft of largest vessel that entered port was 24 ft. A draft of 25 ft. can be taken in and out.
HEALTH: Customs officer acts as Quarantine officer.
RADIO: Ship-to-shore communications; through St. John N.B. or Yarmouth N.S.
BERTHING: Berthing length 400 ft., no water at low tide, ships lie aground on mud alongside. There are railroad tracks on wharf, main and electric lights laid on.
FRESH WATER: From pipe-line on Government wharf.
FUEL: Oil by truck from Imperial Oil Ltd.
REPAIRS: Hull repairs can be made at low water with vessel high and dry.
SERVICES: Supplies: ship's stores can be secured in port.
AUTHORITY: E. L. Dillman, Harbour Master.

HARBOUR GRACE, Newfoundland: 47.43 N. 53.08 W.

DOCUMENTS:
Crew Lists.
Names of passengers.
Clearance from Last Port of call.
Deratting Certificate.
Inoculation List of all crew members and passengers.
Manifest of Cargo.
Copy Bills of Lading.
List of Bonded Goods.
PILOTAGE: Not compulsory, if required cable Agent.
ANCHORAGES: Pilot will instruct captain.
MAX. SIZE: Max. length 450 ft., max. draft 24 ft. low tide.
HEALTH: See "Montreal".
RADIO: Route cables and telephone calls through St. John's Newfoundland Radio.
TUGS: Not available.
BERTHING: Nothing specific, Pilot will have instructions; Agent should be given 24 hours arrival notice.
STEVEDORES: Available. 24 hours notice required.
MEDICAL: Port doctors available; hospital facilities; advance notice would be helpful in providing ambulance services if needed; vaccination/smallpox required for European ships.
TANKERS: Marine storage terminals for oil are served by Canadian tankers.
FRESH WATER: Available, pipe-line delivery at piers, rate of delivery as required.
FUEL: Diesel, gas oil, marine bunkering facilities in piers, available at any time, no notice required.
DEVELOPMENTS: Possibility new wharf installation, no details available.
GANGWAY/DECK WATCHMEN: Not necessary, available if required.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: See "Montreal".
IDENTIFICATION CARDS: Not required.
CONSULS: Norway; Denmark; Spain; Portugal; France.
REPAIRS: Deck and engine repairs available.
AIRPORT: 1 hr. 15 min. drive, service by regular airlines making connection to all points in the world.
TIME: GMT minus 3.5 hours. Clocks advance 1 hour last Saturday of April each year and are put back 1 hour last Saturday October each year.
HOLIDAYS: New Year's Day; Good Friday; July 1st; November 11th; December 25th. Cargoes could be worked on these days with exception of Good Friday and Christmas Day.
POLICE/AMBULANCE/FIRE: One telephone number for all services 709-596-5014.
TELEPHONES: Available at pier.
SERVICES: Compass adjusting available.
SHORE LEAVE: All crew members allowed ashore.
AGENT: Ocean Harvesters Ltd., Harbour Grace. Tel. 709-596-5111, 709-596-5112, 709-726-4840. Telex 016-311. Cable address: Moorfish, Hr. Grace.

KINGSTON, Ontario: 44.12 N. 76.30 W.

For important General Information refer to St. Lawrence Seaway.
DOCUMENTS: See "Montreal".
PILOTAGE: Contact Pilotage Officer, in Cornwall, telephone 613-546-6736.
ANCHORAGE: Good anchorage off Penitentiary.
RESTRICTIONS: Channel Depths – Controlling depth at low lake levels 22 ft. until wharves in harbour approached. In upper harbour, controlling depth 17.5 ft. Depths vary from month to month. Navigating Season April 15th – December 15th.
HEALTH: First port of entry. Quarantine at Quebec city for incoming ships from foreign ports.
TUGS: Available. Necessary for handling ships in rough weather at Elevator and other docks.
BERTHING: Docks extend West from North of bridge (La Salle Causeway) to little Catariqui Bay – some 4 miles. Dept. of Transport Dock 455 ft., depth alongside 17 ft. Portsmouth Dept. of Transport Dock has 20 ft. alongside end section. Also smaller docks for coastal vessels and private docks, including Elevator dock 700 ft. long on East side 24 ft. alongside, and 600 ft. on West side depth 22 ft. La Salle Causeway 1,000 ft., 14–16 ft. alongside used for berthing in Winter.
MEDICAL: Hospitals, Kingston General and Hotel Dieu.
STEVEDORES: From Toronto.
FUEL: Bunker coal – normal stock 2,000 tons from lighters at wharf. Bunker "C" and diesel oil also available.
FIRE PRECAUTIONS: No unusual precautions.
CUSTOMS ALLOWANCES: See "Montreal".
REPAIRS: Most repairs possible.
DRY DOCK: Will take ships of length 210 ft., beam 48 ft. Depth on sill 11 ft.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight Saving Time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: See "Montreal". Port officials always available.
TELEPHONES: Ship to shore phone communications through Kingston (VBH).
AUTHORITY: Harbour Master, Department of Transport.

KITIMAT, B.C.: 53.59 N. 128.46 W.

DOCUMENTS and General Information: Refer to "Vancouver".
PILOTAGE: Compulsory. Pilot boards at Cape Beal, West Coast, Vancouver Island, or Triple Island, off Prince Rupert. Pilotage authority require 48 hours notice to allow Pilot to meet vessel at Triple Island or Cape Beal.
ANCHORAGE: No vessel shall anchor in the fairway or dredged Channel approaching the wharf or otherwise in a position to interfere with or obstruct the docking or undocking of any other vessel. Pilot will instruct Master. Usual anchorage off Amelia Island.
RESTRICTIONS: Approach to the port from the South is via Laredo Sound, Laredo Channel, Campania Sound, Whale or Squally Channels and thence via Douglas Channel. From the North via Brown Passage, Arthur Passage, Grenville Channel, Douglas Channel. The route from the South is approximately 120 miles, from the open sea and from the North approximately 130 miles. Entrance channel to Terminal Wharf No. 1 (red and black buoys with flashing light) is 2,400 ft. long, dredged to a depth of 35 ft. at low water, width varies from 800 ft. at entrance to 600 ft. In addition, a turning basin has been dredged to 35 ft. at low water on the side of the channel opposite wharf, providing a turning basin 650 ft. in width. The channel has mooring dolphins on West side, 865 ft. South of wharf No. 1 to accommodate vessels up to 16,000 d.w.t. while awaiting berth.

Vessels may enter or depart any time of day or night.
MAX. SIZE: LOA, 680 ft. beam 90 ft., draft 36 ft. Mean tide range 13.8 ft. Depth alongside at zero tide 35 ft.
HEALTH: Vessels proceeding direct to Kitimat from foreign ports must apply for permission to proceed by radio to William Head Quarantine Station.
RADIO: Prince Rupert Radio VAJ 500 2182 1630.
TUGS: Tug services available.
ETA: Notice of ETA must be given to Alcan Eurocan at Kitimat at least 24 and 12 hours before arrival. Alcan Eurocan may then assign a berth to the vessel but shall not be liable for any delay in providing berth or for failure to provide a berth. Vessels carrying bulk cargoes for discharge are instructed to request Alcan via radio or wireless telegraph through shore stations as to which hatches are to be opened on arrival alongside unloading berth to permit immediate entry of unloading devices.
BERTHING: Alcan Terminal Wharf No. 1 (concrete caisson construction) is 750 ft. long and has two pneumatic unloading towers discharging to a belt conveyor and a Kangaroo Crane for either bulk and general cargo duties. The wharf is connected by rail direct to Aluminum Co. of Canada smelter yard and to the Terrace – Kitimat spurline of CNR.

Wharf No. 2 is a timber-pile wharf with 19 ft. alongside now used for passenger and light cargo trades. The channel has mooring dolphins on the West side, 865 ft. South of Wharf No. 1, to accommodate vessels up to 16,000 tons, while awaiting berth.

Eurocan Terminal is located to the East of Alcan's Terminal Wharf No. 1 and is 450 ft. long with mooring dolphins at South end. To the North of the terminal is located a hydraulic barge loading ramp.

No container, liquid chemicals or LPG carrier facilities available.
STEVEDORES: ETA sent by cable 24 and 12 hours before arrival.
MEDICAL: Kitimat General Hospital – complete medical service provided.
FRESH WATER: Available at Alcan's Terminal Wharf No. 1.
FUEL: Only diesel oil available.
GANGWAY/DECK WATCHMAN: Not necessary.
OPENING/CLOSING HATCHES: Normally done by crew on bulk discharge. On general cargo, stevedores open and close hatches.
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes or 0.5 lb. tobacco. Liquor: 40 oz. per man, additional issue after 7 days.
CONSULS: Available at Vancouver, B.C.
REPAIRS: Minor repairs only; nearest shipyard facilities Esquimalt or Vancouver.
REPATRIATION: Facilities convenient for crew changes.
AIRPORT: Two flights daily from Terrace to Vancouver

International Airport. Limousine service from Kitimat to Terrace, distance 40 miles.
TIME: GMT minus 8 hours. Daylight saving time from last Saturday in April to last Saturday in October.
HOLIDAYS: New Year's Day, Good Friday, Victoria Day, Dominion Day, Labour Day, Thanksgiving Day, Christmas Day, and Boxing Day.
POLICE/AMBULANCE/FIRE: Police 632-7111; Ambulance/Fire 632-2345.
TELEPHONE: Telephone available at dock offices.
SHORE LEAVE: Permitted.
AUTHORITY: Department of Transport.

LAKEHEAD HARBOUR, Ontario (formerly Port Arthur and Fort William): 48.27 N. 89.13 W.

For important General Information refer to "St. Lawrence Seaway".
DOCUMENTS: As inland Port all documentation carried out by authorities in Montreal, Quebec, prior arriving. Only when vessels have called at United States Port after departing Montreal, and prior arriving at Canadian Lakehead, will any changes in documentation be necessary; which will consist of a United States Customs clearance. Certificates to be available on board:
Immigration papers.
One copy QS 2 (Health Certificate).
Three copies of Ships' Stores.
Crew Declaration.
Customs Clearance.
All of the above will have been stamped in Montreal.
PILOTAGE: Pilots are obtained by Agent at Master's request, at which time the location of boarding the ship will be stipulated. Ship's Masters are able to contact Agent by ship-shore duplex through VBA Marine Radio, Thunder Bay.
ANCHORAGE: Anchorage areas defined by Lakehead Harbour Commission but due to large area and number of entrances to Harbour, Masters are permitted considerable latitude in making own decisions. Usual areas are approximately 1 mile outside of Harbour breakwall, free of shipping lanes. However, Masters should be guided by the advice of Lakehead Control (radio), VDX 30.
HEALTH: Pratique granted at Montreal.
RADIO: Two radio stations; VBA Thunder Bay, is Department of Transport station offering duplex services; VDX 30, Lakehead Control, offers special services such as assistance in obtaining tugs, relaying special messages for police, radar or radio services, etc.
VBA and VDX 30 both operate 24 hours per day during shipping season on following frequencies:
VBA (AM) Channels 51, 52, 57, 58, 59 and 81
(FM) Channels 12, 26, and 28
VDX 30
(FM) Channels 12, 16, 18A, and 14
TUGS: Arranged mutually by ship Masters and Agents on arrival in port. Ship lines used. Four tugs available.
BERTHING: *North Section* is protected by a breakwall. Refer to Canadian Hydrographic Chart No. 2314 for water depths.
The Keefer Terminal is the principal General Cargo berth available at the Canadian Lakehead. The ocean vessel shed is 400 ft. long, has a dock 650 ft. long with a maximum apron width of 65 ft. All types of import and export general cargo can be handled at this Terminal. Rental mobile cranes are available for handling lifts up to 12 tons.
The CNR has an ore dock with a berthing length of 1,200 ft. It can accommodate four vessels at one time with 200 loading chutes available. The vertical height from water level to spout is 45 ft.
South Section is comprised of the Kaministiquia River, Mission River. In general terms, for most vessels two tugs are required for safe river navigation.
There is one open storage Bulk of General Cargo berth, Valley Camp Coal Dock on the Mission River. This dock has two overhead gantry cranes with lift capacity of one, 12–14 tons and the other 22 tons. The berth is 1,600 ft. long. This dock has recently been extended with modern belt loading facilities, for handling iron ore and similar materials in bulk.
MEDICAL: All facilities available and may be arranged through Agent or Lakehead Harbour Police by contacting VDX 30 Lakehead Control.
DENSITY: Fresh water port. No tide.
FRESH WATER: Available.
FUEL: Light diesel available by tank truck. Bunker "C" only in emergencies.
GANGWAY/DECK WATCHMEN: May be arranged through Agent.
OPENING/CLOSING HATCHES: Normally done by crew.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes or 50 cigars every seven days. Spirit/Wine: Officers: One bottle liquor each seven days. Crew: Beer only, at Captain's discretion.
CARGO GEAR: Normal safety certificate only required. No special port regulations.
CONSULS: Following countries are represented at Lakehead: Denmark, Finland, Italy, Netherlands and Norway.
REPAIRS: Full repairs available. Includes mobile equipment by both land and water conveyances.
DRY DOCKS: One available, length 747 ft. by 98 ft. width and can accommodate largest vessel operating on Great Lakes.
AIRPORT: Served by regular airlines with connections to any destination.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end October, clocks advanced 1 hour.
HOLIDAYS: During shipping season from April to mid-December on which stevedores do not work: May 24, July 1, September 1, and Thanksgiving Day (October). Work can be arranged at overtime rates.
POLICE/AMBULANCE/FIRE: Lakehead Harbour Police 344–3594, or by Marine Radio VDX 30.
Thunder Bay City Police 6236471.
Fire and Ambulance contacted most easily through VDX 30 radio.
TELEPHONES: Telephones at Keefer Terminal only.
GENERAL: All vessels entering, moving in, or departing Lakehead Harbour required to contact VDX 30 Lakehead Control prior making such move. Initial contact must be made before entry from area designated as "Welcome Islands" giving particulars of destination within Harbour and routes to be traversed.
AUTHORITY: Lakehead Harbour Commission.

MONTREAL, Quebec: 45.30 N. 73.33 W.

(See Plan)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 sets Customs Documents.
3 sets Health Documents.
6 sets Manifests.
6 sets Bills of Lading.
3 sets Ship's Papers.
PILOTAGE: Compulsory. Pilots board inbound vessels at Anse-aux-Basques (near Les Escoumains) to bring ships as far as port of Quebec where Pilots are exchanged for the trip to Trois-Rivieres. Pilots are again exchanged at Trois-Rivieres before ships may proceed to Montreal.
For further information refer to Quebec.
ICE ADVISORY SERVICE: Ships inbound from seaward between 15th December and 15th April should advise the Ice Information Officer, Sydney, N.S., 36 hours prior to entering Cabot Strait stating their position, destination, whether loaded or in ballast. This procedure will facilitate the passing of ice information to the ship as necessary.
On request, ice information is also available from Marine Radio Stations at Halifax, Camperdown, Seven Islands, Twillingate and Grindstone. The Canadian Broadcasting Corporation maritime network also broadcasts ice information daily during the Winter navigation season. Supplementary ice information may also be obtained from Canadian Marine Service ice breakers.
During the ice season, radio broadcasts of ice information are made twice daily from Marine Radio Stations as follows:

		Call frequencies
Cape Race, Nfld.	VCE	420kc/s CW
		2582kc/s RT
Fox River, Que.	VCG	434kc/s CW
		2582kc/s RT
Mont-Joli, Que.	VCF	446kc/s CW
		2582kc/s RT
North Sydney, N.S.	VCO	489kc/s CW
		2582kc/s RT
Halifax	CFH	115.3kc/s CW
		6949.5kc/s
		8662
		12984
		17218.4

ANCHORAGE: Available at Longue Pointe abreast of the Island of Montreal close to upper harbour. Also at Lanoraie, approx. 3 miles above Sorel harbour limits, and at Pointe-aux-Trembles anchorage below berth 110. Also opposite Canadian Vickers. Boatmen services are available to vessels at anchor.
Anchorages will be allocated by the Harbour Master (Montreal), through the Marine Traffic Control Centre, Montreal.
MAX. SIZE: Entry only restricted by draft. Main channel depth is 35 ft. Channel 550 ft. wide at narrowest point.
HEALTH: Except in case of coastwise vessels free of disease and arriving in Canada from ports or areas that are not infected, every vessel coming from a port outside Canada is inspected by the quarantine officer, and shall not make customs entry until it has received pratique.
"Coastwise Vessel" means a vessel operating exclusively between Canada and the island of St. Pierre and Miquelon or between Canada and the United States, including Alaska. A "coastwise vessel" loses coastwise status and is subject to quarantine inspection on its next arrival at a Canadian port when at any time it touches a foreign port other than those mentioned above.
Where sufficient quarantine information can be given by wireless, radio pratique may be obtained between the hours of 0900 and 1700 the day preceding arrival:
(a) From "Quarantine Halifax" by vessels bound for Halifax, Nova Scotia.
(b) From "Quarantine Saint John" by vessels bound for Saint John, New Brunswick.
(c) From "Quarantine Quebec" by vessels approaching Canadian ports via the Saint Lawrence River.
(d) From "Quarantine Victoria" by vessels bound for ports in British Columbia via the Strait of Juan de Fuca, other than vessels coming from an Asiatic port except ports in Japan.

For the purposes of radio pratique vessels are required to give the following information:

(a) Name and nationality of vessel.
(b) Ports called at during voyage.
(c) Date and place of last fumigation or derating exemption certificate.
(d) Nature of cargo.
(e) Number of crew.
(f) Number of passengers.
(g) Port of destination and name of Agent.
(h) Number of persons without valid vaccination certificates.
(i) Condition of health of all on board with details of any sickness or death which has occurred during the voyage.

Valid Smallpox vaccination certificates required.

To facilitate the quarantine clearance of vessels entering the St. Lawrence Seaway, the Montreal quarantine facilities have been augmented by opening a new office in Montreal East near the entrance to the Seaway. Vessels proceeding directly into the Seaway may now receive quarantine inspection and clearance while at anchor awaiting entrance to the Seaway.

RADIO: All communications via Montreal radio, call sign VFN. Marine traffic control handle VHF traffic as follows: Between Tracy and Cap St. Michel, VHF Channel 10 (156.5 mHz.). From Cap St. Michel to Montreal, VHF Channel 13 (156.65 mHz.). Ship to ship communication, VHF Channel 6, (156.3 mHz.). Port radar service available.

BERTHING:

Berth number (usual name)		*Wharf length (ft.)*	*Depth alongside (ft.)*	*Remarks*
Mackay Pier				
	M-6	714	15	
	M-5	2,061	25	
	M-4		25	
	M-3		25	
	M-2		25	
	M-1	300	25	
Bickerdike Pier				
East Side	B-1	1,866	25–29	
	B-2		29	
	B-3		29	
North End				
	B-12-N	500	29	
West Side				
	B-4	1,923	29	
	B-5		29	
	B-6		29	
	B-7	1,172	29	
	B-8		29	
Windmill Point Wharf				
	5W	465	30	Total berthing length
	6W	500	30	1,023 ft.
	7W	538	30	Grain loading
9 W to	10W	1,226	30	Grain unloading
	11NE	297	14	
	11NW	135	14	
	12	312	14–29	
Alexandra Pier				
South Side				
Lower	3	583	33.5	Berth 3 and 5: Total berthing length of 1,175 ft. Grain loading
Upper	3			Passenger terminal "Iberville" upper shed 3 Parking only
Lower	5	595	33.5	
Upper	5			Passenger terminal "Iberville" upper shed 5
End of Pier				
	14E	352	33.5	
North Side				
Lower	4	533	33.5	
Upper	4			
Lower	6	706	33.5	
Upper	6			
King Edward Pier				
South Side				
Lower	7	1,272	35	
Upper	7			
Lower	9		35	
Upper	9			
End of Pier				
	16E	354	33.5	
North Side				
Lower	8	1,278	35	"Louis Jolliette" passenger terminal. upper shed 8 Parking
Upper	8			
Lower	10		35	"Louis Jolliette" passenger terminal. upper shed 10
Upper	10			
Harbour Front				
Lower	11	587	29	
Upper	11			Berthing length 475 ft.
Jacques Cartier Pier				
South Side				
Lower	12	1,133	35	Grain loading
Upper	12			
Lower	14		35	
Upper	14			
End of Pier				
	18E	308	29	
East Side			29	19 Total berthing length 1,160 ft.
				Under construction
End of Pier	22N	247	29	
West Side				
	20	347	25	
Market Basin				
	21	460	25	
	22	547	25	Coastal
	23	678	25	Coastal
Sect. 24–42 inc.				
	24	384	29.5	
	25	965	29.5	
	27	829	29.5	
	28	807	30	
	29	823	30	
	30	490	30	Berth not available for Maritime traffic
	31	505	30	
	32	504	30	
	33	497	30	
	34	470	30	
	35	554	30	
	36		30	
	37	537	30	
	39	602	30	
	40	609	30–35	
	41	656	35	
	42	616	35	
Laurier Pier				
	43SW	437	30	Capable of handling container. Grain loading
	43SE	436	30	
	43N	572	32.5	
Tarte Pier				
	44S	739	32.5	
	44E	314	30	
	44N	860	30	Grain loading
	45	554	30	Berthing length 480 ft.
Sutherland Pier				
	46	472	32.5	
	46SE	532	32.5	Bulk sugar facility
	46E	227	32.5	
	47	330	32.5	Coastal trade
Sect. 48/56 Inc.				
	48	644	32.5	
	49	601	32.5	Capable of handling containers
	50	623	32.5–35	
	51	786	35	
	52	1,114	35	
	54	1,286	35	Grain loading
	55		35	
	56	803	27	Grain unloading
Vickers East		1,515	30	Dry Dock
Vickers West		1,052	30	
Sect. 57–61 Inc.				
	57	1,298	30	One Bridge Crane
	58		30	
	59	572	30	Two gantry cranes, 20 tons each, capable of container handling
	60	407	30	
	61	535	30	
Sect. 62–68 Inc.				
Racine Wharf				
	62	506	30	
	63	772	30	
	64	834	30	
	66	815	30	
	67	710	30	
	68	708	30	
Container Terminal				
	70	594	35	Two travelling container cranes (28 tons and 45 tons capacity)

(continued over

Berth number (usual name)		Wharf length (ft.)	Depth alongside (ft.)	Remarks
Sect. 71–78 Inc.				
	71	650	35	Two travelling cranes, 30 tons each
	72	650	35	
	73	633	35	One travelling container crane, 45 tons
	74	633	35	
	75	227	35	
	76	1,330	35	Total berthing length 917 ft. capable of handling containers
	77	1,330	35	
	78	575	35	
	79	805		

GRAIN FACILITIES:

Elevator No.	Capacity in bushels	Loading galleries at berths	Loading capacity bushels per hour	Remarks
1 (Section 15)	4,000,000	3–5	16,000	
3 (Section 43)	5,000,000	43N	16,000	
4	5,500,000	54–55	54,000	
5	5,100,000	7W	32,000	2 marine legs 1,590 ft. loading galleries. Unload at 9W–10W with 2 marine legs and a capacity of 72,000 bushels per hour

CRANES: Floating crane 275-ton capacity and many mobile cranes with capacity up to 200 tons.
STEVEDORES: Working hours 0800 to 1200, 1300 to 1700.
MEDICAL: All medical facilities available.
TANKERS:

Berth No. (usual name)		Wharf length (ft.)	Depth alongside (ft.)	Remarks
B. P. Berth	94	781	35	
Metropolitan Petroleum Ltd.				
	95	442	35	Total berthing length 1,328 ft.
	96	442	30–35	
	97	445	30	
Texaco				
	98	480	35	Total berthing length 1,442 ft.
	99	482	30–35	
	100	480	30	
Imperial Oil				
	101E	630	35	Total berthing length 1,263 ft.
	102E	631	35	
	102W	230	30	Total berthing length 712 ft.
	101W	482	20	
Shell Oil				
	103S	622	35	
	103N	622	30	
Sun Oil				Can accommodate ships of 485 ft. length
	104	107	30	
Gulf Oil Canada				
	105	381	30	
	106E	382	30	Total berthing length 763 ft.
	106W	227	30	
Petrofina				
	109	455	35	Total berthing length 910 ft.
	110E	455	35	
	110W	537	15	
Marien Street Wharf				
	110	105	12	

FRESH WATER: Available by pipe-line at most berths.
FUEL: Oil – all grades can be delivered at oil companies' terminals; also by bunker barges to vessels lying anywhere in the harbour.
Coal – delivered direct to vessels at coal berths.

Dock and Location: Section No. 71 and 72.
Operator: Canadian Import-Weaver Fuels 5250 de Maisonneuve W, Tel. 484-1112.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Fuel oil.
Size of Pipe-lines: 14 in. and 10 in.
Storage Capacity: 550,000 barrels.
Distance from Dock to Storage Tanks: 1,135 ft.
Length of Dock: 1300 ft.
Depth at Dock: 35 ft.

Dock and Location: Berth 94, East Montreal.
Operator: B.P. Canada Limited, 9301 Metropolitan, Anjou, Tel. 352-1700.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Crude oil, gasoline, stove oil, marine fuel oil, marine diesel fuel, No. 2 fuel oil, No. 6 fuel oil.
Size of Pipe-lines: 16 in.; 12 in. and 10 in.; 10 in.; 12 in.; 12 in.; 12 in.; 12 in.
Storage Capacity (Barrels): 1,000,000; 430,000; 80,000; Production capacity: 15,000; 400,000; 300,000.
Distance from Dock to Strage Tanks: 3.5 miles; 1,500 ft.; 1,500 ft.; 3.5 miles.
Length of Dock: 781 ft.
Depth at Dock: 35 ft.

Dock and Location: Sections 98-100.
Operator: Texaco Canada Ltd. 10200 Notre-Dame St. E., Tel. 645-8811.
Type of Dock: Loading, unloading, bunkering.
Type of Cargo Handled: Gasoline, distillate fuel oils, crude oil, marine diesel fuel oils and bunker "C".
Size of Pipe-lines: 2–8 in.; 10 in.; 8 in.; and 2–6 in.; 16 in.; 8 in.; 6 in. and 4 in.
Storage Capacity (Barrels): 2,300,000; 1,200,000 and 500,000.
Distance from Dock to Storage Tanks: 1.5 miles.
Length of Dock: 1.442 ft.
Depth at Dock: 30-35 ft.

Dock and Location: Berth 101.
Operator: Imperial Oil Ltd., 10510 Notre-Dame E.
Type of Dock: Loading and unloading, bunkering.
Type of Cargo Handled: Crude oil, gasoline, stove oil, furnace oil, diesel fuel, bunker "C".
Size of Pipe-lines: 16 in.; 12 in.; and 8 in.; 10 in.; 12 in.; 12 in.; 16 in. and 12 in.
Storage Capacity (Barrels): 3,000,000. Total storage capacity rotated by products depending on seasonal demands.
Distance from Dock to Storage Tanks: 2,800 ft.
Length of Dock: Inside 712 ft. Outside 1263 ft.
Depth at Dock: 28 ft. and 35 ft.

Dock and Location: Berth 103 S. & 103 N. Montreal East, and Racine Wharf, foot Duquesne St.
Operator: Shell Canada Ltd., 10500 Sherbrooke St. East, Pointe-aux-Trembles, Que. Tel. Marine Bunkers and Lubricants: 866-7571.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Gasoline, stove oil, furnace oil, chemicals jet fuel, aviation fuel, marine diesel, bunker "C", thin fuels 200 secs/3,500 secs. At Racine Wharf – lubricants.
Size of Pipe-line: 3–10 in.; 20 in.; 12 in. at Racine.
Wharf: 2–8 in.; 6 in.; 4 in.
Storage Capacity (Barrels): 4,000,000. Total storage capacity at Racine Wharf: 120,000.
Distance from Dock to Storage Tanks: 1.75 miles, 0.6 to Racine Wharf.
Length of Dock: 622 ft. at Racine. Wharf 505 ft.
Depth of Dock: 35 ft. S., 30 ft. N., at Racine Wharf 30 ft.

Dock and Location: Berth 104.
Operator: Sun Oil Co. Ltd. 11055 rue Victoria.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Gasoline, No. 1 fuel oil, No. 2 fuel oil.
Storage Capacity (Barrels): 130,000; 80,000; 240,000; 530,000 (total).
Distance from Dock to Storage Tanks: 2,300 ft.
Length of Dock: 107 ft.
Depth at Dock: 30 ft.

Dock and Location: Berths 105 and 106.
Operator: Gulf Oil Canada Limited, 3501 Broadway. Tel. Marine Bunkers: 645-8767; Marine Lubes: 274-4453.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Crude oil; gasoline; light fuels; marine gasoil; marine diesel; medium fuels 200 secs/3,000 secs; bunker "C".
Size of Pipe-lines: 12 in. and 8 in.; 10 in.; 3–8 in.
Storage Capacity (Barrels): 6,300,000 total storage capacity rotated by products depending upon production requirements.
Distance from Dock to Storage Tanks: 1 mile.
Length of Dock: 990 ft.
Depth at Dock: 30 ft.

Dock and Location: Sections No. 109 and 110.
Operator: Canadian Petrofina Ltd., 11701 Sherbrooke St. E. Tel. 645-9221.
Type of Dock: Loading and unloading.

Type of Cargo Handled: Gasoline; crude oil; No. 6 fuel oil; middle distilates.
Storage Capacity (Barrels): 650,000; 900,000; 300,000; 540,000.
Distance from Dock to Storage Tanks: 0.75 mile.
Length of Dock: 910 ft.
Depth at Dock: 35 ft.
FIRE PRECAUTIONS: Looped wire over stern and bow not more than 4 ft. above water for towing in case of fire.
GANGWAY/DECK WATCHMEN: Required.
OPENING/CLOSING HATCHES: Always done by stevedores.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes; 50 cigars; tobacco, 2 lb. per person over 16. Wine/Spirits, total of 40 oz. per person over age of 21.
Subsequent issues may be authorized to crew members of foreign vessels, but the max. quantity any crew member may hold at any one time must not exceed 300 cigarettes, 75 cigars, 3 lb. tobacco, and 60 oz. liquor.
IDENTIFICATION CARDS: Not required.
CONSULS: Consulates of the following countries are available in Montreal:

Belgium	Italy
Denmark	Netherlands
Finland	Norway
France	Panama
Germany	United States
Greece	Venezuela

REPAIRS: All kinds of hull and engine repairs possible.
DRY DOCKS: Steel floating dock: Length 585 ft., lifting capacity 25,000 tons. Steel floating dock section: Length 400 ft., lifting capacity 17,500 tons. Steel floating dock section: Length 200 ft., Lifting capacity 6,700 tons.
The 200 ft. sections may be joined to either of the other docks, making the max. length for docking 785 ft.
All docks breadth at entrance 107 ft. Draft over keel blocks 27.5 ft.
REPATRIATION: All facilities available.
AIRPORT: International Airport.
TIME: GMT minus 5 hours. Daylight saving time applied from last Saturday of April to last Saturday of October.
HOLIDAYS: New Year's day; Epiphany; Good Friday; Ascension Day; St. Jean Baptiste Day (June 24th); Labour Day; All Saints Day; Christmas Day.
POLICE/AMBULANCE/FIRE: Emergency telephones at berths, directly connecting berth with Police and Ambulance.
SHORE LEAVE: Permitted.
AUTHORITY: National Harbour Board.

NANAIMO, B.C.: 49.10 N. 123.57 W.

DOCUMENTS:
3 copies Crew List Form 1MM.200.
1 copy Passenger List.
3 copies Ship Stores E.1.
3 copies Crew Declarations Y.14.
1 Quarantine Certificate.
Manifest from previous Ports.
PILOTAGE: See "Vancouver".
ANCHORAGES: See "Vancouver".
RESTRICTIONS: No restrictions on Nanaimo Assembly Wharf. Harmac Wharf restricted from 2245 to 0700 hrs.
MAX. SIZE: Ships of any size can be taken into harbour with safety. Controlling depths are: Harbour entrance, 57 ft. at high water and 44 ft. at low water. Mean channel depth, 31 ft. at LW. Mean rise of tide 13 ft.
HEALTH: Pratique granted at Victoria, B.C.
RADIO: Vancouver Radio.
TUGS: Join vessel at Gallows Point, Protection Island. Ship's lines to be used.
BERTHING: Berth A – 34 ft. LLW. Berth B – 34 ft. LLW. Berth C – 37 ft. LLW.
STEVEDORES: Ordered by Agent, 16 hours minimum notice.
MEDICAL: Hospital facilities available.
TANKERS: Tanker berths at private companies' wharves where own regulations on lines apply.
DENSITY: September to May inclusive 1.0203 average. June to August inclusive 1.0171 average.
FRESH WATER: Available ex wharf.
FUEL: Limited quantities available by truck delivery only.
FIRE PRECAUTIONS: No other specific precautions except during extreme heat when smoking may be prohibited on wharf adjacent to lumber.
GANGWAY/DECK WATCHMEN: Services not necessary but security guards are available.
OPENING/CLOSING HATCHES: Either crew or stevedores, by arrangement.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per week or 0.5 lb. tobacco and 15 cigars. Wine and/or Spirit. Officers allowed 40 oz. liquor per week. Crew allowed beer only, any amount. *Note:* Beer is not bonded.
IDENTIFICATION CARDS: Not necessary.
CONSULS: None.
REPAIRS: Temporary repairs only.
REPATRIATION: Facilities exist in Vancouver.
AIRPORT: Cassidy Airport, 10 miles South of Port. Charter flights only. Seaplane service from Harbour to Vancouver or charter.
TIME: Pacific Standard Time, 8 hours behind GMT. Daylight Saving Time in effect from late April to late October.
HOLIDAYS: No cargo work on Sundays and/or Holidays with exceptions as follows:
(1) Sundays and Good Friday, Easter Monday, Victoria Day (24th May), Dominion Day (July 1st), Thanksgiving and Remembrance Day crews are available at overtime rates by arrangements.
(2) No cargo work on Christmas Day, Boxing Day and New Year's Day.
(3) Labour Day in case of emergencies only.
(4) Crews cease work at 1200 hrs. on December 24th until 0800 hrs. December 27th; also from 1200 hrs. December 31st until 0800 hrs. January 2nd.
POLICE/AMBULANCE/FIRE: Police 754–2345; Ambulance 753–4433; Fire 753–1234.
TELEPHONES: Available for each vessel.
SHORE LEAVE: Allowed.
AUTHORITY: Nanaimo Harbour Commission.

NORTH SYDNEY, N.S.: 46.16 N. 60.13 W.

DOCUMENTS: And all general information, refer to "Sydney, N.S.".
PILOTAGE: Compulsory. Pilot boards off Cranberry Head. Refer to "Sydney N.S.".
RESTRICTIONS: Navigation season approx. 1st April to 15th January. Channel depth 42 ft.
ANCHORAGE: Above the ballast ground in depths of 5 to 7 fathoms.
PRATIQUE: Obtained at Sydney, N.S., by radio.
MAX. SIZE: Draft 35 ft. 6 in. for entering harbour. Berthing restricted by depth alongside.
TUGS: Available, but not normally required.
BERTHING: Canadian National Railway Pier: 1,080 ft. length, depth alongside 25 to 35 ft.
FRESH WATER: Available from wharves.
FUEL: Fuel and diesel can be supplied.
REPAIRS: Machine shop facilities for hull and engine repairs.
AUTHORITY: Dept. of Transport, Harbour Master.

OCEAN FALLS, B.C.: 52.21 N. 127.41 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 copies Inward Report (Customs A6).
PILOTAGE: Compulsory. Pilots may be taken at Vancouver or Victoria. ETA to be given to Pilots 6 hours before arrival through radio station VAK.
ANCHORAGE: In harbour, ample room for any size vessels.
RESTRICTIONS: Channel depth 25 fathoms.
MAX. SIZE: For berthing alongside, length 500 ft., draft 30 ft.
HEALTH: Ships from overseas are given pratique at William Head.
RADIO: Vancouver Radio, VAK.
TUGS: Not usually considered necessary. Can be made available by prior arrangement.
BERTHING: Ocean Falls Corporation owns five wharves depth alongside 31 ft. at low water.
FRESH WATER: Available from wharves, free of charge.
REPAIRS: Minor repairs to hull and machinery can be effected. No dry docks.
STEVEDORES: Gangs of longshoremen can be hired by arrangement.
AIRPORT: West Coast Air operate daily seaplane service to Vancouver.
MEDICAL: Hospital facilities available.
CUSTOMS ALLOWANCE: 200 cigarettes or 2 lb. tobacco may be held out of bond per person, and 40 ounces of alcohol.
SHORE LEAVE: Crew members allowed ashore.
HOLIDAYS: Easter Monday; July 1st; Labour Day; Thanksgiving Day; Remembrance Day; Christmas and Boxing Day; New Year's Day.
POLICE/FIRE/AMBULANCE: Police tel. 289–3311; Fire 289–3828; Ambulance 289–3828
AUTHORITIES: Dept. of Transport, Ron Acheson, Harbour Master.

OSHAWA, Ontario: 43.52 N., 78.50 W.

PORT LIMITS: The limits of the Oshawa Harbour is defined as follows:
All the waters of Lake Ontario within the following limits: Commencing at the high water mark of Lake Ontario where it intercepts the Easterly limit of Lot 1 of the broken front concession of the Township of East Whitby.
Thence along the high water mark in a Westerly direction to a point where it intercepts the Westerly limit of Lot 17 of the broken front concession of the Township of East Whitby.
Thence in a Southerly direction 3,000 ft. into Lake Ontario on the extension of the said Westerly limit of Lot 17;
Thence on a straight line in an Easterly direction to a point on a Southerly extension of the said Easterly limit of Lot 1, 3,000 ft. from the high water mark.
Thence in a Northerly direction to the point of commencement.
And all water-front property, wharves, piers, docks, buildings, shores and beaches in or along the said waters.
DOCUMENTS: The matter of documentation is done through Hub Transportation Services Limited (Our Terminal Operator) in conjunction with the Customs Office located at the City of Oshawa.

ANCHORAGES: Off the entrance of Lake Ontario.
RESTRICTIONS: Draft 25.6 ft. at the East Wharf. 22 ft. on the West Wall.
MAX. SIZE: Applies to maximum size of vessels entering seaway.
HEALTH: Normal formalities are conducted at first port in Canada in the St. Lawrence Seaway or East Coast, and therefore the vessel is usually considered cleared prior to entering the Seaway system.
RADIO: Toronto VOR or by telephone: (416) 576-0400.
VHF: Presently Nil.
RADAR: None.
TUGS: Tugs available at the harbour entrance. Cost: $800.00 per tug inwards and likewise outwards.
BERTHING: East Wharf – 730 ft., Draft 25.6 ft. West Wharf – 590 ft., Draft 22 ft. Discharging: Ship's gear or shore equipment.
East Wharf – General Cargo, Petroleum, sugar, Steel, Automobiles.
West Wharf – Gypsum, Salt, Petroleum Products, Coal, Steel.
CRANES: Mobile cranes having a capacity of up to 300 tons are available at all times. 2 of these cranes are stationed at the Port of Oshawa and same have respective capacities of 150 and 100 tons.
BULK CARGO FACILITIES: Dry bulk cargoes with the exception of sugar, i.e. coal, salt and gypsum, are carried by self-underloaders and discharged by ship's gear. Sugar is discharged by mobile cranes using clam grabs at a rate of 225/250 t.p.h. Present discharging gear by high water level, specific details will be made available on request.
BRIDGES: None.
STEVEDORES: The port stevedore (Hub Transportation Services Limited) employs members of the I.L.A., Local 1997, and 3 gangs are available from this local.
The main commodities handled are unitized general cargo, containerized general cargo, import and export steel, and raw sugar.
The productivity rate is above average, with general cargo usually reaching a level of 20 tons plus, per gang. Depending on units, weights, runs somewhere in the region of 60 to 125 tons per gang hour. Bulk commodities are usually discharged at a rate of 250 t.p.h.
MEDICAL: A full range of medical services is available at the local Medical Clinic and Oshawa General Hospital.
FRESH WATER: Fresh water available at East wharf only.
FUEL: Available on request.
FIRE PRECAUTIONS: Usual regulations.
CONSULS: All major consuls in Toronto, 29 miles away.
REPAIRS: Available on request.
DRY DOCKS: Information on request from Hub Transportation Services Ltd.
SURVEYORS: Classification Societies are represented by Lloyds, ABS and N.V. in Toronto.
GANGWAY/DECK WATCHMEN: Not required at the Port of Oshawa.
HATCHES: The opening and closing of hatches is normally carried out by ship's crew.
CUSTOMS ALLOWANCES: In accordance with Canadian standards.
CARGO GEAR: Wherever possible by shore crew.
REPATRIATION: Possible.
AIRPORT: Toronto International Airport. All major airlines, 45 miles West.
TIME: EST.
HOLIDAYS: Usual holidays with the exception that Ontario celebrate Civic Holiday which is the first weekend in August. Cargo work can be arranged.
POLICE/AMBULANCE/FIRE: Police, 579-1234. Fire Department, 725-6574. Ambulance, 576-8711.
TELEPHONES: Arrangements can be made through Bell Canada for telephones to be placed on board. A cost of approximately $24.75 installation charge per line.
SERVICES: All services available on request to Terminal Operator.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: Seaman's book is sufficient.
AUTHORITY: Oshawa Harbour Commission.

PICTOU, N.S.: 45.41 N. 62.43 W.

DOCUMENTS:
Customs Report Inwards, Form A6 in duplicate.
Clearance from last port.
Stores List, Form E1 in duplicate.
Crew Declarations, Form Y14 in duplicate.
Crew List, Immigration Form 200 in duplicate.
Quarantine Q25 in duplicate.
Fumigating and Deratting Certificate.
Load Line Certificate.
Inspection Certificate.
Safety Equipment Certificate.
Radiotelegraphy Certificate.
Certificate of Register.
If Pictou is first port of call in Canada photostat copies of the ship's ocean bills of lading in duplicate to cover all goods for discharge in Canada.
PILOTAGE: Normally arranged through Halifax as there is no radio station in Pictou. Various pilot boats in use.
ANCHORAGE: Safe anchorage all over harbour in 40 ft.
RESTRICTIONS: No entry restrictions except draft over bar at entrance to harbour, which is 22 ft. low water.
MAX. SIZE: Government pier 720 ft. long with 27 ft. water on both sides.
HEALTH: Masters must complete Quarantine Form QS.25. Vessel may be quarantined by port doctor, if any disease on board.
RADIO: Halifax, call sign, VCS, Channels 26, 59, 79. Alternate Charlottetown call sign VCA, Channel 59.
TUGS: Not necessary for berthing.
BERTHING: No specific requirements; berths usually available at all times.
STEVEDORES: Usually 24 hours notice required for stevedores.
MEDICAL: Hospital facilities available. Serious cases may be transferred to larger hospital at New Glasgow 8 miles distant, or to Halifax 100 miles distant.
FRESH WATER: Supplied by town through 4 in. line. Water pressure 110 pounds.
FUEL OIL: Diesel fuel available in quantity. 24 hours notice required for bunker fuel as it is only brought in on order.
GANGWAY/DECK WATCHMEN: Not usually required unless requested by ship.
OPENING/CLOSING HATCHES: Usually by crew.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. Issue may be made if ship is in port for long periods. Wine/Spirits: One bottle per man.
IDENTIFICATION CARDS: Not required. Customs and Immigration Officer should be notified if any crew member wants to travel any distance from port area.
CONSULS: None.
REPAIRS: Facilities to carry out all types of ship's repairs, including deck, engine, electrical and hull repairs.
DRYDOCKS: Largest dry dock, 2,000 ton capacity, 250 ft. long, 42 ft. beam.
REPATRIATION: Crewmen would be repatriated through Halifax.
AIRPORT: Closest airport at New Glasgow, 8 miles distant. Airport served daily by Eastern Provincial Airlines which connect with Halifax. No international airlines use this airport.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Queen's Birthday (May 19th); Dominion Day (July 1st); Labour Day (1st Monday in September); Thanksgiving Day (2nd Monday in October); Remembrance Day (November 11th); Christmas Day; Boxing Day. Cargo normally not worked on holidays. Would have to be arranged with stevedoring company.
POLICE/AMBULANCE/FIRE: Police 485-4363; Fire 485-4141; Ambulance 485-4381.
TELEPHONES: Facilities available for placing telephones on ships.
GENERAL: For larger and bulk cargoes stevedores should be notified well in advance. Rates vary according to the type of cargo.
AUTHORITY: Department of Transport, Harbour Master.

PORT ALBERNI, B.C.: 49.14 N. 124.50 W. (See Plan)

DOCUMENTS, HEALTH, CONSULS, ETC.: See "Vancouver".
PILOTAGE: Compulsory, contact through Vancouver Radio. Pilot boards at Cape Beale.
ANCHORAGE: Deep water anchorage available in harbour, depths up to 60 ft.
RESTRICTIONS: Depths in approaches 84 ft. MLLW.
TUGS: Available and required for berthing.
BERTHING: Pulp and paper wharf with two berths: supplied directly from MacMillan Bloedel's pulp and paper mill. Berthing length is 500 ft. with 33 ft. depth. Storage sheds in the centre, with berths either side and specialised equipment for loading pulp and rolls of paper. A smaller berth in the river is used for loading 7,200 ton cargoes on specially covered newsprint barges.
Somass Sawmill Wharf: berthing length 950 ft. with 35 ft. depth; cranes of 5 and 30 ton capacity.
New Port Alberni Terminals Berth 3: 600 ft. long and, with the aid of pile dolphins, can berth ships of 700 ft. and over, with a depth alongside of 40 ft.
Port Alberni Terminals Berths 1 and 2: berthing is 1,050 ft. with 36 to 50 ft. depth. Storage sheds and forklifts, with a 6 ton electric crane on the dock.
STEVEDORES: 15 Gangs available. Refer "Vancouver" for holidays, etc.
MEDICAL: Doctors and hospital facilities available.
DENSITY: Salt water.
FRESH WATER: Available at wharves.
FUEL: Supplies by barge from "Vancouver".
CUSTOMS ALLOWANCES: See "Vancouver".
REPAIRS: Machine shop capable of major repairs.
AUTHORITY: Port Alberni Harbour Commmission.

PORT ALFRED (Including Bagotville) (See Plan) Quebec: 48.20 N. 70.52 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crew's Declaration (Can. Form Y.14).
3 Stores Lists (Can. Form E.1).
Quarantine (Can. Form QS.2001).
3 Cargo Manifests.
3 Bills of Lading.
2 Stowage Plans.
Harbour Master Dues receipt.

PILOTAGE: Pilotage is compulsory. A minimum notice of 24 hours must be given to ensure availablity of Pilot. This notice to be confirmed 12 hours and 4 hours prior to arrival at pilot station. Reports stating ETA and Net Reg. Tonnage of Vessel to be addressed to "Pilots Montreal" and passed by the Marine Traffic Control communication system on VHF Channel 14 (156.7 mHz), or by any coast radio station.

The Pilot station for vessels upbound to Baie des Ha! Ha! is located at Anse-aux-Basques, chartered 2 miles S.W. of Les Escoumins Wharf on the North shore of the St. Lawrence river and for downbound vessel at Quebec City.

ANCHORAGE: Vessels awaiting berthing facilities anchor off Anse a Philippe (48.21 N., 70.73 W.).

RESTRICTIONS: None. Vessels may enter or depart at any time of day or night.

MAX. SIZE: Vessels of up to 39 ft. draft may berth at Duncan Wharf and up to 30 ft. at Powell Wharf. Length and breadth not considered.

HEALTH: Pratique obtained by cable to Quarantine Quebec, and serves for duration of vessel's stay in Canada. See also "Montreal".

RADIO: Halifax Radio Station used by vessels while in Atlantic and Sept-Iles Radio Station while in Gulf of St. Lawrence.

TUGS: Two tug-boats available 2,400 h.p. and 1,050 h.p. Join vessel 1 mile off wharves at Port Alfred. Ship's lines used.

BERTHING:

N.H.B. Facilities

Berth number (usual name)	*Wharf length (ft.)*	*Depth at Low Water (ft.)*	*Remarks*
Bagotville			
Main Wharf (outer face)	167	28	
Lepage (outer face)	79	10	
Grande Baie Wharf (outer face)	833 44	 —	

Private Facilities

Berth	*Length (ft.)*	*Depth at Low Water (ft.)*	*Utilisation and General Remarks*
Port Alfred (Alcan Smelters and Chemical Ltd, Transport Division).			
(1) Powell Wharf			
South Side	1,138	33	Floor capacity 20,000 tons.
North End	481	39	Two 5 ton electric level-luffing gantry cranes (bucket or hook) operate on a 35 ft. apron.
Across outer end	215	36	
(2) Duncan Wharf			
South Side	1,265	39	For unloading bauxite and salt (bulk). Three electric gantry towers. 500 t.p.h. each, and one for general and bulk, 10 ton capacity. Also two electric towers 1,000 t.p.h. each.
(3) Consolidated Bathurst			
North Side	600	25	

STEVEDORES: ETA sent by cable 72, 24 and 12 hours prior to arrival is sufficient to arrange gangs.

VHF: VHF radio telephone Channel 9 (Escoumins Channel).

MEDICAL: General hospital at Chicoutimi located 13 miles away, in addition to local hospital.

TANKERS: One 14 in. discharge line using 10 in. and 12 in. discharge hoses. ASA fittings. No slop discharge facilities. One berth available for tankers at 39 ft. draft. (No. 4 Powell Wharf).

DENSITY: 1005.

FRESH WATER: Available at most berths.

FUEL: Only small quantities of O.M. diesel available by tank trucks.

FIRE PRECAUTIONS: Alcanport have a trained fire-fighting crew and fire hydrants installed at all strategic points. No-smoking on all wharves and in ship's holds.

GANGWAY/DECK WATCHMEN: To be attended by ship's personnel.

OPENING/CLOSING HATCHES: Done by crew on bulk discharging. On general cargo, stevedores open and close hatches.

CUSTOMS ALLOWANCE: One carton (200) cigarettes allowed for each Crew member. Wine and/or Spirits, one bottle for Officers and crew and 5-6 bottles to Master.

IDENTIFICATION CARDS: Not required.

CONSULS: Norway, Italy and France.

REPAIRS: Only minor deck and engine repairs.

SURVEYORS: Lloyds at Quebec City. AB and BV at Montreal.

REPATRIATION: Facilities convenient for crew charges.

AIRPORT: At Bagotville, 6 miles from dock, Daily service to Montreal, Quebec City, Sept-Iles and Baie Comeau

HOLIDAYS: 1st & 2nd January, Easter Monday, St. Jean Baptiste Day (24th June), Confederation Day, 1st July, 2nd Monday of August, Labour Day & 25th December.

POLICE/AMBULANCE/FIRE: Police 544-6804; Fire 544-6804; Ambulance 544-5840 or 543-0755.

TELEPHONES: Telephone outlets at each berth; telephone can be put on main deck of vessels at no charge.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Alcan Smelter and Chemicals Ltd. Transport Division, Port Alfred.

PORT ALICE, B.C.: 50.22N. 127.28W.

PILOTAGE: Compulsory. Pilots can be secured off Cape Beale, Barkley Sound, South end of Vancouver Island. Master should advise "Pilots Victoria" via Radio Station VAK giving their ETA Cape Beale.

ANCHORAGE: Good anchorage within one half mile of dock in 30 fathoms.

HEALTH: The nearest station is at Victoria, B.C. Ships coming from foreign other than U.S.A. ports and having duplicate pratique from same to British Columbia ports other than Victoria must obtain Radio pratique through Victoria, B.C.

TUGS: Small tug (335 h.p.) and line boat available to assist berthing and departure if required.

BERTHING: Controlling depth from entrance of Quatsino Sound to Port Alice dock 24 fathoms. A draft of 25 ft. can be handled alongside dock and a vessel 525 ft. in length can be berthed with safety.

Oil tankers with draft up to 35 ft. and 580 ft. in length can berth against berthing scow positioned between dock and oil tanker. (Width of scow 35 ft.).

Bulk Carriers with draft of 35 ft., 565 ft. in length are berthed approximately 16 ft. out from dock by means of log fenders. Gantry of monck cranes extending over apron of dock. Largest ship handled of this type, 29,500 d.w.t., draft 35 ft. 4 ins. (Cargo loaded – Units of woodpulp).

STEVEDORES: Working day of 12 hours.

MEDICAL: 12 bed hospital, physician in attendance.

FRESH WATER: Available.

FUEL: Limited quantity of diesel oil. Fuel oil only available in an emergency from gravity hose on dock, vessel must supply hoses.

CONSULS: None.

REPAIRS: Minor repairs can be made in the company workshop.

CUSTOMS: Customs board at Port Alice.

CARGO GEAR: No shore cranes, ships use own gear.

AIRPORT: 35 miles from Port Alice, daily service.

HOLIDAYS: All Dominion legal holidays.

GENERAL: Port Alice is a private port open to navigation all year round. Limited quantity of supplies available.

AUTHORITY: Rayonier Canada Ltd.

PORT CARTIER, Quebec: 50.02 N. 66.47 W.

(See Plan)

DOCUMENTS:

Deratisation Certificate.
Smallpox Vaccination Certificate.

Immigration

Crew List Form 1MM.200 in triplicate.

Customs

Report inwards (A.6) in triplicate.
Crew Declaration (Y.14) in triplicate.
Ship's Stores List (E.1) in triplicate.
Ship's Register.
Clearance from Last Port.
Manifest of cargo.

PILOTAGE: Compulsory. Pilots board about 1 mile off by tug-boat. Frequencies for VHF communication with Pilot and harbour office. Calling 156.8 megs. Receiving/transmitting 156.6 megs. Internal harbour (tugs and Pilots) 156.35 megs.

Vessels over 40,000 d.w.t. shall also provide accommodation ladder with rope ladder alongside. The landing platform of the accommodation ladder should be approximately 20 ft. above the water.

APPROACHES: The depth of water in the harbour from the entrance is 50 ft. at Mean Low Tide. The approach channel is 40 ft. at Mean Low Tide for a width of 1,000 ft. A depth of 54.5 ft. at Mean Low Tide is maintained in the channel for a width of 200 ft. on each side of the centre line of approach into the harbour.

ANCHORAGE:

Anchorage areas have been established as follows:

Designator	*Position*
A.	50° 00′ 57.0″ N., 66° 46′ 36.2″ W.
B.	50° 01′ 07.1″ N., 66° 45′ 44.5″ W.
C.	50° 01′ 16.4″ N., 66° 44′ 53.2″ W.
D.	50° 00′ 32.8″ N., 66° 45′ 44.5″ W.
E.	50° 00′ 22.7″ N., 66° 46′ 35.0″ W.
F.	49° 59′ 56.5″ N., 66° 48′ 43.0″ W.
G.	49° 59′ 44.0″ N., 66° 49′ 32.8″ W.

RESTRICTIONS: Vessels with 50 ft. draft and over must sail on the tide. Tidal range 6 ft. to 12 ft.

MAX. SIZE: Max. size of vessel 1,000 ft. length, 170 ft. beam, max. draft 54 ft.

Vessels of 100,000 d.w.t. and over must have a draft not exceeding Fwd. 33 ft. and Aft 38 ft. on arrival. Also see "Berthing".

HEALTH: All vessels should 24 hours before arrival and during

normal office hours (holidays and Sundays excepted) radio – "Quarantine Quebec" for radio pratique. Ships trading between Canada and the United States continuously and touching no other foreign port, since last granted Canadian pratique, comply with the above, only on first trip to Canada.

The quarantine message should contain: Name of vessel, Nationality of flag, Port of Departure, Destination, Type of cargo or in ballast, Number of crew and passengers, Health condition on board ship.

Vessels inspected by Port Health Officer soon as possible, in berth or not.

Persons not in possession of valid smallpox certificate are re-vaccinated if vessel arriving from suspect area.

Masters shall have ready for inspection:

Maritime Declaration of Health Form Q.S.2001 in duplicate.

Deratisation Certificate.

All Smallpox vaccination certificates of crew and passengers if vessel is arriving from an infected Port – otherwise not necessary.

Medical parades of crew may be conducted by the Port Health Officer on vessel's arrival alongside.

RADIO: Cable Address "Cartier" Port Cartier.

Vessels entering the Gulf from the Atlantic should keep watch on Halifax Radio for all traffic. During the ice season this station also issues an ice report and vessels should report to Ice Information Officer, Halifax N.S. 36 hours before entering the Gulf. Information as to time of reports and frequencies will be found in International Radio Aids to Navigation Manual.

Traffic List	420 kHz	Even hours plus 50 GMT
	2582/161.9	Even hours plus 40 GMT

Weather, Ice Reports and Notice to Shipping.

Channel 59	Receiving Frequency	2582 kHz.	
Channel 26	Receiving Frequency	161.9 mHz.	1330 GMT
and CW		'1830 GMT	
			0130 GMT

When vessels are 36 hours from Port Cartier, they should keep W/T watch on VCK Seven Islands radio for traffic from this Port.

Seven Islands Calling and Receiving:

W/T Frequency	Calling		500	kHz.
R/T Frequency	Transmitting		2582	kHz.
	Calling		2182	kHz.
	Receiving		2206	kHz.
R/T (Duplex)	Transmitting		2582	kHz.
	,,		2514	kHz.
	,,		2550	kHz.
	Receiving		2206	kHz.
	,,		2118	kHz.
	,,		2158	kHz.
VHF Calling			156.8	mHz.
Receiving & Transmitting		Port Cartier	156.6	mHz.
Internal Harbour (Tug & Pilot)			156.35	mHz.

The Port Office telephone number is (418) 768-2485, and Telex number is 011-8-6422. It is also fitted with VHF on the frequencies mentioned above. The office is open to receive messages on a 24-hour basis. Radio and radio telephone traffic by a ship at anchor in the area off Port Cartier is permissible.

ARRIVAL ADVICE: *Ore Carriers:* Each vessel operator or its principal shall notify Quebec Cartier Mining at least two weeks prior to the expected arrival of each vessel at Port Cartier and Quebec Cartier Mining Company shall forthwith advise such vessel operator or principal whether it can accept the vessel at such time. An allowance of 3 days preceding and 3 days subsequent to the date so fixed will be made for the actual arrival of each vessel. If the vessel's actual arrival is not within such 3-day period preceding or subsequent to the date fixed for its arrival, Quebec Cartier Mining Company may fix another arrival date for such vessel that will not interfere with other scheduled loading. Quebec Cartier Mining Company shall be kept fully advised of all vessel nominations, substitutions, cancellations, delays, sailing dates at Port Cartier of all vessels designated to accept delivery of ore at this Port.

ETAs – All vessels must advise ETA 72 hours, 48 hours and 24 hours, before arrival. If any change in ETA of more than 1 hour occurs after transmission of the 24 hour ETA, the vessel must send a corrected ETA immediately. These ETAs shall be submitted in local time at Port Cartier.

Vessels proceeding to Port Cartier will advise tonnage of cargo required and the amount and currency of funds required, if any, in the 72 hour ETA message. In the 24 hour ETA the estimated time for pumping ballast after arrival alongside should be included. However, if because of weather or any other cause the estimated pumping time should change, the vessel shall notify Quebec Cartier Mining Company's Port Authority by an additional message.

All ships shall request docking instructions 2 hours before arrival.

Ships inbound for Port Cartier from Seaward between December 15th and April 15th should report to "Ice Halifax" 36 hours before passing Cape Ray for ice channel routing.

Radiogram	Ice Halifax
Station Sydney Call Sign	VSC
Frequency	489 kHz. CW
,,	2598 kHz. RT
,,	161.9 mHz. RT

N.B. Ships trading in the Gulf of St. Lawrence during this period should avail themselves of the Canadian Government Publication "Ice Navigation in Canadian Waters".

Grain Carriers: ETAs: All vessels must advise "Cartier" Port Cartier, ETA 72 hours, 48 hours and 24 hours before arrival. If any change in ETA of more than 1 hour occurs after transmission of the 24 hour ETA, the vessel must send a corrected ETA immediately.

Vessels proceeding to Port Cartier will advise in the 72 hour ETA amount of grain required and amount of grain fittings if any required on arrival. Supplies, Bunkers, water, cash advance and bonded stores required.

All ships are to request docking instructions 2 hours before arrival.

Ships inbound for Port Cartier from Seaward between December 15th and April 15th should report to "Ice Halifax" 36 hours before passing Cape Ray for ice channel routing.

Radiogram	Ice Halifax
Station Sydney Call Sign	VCO
Frequency	489 kHz. CW
,,	2598 kHz. RT
,,	161.9 mHz. RT

Coasting Vessels: (Vessels that do not make voyages outside Canadian waters.)

Cable Address "Cartier" Port Cartier.

ETA: All vessels should advise ETA 24 hours before arrival. If any change in ETA of more than 1 hour occurs after sending 24 hour notice, vessel should send corrected ETA immediately.

The Port Office telephone number is (418) 768-2485, and telex number is 011-8-6422. It is also fitted with VHF. The office is open to receive messages on a 24 hour basis. Radio traffic by a ship at anchor in the area of Port Cartier is permissable.

All ships are to request docking instructions 2 hours before arrival.

TUGS: Compulsory. Meet vessel outside harbour under instructions from Pilot. Tug lines used at all times. Two tugs of 3,800 h.p. available.

BERTHING: North dock 2,500 ft. long includes No. 1 West Berth, length 1,000 ft., for ore loading, and No. 4 East berth, length 1,500 ft., for standby or emergency use only. The South dock length 1,480 ft. includes No. 2 West berth for discharging grain, and No. 3 East berth for loading grain. Tanker berths also located on the South dock. Berth No. 5 on the South side of the South dock for general cargo use by coastal vessels only. Coastal vessels also use berths No. 2 and 3 when permitted by the Port Authority.

Vessels cautioned not to use anchors in harbour in case of damage to bubbler system installed on the bottom of harbour. The bottom is smooth surface rock and anchors are of very little value.

Faces of all berths fitted with rubber tyre fenders. All mooring ropes and wires should have eyes at least 8 ft. in diameter.

Maximum dimensions allowable under Grain Berth:

LOA	900 ft.
Beam	137 ft. for self trimming bulk carriers
	137 ft. OBO centre holds only
	125 ft. Tankers providing off shore tank openings are a minimum of 15 ft. inside ship's side
Draft	49 ft. loaded
Air draft	LW 53 ft. to top of hatch covers
	HW 45 ft. to top of hatch covers

Vessels are required to present alongside the loading berth with hatches open and gangway ready.

On completion of loading, vessels are required by the Elevator Company to vacate the loading berth within 1 hour. If additional time is required alongside the loading berth application for an extension must be made at time of docking.

Note: Most vessels requiring additional dock time will be ordered to a lay-by berth, if available, or to anchorage at their expense.

MEDICAL: Hospital facilities and dentist available.

TANKERS: No facilities for slop discharge.

DENSITY: Has been known to vary slightly between 1025 and 1021, but is considered salt.

FRESH WATER: Available to all vessels at Berths No. 1, 2, 3, 4 and 5 with connections conveniently located. Rate of approximately 20 t.p.h. The fresh water line is 6 in. with 2.5 in. standard Quebec hose, male connection of 7 threads to the inch. Necessary connections and hoses are to be furnished and handled by vessel.

If required, fresh water can be supplied to vessels at anchor. Max. amount per trip 50 tons. Cost per trip $200.

FUEL: Available at Berths No. 1, 2 and 3 for Bunker "C" marine diesel and/or any specialised blend and connections are positioned for ready supply to all vessels. All bunker requirements are directly supplied by Gulf Oil Canada Limited, and proper credits should be established. Bunker "C" can be supplied at approximately 2,700 barrels per hour. Marine diesel oil can be supplied at approximately 2,400 barrels per hour, Bunker "C" line is 10 in. with 6 in. reducer flange connection. Marine diesel oil line is 8 in. with 4 in. reducer flange connection. There is no coal available at this port.

Vessels nominated for Port Cartier and required to anchor awaiting a berth, which in the meantime require bunkers, will be permitted to enter the harbour, if a berth is available with bunkering facilities, for the purpose of bunkering, and shall then return to anchor. The fee for this service shall be $300 plus second tug when used; and applicable line handling charges when used.

GANGWAY/DECK WATCHMEN: Not necessary. Security guards obtainable on request.

OPENING/CLOSING HATCHES: Normally done by crew.

CUSTOMS ALLOWANCES: Canada Customs regulations allow each crew member to have in his possession for his personal consumption 200 cigarettes, 50 cigars and 2 lbs. tobacco; also 40 oz. of spirituous liquor or wine or 24 pints of beer or ale. All quantities must be declared on Crew Declaration Form Y-14 along with all personal effects such as Radios, Cameras, Tape Recorders, Binoculars, Souvenirs, etc., plus serial numbers of these items.

N.B. Masters of vessels are advised that tobacco items and spirits in excess of these amounts in possession of crew members should

be collected and placed in bonded stores prior to the vessel's arrival in order to speed up the clearance of the vessel.
IDENTIFICATION CARDS: Not necessary.
REPAIRS: Only minor repairs possible.
REPATRIATION: Crew changes and repatriation can be carried out.
AIRPORT: Nearest airport is Seven Islands about 40 miles by road. Services to Quebec City and Montreal, 4 flights daily.
TIME: Port Cartier is located in the Eastern Standard Time Zone (GMT less 5 hours). Daylight Saving Time is observed from last Saturday in April to last Saturday in October.
HOLIDAYS: Ore vessels not loaded on New Year's Day (January 1st), and Christmas Day (December 25th), nor from 0800 hrs. Sunday to 1600 hrs. Sunday nor during the same period on the following holidays: Good Friday; St. Jean Baptiste Day (June 24th); Dominion Day (July 1st); 2nd Monday in July; First Monday of August; Labour Day (First Monday of September); Thanksgiving Day (Second Monday of October); Immaculate Conception (December 8th); Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Police 766-2233; Ambulance/Fire 768-2300.
TELEPHONES: No direct connections to vessels. Available on berths.
GENERAL: Vessels which have completed discharging of grain and are to load iron ore should have ratguards fitted to all mooring lines at all times.
SERVICES: Electronic repair services to navigational equipment. Should be requested in advance.
SHORE LEAVE: Permitted.
DELAYS: Occasionally Easterly weather conditions may delay vessels berthing.
GENERAL: Grain vessels: Vessels ordered to anchor should do so in the recommended Anchorage. Failure to do so may result in delays to vessels from being boarded by Port and Government Authorities.

Vessels arriving in ballast should ensure they are in good trim for safe handling into the harbour, bearing in mind the loading rate so as not to cause any delay in loading due to deballasting. However, should a vessel not be sufficiently ballasted at the time of proceeding into the harbour, the Pilot may request further ballasting depending on the prevailing weather conditions. If in doubt, Master should contact the Port Office by radio telephone.

Vessels should have main engines and deck machinery operable at all times when alongside the berth. Permission contrary to the above must be obtained from the Port Authority.

Vessels usually dock starboard side at the Grain Berth.

Tankers and OBO vessels having discharged Petroleum products at last port and not in possession of a Gas Free Certificate by an independent Chemist will advise accordingly in the 72 hour ETA, and arrangements will be made to have a chemist available on arrival at vessels expense.

All vessels discharging or loading grain will at all times have adquate ratguards on all mooring lines.

Ore Carriers:

Loading Conditions: Quebec Cartier Mining Company will load ore at Port Cartier into vessels conforming with the Specifications hereinafter set forth.Quebec Cartier Mining Company has installed equipment at Port Cartier having a rated capacity for free loading at 6,000 gross tons per hour. Any trimming beyond that necessary for the safety of the vessel which is desired by the vessel and is consented to by Quebec Cartier Mining Company and which must be limited to lower holds, shall be at vessels expense.

Loading Minimum and Vessel Specifications: Each vessel designated to accept delivery of ore at Port Cartier, must conform in construction to the following specifications and conditions:

1. Not less than 4 ore hatches of at least 18 ft. square, except Great Lake Bulk carriers where the minimum width of hatches shall be 9 ft., to accept Ore Cargo direct from loading tower at Port Cartier.
2. All vessels nominated must be suitable for the loading and the transportation of concentrates and capable of taking the entire cargo to be loaded in the lower holds without "peak-up" above the between deck levels. The vessel shall load and stow in accordance with the Canada Shipping Act and Regulations promulgated thereunder.
3. Hatch opening sufficiently clear of obstruction on deck to permit free and direct contact with loading tower.
4. In case of combination Ore Carrier and Tanker type vessels, the Master must present a Gas Free Certificate before Notice of Readiness will be accepted.

Rules and Regulations:

Ships will be loaded in regular turn of vessel's arrival off Port Cartier provided they present with hatches open and do not have ballast dumping time which will exceed minimum loading time. The shiploader has a rated capacity of 9,000 gross t.p.h. A vessel which has berthed at the loading dock and is found to have a deballasting rate time which in the opinion of the Port Authority will not permit loading at maximum rate, may be ordered off the dock and moved to the standby berth or to anchorage until it is in a condition to accept its cargo at maximum loading speed.

The vessel will then be returned to the ore loading berth in turn, following re-submission of Notice of Readiness. All moves to be at vessel's expense. Quebec Cartier Mining Co., Port Authority will be final arbitrator in case of dispute.

Any vessel which discharges a cargo of grain and is to load a cargo of iron ore will be considered in turn for loading only after the vessel has completed discharging grain and is in all respects clean and ready to receive iron ore.

Loading plan must be presented to the loading foreman on arrival at the berth.

Ships will leave the loading berth immediately on completion of loading. If any delays occur on documentation, crew members missing, etc., ship will leave the dock and all matters will be handled from anchorage or another berth.

All shipboard work necessary for docking and loading, including but not limited to line handling and tending, opening and closing hatches, and normal deck cleanup, shall be done by the vessel's crew.

Any owner or charterer with more than one vessel awaiting turn to load may interchange his vessels, provided they are of comparable capacity (deadweight). Any interchange of turn must be arranged with and have the approval of Quebec Cartier Mining Company.

All weights shown on the Bill of Lading and/or Manifest will be the same as recorded on the weighing facilities of Quebec Cartier Mining Company.

The Port will be in operation 24 hours a day, 7 days a week; however, ore vessels will not be loaded on New Year's Day (1st January), and on Christmas Day (25th December), nor will they be loaded from 0800 hrs. Sunday to 1600 hrs. Sunday, nor during the same period on the following holidays: Good Friday; St. Jean Baptiste Day (24th June); Dominion Day (1st July); First Monday of August; Labour Day (First Monday of September); Thanksgiving (Second Monday of October).

Arrangements have been made so that loading operations will commence as soon as possible after the vessel's arrival at the loading berth.

Vessels which have completed discharging of grain and are to load Iron Ore should have ratguards fitted to all mooring lines at all times.

Vessels ordered to anchor, should do so in the recommended area as shown under Anchorage. Failure to do so may result in delays to vessels from being boarded by Port and Government Authorities.

Vessels arriving in ballast should insure they are in good trim for safe handling into the harbour, bearing in mind the loading rate, so as not to cause any delay in loading due to deballasting. However, should a vessel not be sufficiently ballasted at the time of proceeding into the harbour the Pilot may request further ballasting, depending on the prevailing weather conditions. If in doubt the Master should contact the Port Office by Radio Telephone.

Vessels should have main engines and deck machinery operable at all times when alongside the berth. Permission contrary to the above must be obtained from the Port Authority through the Agent.

Vessels usually dock port side to at Ore Berth.

Ore-Oil and OBO vessels having discharged petroleum products at last port and not in possession of a Gas Free Certificate by an independent chemist will advise accordingly in the 72 hour ETA, and arrangements will be made to have chemist available on arrival at vessel's expense.

General Instructions in Preparing Vessels' Holds to Accept Iron Ore.

Quebec Cartier's iron ore is a type of iron ore concentrate which weighs on the average 192 lb. per cubic foot, and stows at approximately 12-13 cubic feet per gross ton.

The iron ore contains an average moisture content from 1.5% to 2.3% and could sometimes in the Summer season be shipped at as high as 4%. The character of this ore is self draining. It will retain moisture up to about 1.5%, but all moisture over and above this will drain on compaction of the material, and also, if the ore is left for long periods in stock-pile or in the hold of a vessel, this drainage of moisture will sometimes leave a considerable quantity of water in the hold of the vessel, and could cause some inconvenience when discharging the cargo. For this reason all bilge strums or wells should be sounded regularly and pumped out at regular intervals so as to keep the bottom of the hold as dry as possible.

Quebec Cartier's iron ore is considerably abrasive, and could cause damage to bilge pumps. Masters of vessels are advised to cover all bilge strums or wells with burlap in a similar manner as when receiving a grain cargo in bulk; so as to permit a free flow of the water and retain the iron ore in the hold of the vessel.

All holds for the acceptance of this cargo should be clean prior to the arrival of the Vessel.

AGENT: Quebec Cartier Mining Company, Port Office, PO Box 1130, Port Cartier, P.Q. Canada. Tel. 768-2400. Telex: 011-8-6422.

PORT COLBORNE, Ontario: 42.52 N. 79.15 W.

Refer to "St. Lawrence Seaway" for important general information.
DOCUMENTS: All documentation carried out by Authorities in Montreal. Only when vessels have called at United States port after departing Montreal will any changes in documentation be necessary, which will consist of a United States Customs Clearance Certificate, to be available on board.

Immigration papers.
1 copy QS2 (Health Certificate).
3 Stores Lists.
Crew Personal Effects List.
Customs Clearance.
All of the above will have been stamped in Montreal.

PILOTAGE: Pilots available at Port Weller (upbound) and at Sarnia (downbound).
ANCHORAGE: In Lake Erie, beyond the 3-mile fairway buoy at entrance to Port Colborne Harbour.

No anchorage available outside those allocated by the St. Lawrence Seaway Authority, except those vessels waiting to unload at N.H.B. facilities only can moor temporarily on the inner breakwater West of the N.H.B. elevator with permission from the N.H.B. elevator manager.

RESTRICTIONS: Navigation season approximately from April 1st to December 31st. Channel depth 27 ft. dependent on Lake level.

MAX. SIZE: 730 ft. length, 75 ft. 6 in. beam, 26 ft. draft.

HEALTH: Pratique granted at Montreal.

TUGS: None available.

BERTHING: East Side Wharf: 2,600 ft. long, depth alongside 27 ft. West Side Wharf: 5,000 ft. long, depth alongside 15 to 27 ft. N.H.B. Elevator: 700 ft. long, depth alongside 22 ft.

MEDICAL: Local hospital at Port Colborne. All assistance available.

DENSITY: Fresh water.

FRESH WATER: Available at West Side Wharf.

FUEL: All grades available from oil company berths at West Side Wharf.

REPAIRS: Lay-up berth at West Side Wharf, 9.5 ft. – 13.5 ft. alongside. Local repair shops for boiler, engine and above deck repairs.

AUTHORITY: St. Lawrence Seaway Authority, Port Colborne.

PORT HAWKESBURY AND STRAIT OF CANSO, N.S. (See Plan)

PORT LIMITS: Port Hawkesbury and Mulgrave harbour limits are from a line joining Melford Point and Bear Head, and the Canso Causeway.

DOCUMENTS:

3 copies Crew Declaration, Form Y14 (IMCO Form 5 acceptable).
3 copies Store List, Form E1.
3 copies Immigration Crew List, Form IMM200.
3 copies Inward Report, Form A6.
2 copies Shipping Report, Form S1.
3 copies Outward Report, Form A6.
Completed Maritime Declaration of Health, Form QS2001.
Valid Derating Certificate.
International Vaccination Certificates for Crew Members.
Complete copy of Manifest for Goods to be Discharged in Canada.
Clearance from Last Port.

Tankers must be in possession of Canadian Compliance Certificate, valid for two years, or have arrangements made to receive one.

CANSO MARINE TRAFFIC REGULATING ZONE: A marine traffic regulation system is in operation for the area of the Strait of Canso, including Chedabucto Bay, St. George's Bay and the approaches thereto.

Vessels of 50,000 g.r.t. and over are required to apply for clearance to the traffic regulating centre not less than 24 hours before entering the waters designated as the Canso Marine Traffic Regulating Zone.

All other vessels of 65 ft. registered length and over are required to establish communication with the Eddy Point Marine Aids Centre 12 hours before entering the waters designated as the Canso Marine Traffic Regulating Zone.

Vessels requiring initial clearance to enter the Canso Marine Traffic Regulating Zone are required to make an application through a marine radio station to "Eddy Point Traffic" in the following form:

(a) Name of ship and call sign.
(b) Position of the ship.
(c) ETA at the limit of the zone.
(d) Ship's destination and last port.
(e) Ship's draft.
(f) Description and weight of pollutants carried.
(g) Pilotage requirements.
(h) Deficiencies in shipborne navigational aids, equipment and ship's machinery.

The Regulating Centre will give to any ship on request such information on traffic, weather, or other conditions as is known to the centre.

ICE: Ice Advisory and Shipping support Service is provided from mid-December to the end of the ice season. Information regarding ice conditions is broadcast regularly and special reports will be obtained on request from "Ice Halifax" through Halifax Radio (VCS).

Local reports are included in a routine information broadcast on VHF by "Eddy Point Traffic" at half hourly intervals.

Masters are cautioned that it may be necessary to remove certain buoys in Chedabucto Bay and the Strait of Canso during the ice season, and it is recommended that Masters request information on their deposition from "Eddy Point Traffic" prior to entering the Canso Marine Traffic Regulating Zone.

PILOTAGE: Pilotage is compulsory. Pilotage boarding stations:

Strait of Canso, Northern Approach: 45° 42′ 42″ N. 61° 29′ 12″ W.
Strait of Canso, Southern Approach: 45° 24′ 00″ N. 61° 01′ 00″ W.

Vessels must report by radio-telephone or radio-telegraph their ETA's to the Eddy Point Marine Aids Centre, 12 hours before the vessel's ETA. Time used must be GMT. ETA's must be confirmed or corrected not more than 8 hours later nor less than 4 hours prior to the new ETA.

Canso pilot boat guards Channel 14 whilst in the area of Chedabucto Bay approach and Channel 12 whilst in the area of St. George's Bay approach.

ANCHORAGES: In the interests of safe navigation, anchorage berths for vessels of 65 ft. registered length have been established.

Anchorages "A" to "F" are situated in Chedabucto Bay in water depths from 14 to 26 fathoms.

Anchorages "G" to "O" are situated in Inhabitants Bay in water depths from 5 to 8 fathoms.

HEALTH: Pratique will be granted on arrival at berth by boarding officers, but it is the Master's responsibility to report by radio all details of any sickness or death occurring during the voyage to "Quarantine Halifax".

MAX. SIZE: Tankers of 326,000 d.w.t. and larger can be accommodated. See also "Berthing".

RADIO: Halifax (VCS) continuous year round. 500, A2; 2,182, A3; 156.8; F3 also 4, 6, 8, 12, 16, 22 mHz bands.

Sydney (VCO) continuous year round. 500, A2; 2,182 A3, 156.8, F3.

Canso (VAX) continuous year round. 2,182, A3; 156.8, F3.

Grindstone, Magdalien Island (VCN) continuous year round. 500, A2; 2,182, A3; 156.8 F3.

Canso Locks (VAZ3) continuous during navigation season. 2,182, A3; 156.8, F3.

TUGS: Two tugs of 3,400 b.p.h. and 40-ton bollard pull operate in the area, these tugs are under contract to Gulf Oil Canada Limited and are available, operational conditions at their Ocean Terminal permitting, for use at other berths in the port subject to the terms of the United Kingdom Standard Towage conditions.

BERTHING: *Gulf Oil Canada Ltd., Ocean Terminal, Point Tupper:* Masters are required to establish communications with the terminal when within a distance of 35 miles of the terminal on HF Channel 16, using call-sign "Gulf Control".

Situated at Wright Point and is a "T"-shaped structure providing two berths for tankers. Outer berth No. 1, has accommodated vessels up to 357,000 d.w.t. and has a least depth of 100 ft., inner berth No. 2 can accommodate vessels up to 50,000 d.w.t. with a least depth of 75 ft.

Berth No. 1 is equipped with 8 hydraulically operated loading arms, each fitted with a speed-seal hydraulically operated manifold coupling.

Loading arm	*Coupling*	*Purpose*	*Rate*
11	16 in.	Mammoth tanker ballasting	25,000 b.p.h.
12	10 in.	Vessel bunker	10,000 b.p.h.
		Cargo bunker	10,000 b.p.h.
13	16 in.	Cargo bunker	25,000 b.p.h.
		Crude	25,000 b.p.h.
		Ballast discharge	25,000 b.p.h.
14	16 in.	Crude	25,000 b.p.h.
15	16 in.	Crude	25,000 b.p.h.
16	As No. 13		
17	As No. 12		
18	As No. 11		

Berth No. 1 is connected by 2–42 in. lines to the crude tank farm with an average pumping distance of 7,750 ft., tank base being at an elevation of 90 ft. No booster pumps are provided.

Berth No. 2 is equipped with six hydraulically operated loading arms each fitted with a speed seal hydraulically operated manifold coupling.

Loading arm	*Coupling*	*Purpose*	*Rate*
1	8 in.	Vessel bunker	2,500 b.p.h.
2	12 in.	Cargo bunker	12,000 b.p.h.
		Ballast discharge	25,000 b.p.h.
3	12 in.	As No. 2	
4	10 in.	Premium gasoline	10,000 b.p.h.
		Regular gasoline	10,000 b.p.h.
5		Naphtha	10,000 b.p.h.
5	10 in.	Stove oil	10,000 b.p.h.
		D-40	10,000 b.p.h.
		D-20X	10,000 b.p.h.
		D-25	10,000 b.p.h.
		Jet	10,000 b.p.h.
6	8 in.	Vessel bunker	2,500 b.p.h.

Product tanks are situated 3,920 ft. for bunker to 6,400 ft. for gasolines from the berth.

Vessels will be expected to berth with manifold blinds removed, sea valves sealed and locked, pumps and pipe-lines set ready to commence discharge of cargo or ballast immediately on connection of loading arms and on verification of the discharging/loading procedure between the Master or his delegate and the terminal's representative.

On termination of the cargo transfer, the vessel will be required to vacate the berth, if loading, on the completion of gauging, sampling and documentation; if discharging upon ballasting to a draft consistent with the weather conditions prevailing.

Suitably equipped vessels will be able to maintain VHF radio communication with the terminal control room during the cargo operation.

Fresh water and fuel are available for calling tankers on both berths.

A gangway will be provided on berth No. 1, but will require the assistance of ship's personnel in positioning the ladder, only in instances when the ship's superstructure or other obstruction prevent the use of the terminal's gangway should arrangements be made to use the ship's gangway.

Nova Scotia Forest Industries Wharf. Situated at Madden Point

and serves the pulp and paper manufacturing facility, the wharf is 425 ft. long, with dolphins extending a farther 100 ft. from each end of the wharf, depth alongside 26 ft. at low water. Fresh water available, bunkers not available.

Georgia Pacific Corporation Terminal. Situated at Point Tupper, this gypsum loading facility consists of a series of dolphins capable of mooring a ship over 700 ft. in length and has a min. depth of 32 ft. low water. Conveyor system from plant to centre of dolphins. No fuel oil or fresh water available.

Port Hawkesbury Department of Transport Wharf. Berthing length 50 ft., depth of water alongside 18 ft. No fresh water, no bunkers.

Mulgrave Department of Transport Wharf. Berthing length 940 ft., depth of water 18 to 25 ft. Used for wood pulp and general cargo loading/discharging rail tracks, fresh water available, fuel oil delivered by truck, no cranes or permanent hoist.

BALLAST: *Gulf Oil Canada Ltd.:* All ballast must be pumped ashore. Ballast receiving facilities are situated 5,250 ft. from the berths. Disposal of ballast water overside is strictly prohibited and any pollution of the Strait will result in heavy claims and fines. The terminal will in the case of an oil spill take such steps as may be deemed necessary to fight the pollution before it spreads. If the spill is due to faulty equipment or material on the vessel or to negligence on the part of the ship's personnel, the terminal shall be indemnified for any expense incurred in connection with the preventative action taken. No ballast is to be taken from the Strait unless required for the ship's clean permanent ballast system. Clean ballast for the cargo tanks will be by terminal pumps.

MEDICAL: Masters are required to give early advice to their Agent regarding medical and dental attention requirements, hospitalisation cases will be referred, Antigonish, 40 miles distant.

DENSITY: 1025. Influenced by Spring thaw run-off.

FRESH WATER: Available in limited quantities.

FUEL: Available, vessels requested to give 72 hours notice of requirement, quantity and specification.

CONSULS: See "Halifax".

REPAIRS: Breton Industrial and Marine perform hull and machinery repairs to vessels afloat. Radio and radar service is available locally, the vessel's Agent should receive early advice of repair requirements.

GANGWAY/DECK WATCHMEN: Usually ship's crew.

CUSTOMS ALLOWANCES:

Tobacco: 200 cigarettes or 50 cigars or 2 lb. tobacco per person per week. Wines/spirits: Total of 40 ounces per person over 21 years old.

Subsequent issues may be authorised to crew members of foreign vessels, but the max. quantity any crew member may hold at any time must not exceed 300 cigarettes, or 75 cigars, or three pounds of tobacco and 60 ounces wines/spirits.

Crew personal effects such as radios, tape recorders binoculars, etc., should be declared on manifest.

REPATRIATION: Crew changes and repatriation permitted.

AIRPORT: Regular services by Air Canada from Halifax International Airport 150 miles distance, and from Sydney Airport 90 miles distant. Charter flights by small aircraft can be arranged from Port Hawkesbury Airport to Halifax and Sydney.

SUPPLIES: Provisions and bonded stores can be supplied locally but Masters are advised that to avoid delays, their Agent should be notified prior to arrival on their requirements, particularly for deck and engine stores as these may have to be obtained from Halifax.

Laundry facilities are available and in order to expedite the service, Masters should request their Agent to have a representative to attend on arrival.

Supplies of stores will have to be conveyed to tankers at Gulf's Ocean Terminal by stores boat or barge.

TIME: GMT minus four hours. Last Sunday in April, clocks advanced one hour, last Sunday in October, clocks retarded one hour.

POLICE/AMBULANCE/FIRE: Police 625-2220; Ambulance 625-2929 or 625-1911; Fire 625-2838.

SHORE LEAVE: Permitted.

DEVELOPMENTS: Simultaneous with an announcement by Nova Scotia Refining Company of the construction of a 200,000 barrels per day refinery, the Nova Scotia Government announced the construction of a common-user oil terminal to be sited on the Mulgrave side of the Strait of Canso.

CANSO CAUSEWAY CANAL: Max. vessel dimensions, length 715 ft., width 75 ft., draft 28 ft., vessels with draft greater than 28 ft. and not more than 30 ft. may proceed through with special permission of the Canal Superintendent. Depth of water on the North and South approach mooring berth is 32 ft. During the months December to April Masters should consult with Ice Operations, Halifax, whether lock in operation.

POWELL RIVER, B.C.: 49.52 N. 124.33 W.

DOCUMENTS:

Customs Clearance from last port.
Manifest for goods to be off-loaded and "In Transit" cargo tonnage.
Duplicate Pratique for vessels arriving from ports other than U.S. ports.
Cdn. Immigration Crew List, (Imm. 200) required in triplicate.
Passenger List in triplicate.
Seamen's passports and I.D. cards should be available when arriving from sea.
Ship's Certificates.

PILOTAGE: Payment compulsory. Incoming ships take Pilot at Race Rocks, near Victoria. Pilotage District of British Columbia.

ANCHORAGE: No suitable anchorage is available in Powell River area. Vessels usually anchor in English Bay (Vancouver) or various anchorages Vancouver Island.

RESTRICTIONS: No linesmen available between 2359 hrs. and 0700 hrs. Except tankers who berth anytime.

MAX. SIZE: Up to 600 ft. LOA. 32 ft. draft. Tankers up to 615 ft. have berthed for discharging purposes (No. 2).

HEALTH: Duplicate pratique for first port of call. See also "Montreal".

RADAR/VHF: No radar. Pilots are in contact with tugs and mill office using VHF.

TUGS: Two tugs available, 300 to 350 h.p.

BERTHING: Berth No. 1 requires a tug when berthing only. Berth No. 2 Pilot's discretion. Accommodation: Channel depth 30–35 ft. LW. Three private piers; pier A with Berth No. 1, 500 ft. long, depth alongside 30 ft. LW, Berth No. 2, 482 ft. long, depth alongside 35 ft. LW; pier B with Berth No. 3, 300 ft. long, Berth No. 4, 400 ft. long, Berth No. 5, 130 ft. long, and Berth No. 6, 375 ft. long, depths alongside 30 ft. LW.

Three 10-ton elevators, one 6-ton travelling crane. Dock storage for 10,000 tons. The elevators are used for loading barges only.

STEVEDORES: None. Local longshoremen only. Supercargoes are sent from Vancouver to assist in loading vessels. Longshoremen are members of Papermakers' Union.

MEDICAL: Powell River General Hospital and port doctor available. Complete medical services provided.

TANKERS: Bunker oil supplied by company barges.

FRESH WATER: Unlimited supply, no charge.

FUEL: Fuel oil, diesel, and gasoline available.

GANGWAY/DECK WATCHMEN: On request.

OPENING/CLOSING HATCHES: By crew prior to arrival and departure.

CUSTOMS ALLOWANCES: 300 cigarettes, or 50 cigars, or 1 lb. tobacco on arrival. Issues every 7 days. 60 oz. or 2 cases beer on arrival. Issues every 7 days.

IDENTIFICATION CARDS: Keep available for inspection.

CONSULS: Available at Vancouver, B.C.

AIRPORT: 2 flights per day to Vancouver International Airport. 4 miles from docks. Charter flights available to Vancouver Island on request.

TIME: Pacific Standard Time.

HOLIDAYS: Union Contract. Usual holidays are New Year's Day, Easter Monday, Labour Day and Christmas Day, every second Sunday.

TELEPHONES: Ship's telephone available.

SERVICES: Most services arranged in Vancouver.

SHORE LEAVE: Permitted.

AGENT: Powell River Shipping Services Ltd., Box 74, Powell River B.C. Office, 483–4232.

PRESCOTT, Ontario: 43.44 N. 75.31 W.

For important General Information refer to "St. Lawrence Seaway".

DOCUMENTS: See "Montreal".

PILOTAGE: Arranged through Agents – Montreal.

ANCHORAGE: Seaway Anchorage.

MAX. SIZE: Up to 27 ft. draft.

HEALTH: See "Montreal".

RADIO: Seaway Stations.

BERTHING: *N.H.B. Facilities.*

Berth	*Length* (ft.)	*Depth alongside* (ft.)
Grain Unloading Berth	1,300	27
Grain Loading Berth	930	27
Shed Berth	1,450	27
Salt Dock Berth at Shed	1,450	27
Salt Dock Berth Up-stream Pier	620	27

Grain Facilities: Prescott Elevator, capacity 5,500,000 bushels, 11 spouts available. Loading capacity 80,000 bushels/hour, depending on type of vessel and conditions.

STEVEDORES: Stevedores arranged by Montreal Agents.

MEDICAL: Nearest hospital located at Brockville. Ambulance service available at Prescott.

DENSITY: No tide – seaway density.

FUEL: Arranged with Montreal Agents.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Ship's crew.

CUSTOMS ALLOWANCES: Tobacco: No limit. Wine and/or Spirits: No limit.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Small repairs available.

AIRPORT: 125 miles to Montreal – served by regular airlines.

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.

HOLIDAYS: See "Montreal". Work can be arranged on holidays.

POLICE/AMBULANCE: Prescott – Police 925-3131; Ambulance 925-4901.

TELEPHONES: Arrangements can be made to place telephones on board.

SHORE LEAVE: Allowed.

AUTHORITY: National Harbours Board.

PRINCE RUPERT, B.C.: 54.19 N. 130.19 W.

DOCUMENTS: See also "Vancouver".
Crew List (Imm. 200) 2 copies.
List of Ship's Stores (E.1) 3 copies at first Canadian Port.
Personal Possession List (Crew Declaration Y.14) 3 copies at first Canadian port.
PILOTAGE: Compulsory. Telegraphic address: "Pilots Victoria" 48 hours notice required. VHF Channels 6, 11 and 16. Pilot boat 60 ft. vessel, black hull. Boarding station one mile radius from Triple Island. Safe sector of approach 060° True through East to 135° True. Heavy weather, North of Lucy Island.
ANCHORAGES: All position centre of 1,800 ft. radius.
1. 065° True 5.9 cables from McIntosh Rk Beacon (approx. position 54° 18.5′ N., 130° 21.63′ W.).
2. 058° True 12.0 cables from McIntosh Rk Beacon (approx. position 54° 18.9′ N., 130° 20.83′ W.).
3. 227° True 12.9 cables from Vigilante Island Pk (approx. position 54° 19.27′ N., 130° 20′ W.)
4. 218.5° True 7.0 cables from Vigilante Island Pk (approx. position 54° 19.6′ N., 130° 19.13′ W.).
5. 078.5° True 5.0 cables from Vigilante Island Pk (approx. position 54° 20.25′ N., 130° 17.55′ W.).

RESTRICTIONS: Nil on Prince Rupert Harbour. Porpoise Harbour, slack water and daylight. Swept to 23 ft. at low water.
MAX. SIZE: Vessels of 630 ft. and 36 ft. draft have entered. Larger vessels can be accommodated. Fairview Terminal has 45 ft. of water at Low Tide with a 1,400 ft. dock face.
HEALTH: Prince Rupert is an unorganized port and pratique is granted for this port only. Officials board at berth. Pratique is automatic when vessel has called at ports in Southern mainland. See "Montreal".
RADIO: Prince Rupert Radio VAJ 500, 2182, 1630.
TUGS: Join vessel off berth. Either ship's or tug's lines may be used. No extra charge for tug's lines.
BERTHING:
Private Facilities

Berth	*Length (ft.)*	*Depth alongside (ft.)*	*Utility and general remarks*
Northland Dock Columbia Cellulose	460	27	General and containers
Chemical Wharf	40	30	Chemical Handling
Canadian Cellulose	1,500	35	1,100 ft. Suitable for berthing – pulp handling
Shell Oil	100	30	Fuels – Marine use
Standard Oil	175	35	Fuels – Marine use
Gulf Oil	100	35	Fuels – Marine use
Home Oil	100	35	Fuels – Marine use
Imperial Oil	210	37	Fuels – Marine use
Albert & McAffrey	300	18	4 Sections total – general cargo
Babcock fisheries	270	27	Fish Handling Terminal
Atlin Fisheries	350	29	Fish Handling Terminal
Royal Fisheries	80	20	Fish Handling Terminal
B.C. Packers Ltd.	240	10-24	Fish Handling Terminal
Fairview Terminal	1,400	45	General Purpose Terminal
N.H.B. Facilities:			
Ocean Dock	495	35	

Grain Facilities

Elevator	*Capacity in bushels*	*Loading galleries at berths*	*Loading capacity bushels per hour*	*Remarks*
Canadian Government Grain Elevator	2,500,000	1	15,000 each shipper Total 75,000 bushels per hour	Berth length 1,013 ft. Depth at LW – 37 ft. Total of 5 shippers

STEVEDORES: Gangs arranged through Agent. Main commodities for export: Grain – loading rate up to 13,000 tons per day. Pulp – 25 tons per gang hour. Lumber – 20,000 FMB per hour – packaged.
MEDICAL: Hospital facilities available.
DENSITY: Variable, 1013 to 1025.
FRESH WATER: Available at all berths.
FUEL: Marine diesel and heavy fuel oil available from tanks or tank car by arrangement. No berths for bunkering ocean-going vessels.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: This work is carried out by stevedores except for specially constructed hatches such as McGregor.
CERTIFICATES:
Safety Equipment.
Cargo Ship Certificate.
Safety Radio.
Derat.
Load-line.
Cargo Gear Book and Certificates.
All subject to inspection on arrival.
CUSTOMS ALLOWANCE: Tobacco, 50 cigars and 200 cigarettes and 2 lb. of tobacco. Wine and Spirit, 1 bottle per officer, (40 oz.) and Beer 288 oz. or 24 pts.
CARGO GEAR: Cargo Gear Book to be ready for inspection. At first Canadian Port it is advisable to have derricks lowered on arrival.
IDENTIFICATION CARDS: Not required.
REPAIRS: Minor repairs deck and engine room.
DRY DOCKS: Two small slipways for 150 ft. vessels.
AIRPORT: Two flights daily to Vancouver, B.C. Travelling time to airport about one hour.
TIME: Zone plus eight Pacific Standard Time. Last week in April to last week in October is Summer Time, clocks advanced one hour.
HOLIDAYS: New Year's Day (no work); Good Friday; Easter Monday; Queen's Birthday; Dominion Day; Labour Day (no work); Thanksgiving Day; Remembrance Day; Christmas Day (no work); Boxing Day (no work).
POLICE/AMBULANCE/FIRE: Police tel. 15; Fire tel. 10; Ambulance tel. 10.
TELEPHONE: Placed on board if required.
SERVICES: Compasses adjusted. No tank cleaning equipment or facilities for discharge of tank washings.
SHORE LEAVE: No restrictions.
AUTHORITY: National Harbours Board.

QUEBEC, P.Q.: 46.49 N. 71.12 W. **(See Plan)**

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists (cargo vessels).
8 Passenger Lists (passenger vessels).
3 Ship's Stores Lists.
3 Crew Declarations.
1 Maritime Declaration of Health.
1 Complete Manifest of cargo to be discharged in all Canadian Ports.
5 Manifest for local cargo.
No bills of lading required to Local Authorities.
PILOTAGE: On arrival at Anse-aux-Basques, a ship takes on board a Pilot of the Laurentian Pilotage Authority to bring the ship to Quebec. Pilotage and payment of dues are compulsory. Pilots board inbound vessels at Anse-aux-Basques. The Master of every ship inward bound in the Gulf of the St. Lawrence and destined for ports West of Anse-aux-Basques must report ETA to Pilots Montreal, via Marine Traffic Control on VHF radio Channel 14 or by other means of communication to Seven Islands Radio Station, giving any information Control may require.
A min. notice of 12 hours must be given. This notice must be confirmed 3 hours prior to arrival at the Pilot station.
Note: Pilot boats (2) and Pilot station keep watches on 2182 kc/s. and have VHF facilities, which are only used for local instructions from one to the other.
Pilot boats (2) in operation: Pilot No. 9 Canada and Pilot No. 10 Canada. Hull painted black, white superstructure. Pilot-jack welded on stack – all-steel vessels. Equipment: Radar – echo sounder – radio VHF/all frequencies. A.M. – all frequencies – electric whistle – loud hailer – searchlight.
Pilot station can either be raised by radiotelephone frequency 2182 kc/s. by morse lamp – semaphore – by just blowing the code letter G consecutively or displaying code flag G. Exact location of Pilot station Anse-aux-Basques, on North shore of St. Lawrence river. Lat. 48° 19.2′ N. Long. 69° 24.9′ W. Pilotage ground limits are rectangular distance of 2 miles from the station. In bad weather, pilot boats removed from station to more secure position and pilotage service held up until better conditions. Same procedure applies during severe ice conditions. Any changes regarding pilot boat service obtained through Marine Traffic Control.
Vessels using pilot boarding stations within St. Lawrence River – Seaway – Quebec Harbour – Lakehead, requested provide accommodation ladder. Landing platform of accommodation ladder should be 10 ft. above water.
Vessels arriving Anse-aux-Basques without having previously stated ETA Pilot station 12 hours in advance, or during such time as pilotage service held up for any reason, vessels normally proceed to anchorage off Ile-aux-Basques on Southern side of river, where good anchorage ground can be found. Further instructions will be given to Vessel by Marine Traffic Control or Pilot Station on VHF or 2182 kc/s.
ANCHORAGE: See "Pilotage".
Due to submarine cables and other submarine installations, anchoring in the harbour is prohibited without permission of the Harbour Master. Permission for anchoring is to be obtained through Marine Traffic Control Centre. The official anchorage area extends Southwestward from the fixed blue light on Queen's wharf Lat. 46° 48′ 34″ N., Long. 71° 12′ 12″ W. (10 anchorage posts).
RESTRICTIONS: Depth of water in 11 mile dredged channel. Channel dredged to 40 ft. to which depth add height of tide which, at times, may give extra 15 ft.
MAX. SIZE: No limit in length and breadth. Draft limited to 42 ft. Winter and 48 ft. in Summer.
HEALTH: Radio pratique obtained through Seven Islands by wireless. In case of reported suspected disease instructions will be given by wireless. When pratique granted, vessel automatically cleared for *all Canadian Ports.*
RADIO: Seven Islands: Call sign VCK. Quebec: Call sign VCC.
RADAR/VHF: Port radar service in operation. VHF Marine Traffic Control System in effect for area extending from meridian of Long. passing through Sept-Iles to upper limits of Montreal Harbour.

In order to take advantage of the Traffic Control System and avoid unnecessary delays, all vessels approaching Sept-Iles from seaward should be fitted with VHF set.

Control of VHF Channels shall be immediately available on bridge, convenient to conning position and such installation shall conform to requirements laid down in Radio Regulations for equipment used in VHF International Maritime Mobile Radiotelephone Service and be capable of operation on Channels: 16, 14, 13, 12, 11, 10, 9 and 6.

For vessels not provided with VHF equipment, portable VHF sets will be taken on board by Pilot. Rental charge for this service. Vessels approaching meridian of Long. passing through Sept-Iles from Eastwards should call Channel Quebec on 156.7 (Channel 14) for further instructions.

TUGS: Tugs join vessels in stream and use ship's lines.

4 tugs available, each equipped with radio-telephone. Two tugs of 4,200 h.p.; two tugs of 1,250 h.p.

BERTHING:

Terminal	Berth No.	Berth Length (ft.)	Depth at Low Water (ft.)	Remarks
Au Vieux Port	4	800	13	Lay-up Berths
	5	580	17	
	8	500	26	Coastal trade.
	14	600	20	
	17	700	19	
	19	620	26	Berth used for entering Vieux Port
	20	1,100	24	Ocean and coastal trading.
St. Laurent	18	800	35	
	25	700	35	Grain unloading; two marine towers.
	26	800	36	
St. Charles	24	550	33	
	27	962	40	Roll-on/Roll-off berth.
	28	840	35/37	
	29	1,000	35	Grain loading galleries and shedded cargo.
	30	750	35	Scrap metal.
	31	750	35	
Anse-aux-Foulons	1	650	37	Total berthing length 1,090 ft.
	2	440	37	
	3	692	37	Total berthing length 1,384 ft.
	4	692	37	Passenger accommodation. 2 floors in Cargo Shed.
	5	641	37	Total berthing length 1,282 ft., container facility. 1×35, 1×40
	6	641	37	ton cranes. Oil handling facilities at No. 6.
	7	568	37	Oil handling terminals.
	8	591	37	Total berthing length 1,159 ft.
Beauport	50	690	39	Bulk – Total berthing length
	51	690	41	2,090 ft. 2 travelling gantry
	52	690	41	cranes.
	53	690	50	Capable of handling containers.
	54	690	50	One bridge crane 35 tons. Total berthing length 1,380 ft.
Levis	98	714	33	Bulk.
Private Terminals				
Aigle D'Or	1	1,400	31	Coastal tankers up to 20,000 tons
	2	1,500	54	Ocean tankers up to 100,000 tons.
Irving		Pontoon	35	Oil terminal.
Reed Paper		1,200	24	Coaling bridge 5 ton clam.
De La Reine	1	240	35	Coast-guard.
M.O.T.	2	355	35	
	3	370	31	
	4	235	40	
	5	310	40	
	6	325	35	

BULK HANDLING FACILITIES:

See Table below.

Storage capacity – 8,000,000 bushels (240,000 short tons). Served by CN and CP railways.

A marine terminal facility on piers 50, 51 and 52 which include – three bridge towers with a loading capacity of 2,000 t.p.h., locomotive cranes to unload gondola cars, a track-mobile to shunt cars and other ground rolling stock to manipulate bulk material on paved pads, and two-way underground conveyor system to handle dry bulk cargoes at a present loading rate of 800 t.p.h. 2,000 ft. of dock frontage with a depth of at least 41 ft. at low tide and leased from NHB over 1 million sq. ft. of land and operating 13,500 ft. of trackage on property connected to CNR. Storage capacity of 7 million imperial gallons for any liquid products serviced by 10 in. marine pipe-lines and a 4-in. loading rack.

Container Berths

Anse-aux-Foulons: Direct access to Trans-Canada Highway without crossing the city. A direct rail access to Canadian Pacific Railways. Two container berths, length 1,282 ft., depth 37 ft. at low tide, 17 acre area.

C.P. Navigation: One 35-ton Paceco Vickers and one 40-ton Dominion Bridge portainer cranes, 8 straddle carriers, one 35-ton transtainer crane and 2 top lifters.

Beauport: Direct rail access to Canadian National. One container berth length 700 ft., depth 50 ft. at low tide, 28 acre area.

SABB Inc.: One 35-ton portainer, top handlers and fork lifts.

Roll-on/Roll-off Berths: One berth 962 ft.

Storage facilities: shed 27, 42,000 sq. ft.
shed 28, 50,000 sq. ft.
Open shed 27, 227,000 sq. ft.

CRANES: Floating crane 100 ton capacity, 75 mobile cranes up to 200 ton capacity.

STEVEDORES: Dead-line for orders: 1100–1600–2200 hrs. for periods starting 0800–1300–1900 hrs.; 1 hour required before deadline to order gangs.

Export:	Newsprint	22 to 35 t.p.h.
	Asbestos	22 to 26 t.p.h.
	Woodpulp	22 to 36 t.p.h.
	Linerboard	22 to 35 t.p.h.
Import:	General	15 to 25 t.p.h.
	Steel	26 to 75 t.p.h.

MEDICAL: No advance notice required for medical attention. Hospital facilities available. Every person who arrives in Canada from country other than United States, Alaska, Greenland, Iceland, Islands of St. Pierre and Miquelon, Bermuda, Cuba, Jamaica, Bahamas, Virgin Islands, Puerto Rico, Panama Canal Zone or Hawaiian Islands, shall furnish evidence of being immune from Smallpox.

TANKERS: No slop discharge facilities. Eight tanker berths. Depths from 37 ft. to 50 ft. See "Berthing".

DENSITY: Fresh water.

FRESH WATER: Available to all berths, provided directly from the Board's hydrants and hoses to vessels. Rate: St. Charles River piers, 20 t.p.h. Anse-aux-Foulons 50 t.p.h. with one line, and two lines 100 t.p.h.

FUEL: Available any berth by truck.

FIRE PRECAUTIONS: Only usual precautions; towing wire hanging overboard.

GANGWAY/DECK WATCHMEN: Watchmen at gangway not necessary, but could be obtained.

OPENING/CLOSING HATCHES: McGregor hatches must be opened by crew. All other cases recommended to be done by crew also, but stevedores would also under conditions specified in stevedoring contract.

SHIP'S CERTIFICATES: Load Line, Safety Equipment, Construction, Radio, Passengers, Cargo Gear, Derating.

CUSTOMS ALLOWANCE: Tobacco, 8 ozs. tobacco for eight days, cigarettes: 1 carton per eight days. Wine and/or Spirits, 40 ozs. only. Officers and Masters will have additional supply for entertainment daily on request to Customs.

CONSULS:

British Government Office: 500 Grande Allee E.	Tel. 418–525–5187
United States of America: 1 Ste. Genevieve	522–7089
France (Commercial): 500 Grande Allee E.	522–4646
Dominican Republic: 550 23e Rue.	524–1090
France (Consulate), 1110, Des Laurentides	688–0430
Denmark, 880 Ch. Ste. Foy.	681–0708
Belgium: 55 D'Auteuil.	529–1655
Uruguay: 1093 St. Jean.	525–6612
Republic of Germany, 3030 Bl. Ste. Anne.	661–1146
Norway: 2 Nouvelle France.	692–1071
Holland: 71 Ste. Pierre.	692–0660
Mexico: 2040 Terrasse Stuart.	527–1374
Peru: 71 Ste. Pierre.	692–0616
Haiti: 967 Bar-le-Duc	651–2360
Spain: 777 1e Av.	525–5111
Italy: 580 Grande Allee E.	529–1625

All other consuls located in Montreal and send representatives to Quebec on request.

REPAIRS: Repairs of all types can be obtained.

DRY DOCKS: Department of Public Works "Champlain Lorne" located within Davie Shipbuilding Ltd. "Champlain" dry dock 1,150 ft. by 120 ft. at gate entrance. Can dock largest ships afloat. "Lorne" dry dock 624 ft. with floor width 73.5 ft. Also three outdoor berths and one covered berth.

SURVEYORS:

Lloyds Agent: P. A. Boutin Inc.	692–0660
Bureau Veritas: Jean Labas	MTL 288–6515
Det Norske Veritas: Hayes, Stuart & Co.	MTL 937–5336

REPATRIATION: All facilities for effecting crew changes and repatriation.

AIRPORT: 6 miles from city limits, served by regular airlines.

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end April to last week-end October, clocks advanced 1 hour.

Loading Berths

Elevator	Number of berths	Berth name	Length of berth	Depth of water	Number of belts	Max. hourly capacity each belt (short tons)	Number of spouts	Number of travelling loaders	Total max. hrly. capy. (short tons)
Bunge	1	28	840 ft.	35/37 ft.	4	660	20	4	2,640
,,	2	29	1,000 ft.	35 ft.	3	480	30		1,440

Unloading Berths

Elevator	Number of berths	Berth name	Length of berth	Depth of water	Number of legs	Max. hourly capacity of each leg (short tons)	Total max. capacity (short tons)
Bunge	1	18	800 ft.	35 ft.	2	1,080	2,160

HOLIDAYS: Longshoremen Official Holidays: Good Friday; Saint Jean Baptiste (June 24th); Confederation (July 1st); Labour Day (last Monday of September); Thanksgiving Day (beginning of October); Armistice Day (November 11th); Christmas Day. Cargo can be loaded or unloaded during each holiday except Labour Day.
POLICE/AMBULANCE/FIRE: Police (Harbour) 694–3645, City 694–6123, RCMP 694–3733; Ambulance 529–9221, 529–6811; Fire 694–6441.
TELEPHONES: No existing facilities for placing telephone on board.
TELEPHONE NUMBERS:

Port Warden, Captain J. P. Senterre	692–3853
Quarantine: Medical and Sick Mariners Service	694–3013
Manpower and Immigration	694–3513
Transport Canada – Marine Services:	
Regional Director: Jean Paul Godin	694–4158
District Manager: Jacques Clavelle	694–3420
Aids to Navigation: Lucien Cardinal	694–3574
Harbours and Property	694–3680
Marine Traffic Regulations: L. Misson	694–3884
Steamship Inspector Service	694–3237
Shipping Master: E. Lebars	694–3234
Laurentian Pilotage Authority: C. Bouchard	694–3358

SERVICE: Any services needed.
SHORE LEAVE: No restrictions.
DEVELOPMENTS: Extensive land reclamation work being carried out in the development of Beauport Flats will provide 1,500 acres of prime waterfront property for container and bulk-loading facilities. Work will commence shortly on the construction of a new berth (No. 55) at Beauport Flats, 1,200 ft. long with a depth of more than 50 ft. alongside. Beauport Flats are connected to the Metro-Quebec expressways scheduled for completion in 1977.
AUTHORITY: National Harbours Board.
AGENT: Shipping Limited. 140 Dalhousie Street, Quebec 2, P.Q. Telephone: (418) 692–0650 (24 hour service) Cables: "Bulko". Manager Mr. Bruno Lapointe.

ST. CATHERINES, Ontario: 43.11 N. 79.17 W.

Refer to "St. Lawrence Seaway" for important general information.
DOCUMENTS: See "Montreal".
HEALTH: See "Montreal".
PILOTAGE: Commences in lower St. Lawrence River and is continuous from district throughout Great Lakes. See "Quebec".
ANCHORAGES: Good anchorage areas at both ends of the Welland Canal.
MAX. SIZE: Max. size of vessel permitted in Welland Canal is LOA 730 ft. (222.51 m.), beam 75 ft. (23.15 m.), draft 26 ft. (7.92 m.).
HEALTH: Pratique granted in Montreal.
RADIO: Toronto Radio, Buffalo Radio.
TUGS: Tugs not generally used, but may be obtained from Hamilton or Toronto.
BRIDGES: Vessels are instructed by Traffic control on the transit of the Canal. Generally no delay for bridges.
MEDICAL: Medical and hospital facilities are available in emergencies.
TANKERS: There are limited berths suitable for small domestic tankers.
DENSITY: Fresh water.
FRESH WATER: None available except in emergency by tank wagon.
FUEL: Fuel may be obtained in Port Colborne from Shell, Esso, and St. Catherines Fuels.
DEVELOPMENTS: To eliminate the winding section of the Welland Canal which ran through the centre of the City of Welland, and to minimize delays to navigation, a new 8.3 mile section of canal, which by-passes the City of Welland, was opened in 1973. The new channel is almost straight and is both wider and deeper than the old section. Approximately 1 hour has been saved on a vessel's round trip transit time since the opening of the new channel.
GANGWAY/DECK WATCHMEN: At discretion of the Master.
CUSTOMS ALLOWANCES: See "Montreal".
IDENTIFICATION CARDS: Not needed.
CONSULS: No consuls.
REPAIRS: Deck and engine repairs are possible.
DRY DOCKS: Situated at Port Weller able to accommodate vessels, LOA 730 ft.
AIRPORT: International Airport at Toronto, 75 miles away.
TIME: GMT minus 5 hours. Daylight Saving Time when clocks advanced 1 hour usually 28th April and retarded 27th October.
POLICE/AMBULANCE/FIRE: St. Catherines – Fire 684–4311; Police 416–688–4111. Welland – Fire 734–4511; Police 416–735–7811. Port Colborne – Fire 834–4511.
SHORE LEAVE: Only when usual formalities are observed, e.g. Customs, Immigration, etc.
AUTHORITY: Director, Western Region, St. Lawrence Seaway Authority, St. Catherines.

SAINT JOHN, N.B.: 45.16 N. 66.03 W. (See Plan)

PORT LIMITS: A vessel is considered to be an "arrived vessel" when it comes alongside the pier.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Sets Customs Documents.
3 Sets Health Documents.
6 Sets Cargo Manifests.
6 Sets Bills of Lading.
3 Sets Ship's Papers.
PILOTAGE: Compulsory. Pilots board at Harbour entrance within a radius of 8 miles from Partridge Island. Masters are reminded that it is essential to send ETA by radio directly to pilots' office and to ship's Agent, to avoid delay in waiting for Pilot. This ETA (in GMT and so stated) must be sent at least 3 hours before arrival. Any material change in ETA must be corrected as soon as possible. Pilot Office: Tel: 658 – 4864.
Pilots can be contacted on VHF Channel 16.
ANCHORAGE: If required, Harbour Master will designate an anchorage.
MAX. SIZE: Controlling depth in main channel is 30 ft. at LW. Vessels length and breadth unlimited. Also see "Tankers".
HEALTH: See "Montreal".
RADIO: VAR Saint John.
TUGS: Available and considered necessary for docking and undocking large ships. 2 tugs usually needed, both in and out.
BERTHING: 27 berths. All but 2 are deep-water berths with depths up to 35 ft. Dredging done each year to maintain depth. Due to rise and fall of tide, boatmen usually necessary for running lines and docking. All berths are tidal. Tidal range up to 28 ft.

N.H.B. Facilities:

Berth number (usual name)	*Wharf Length (ft.)*	*Remarks*
Pier No. 1	1,235	
No. 2	1,025	Grain Loading
No. 2 C	300	
No. 3	1,025	Grain Loading
Rodney Term. A	1,225	2 Portainer
Rodney Term. C	1,348	
Pier No. 10	550	
No. 11	530	
No. 12	870	
No. 13	800	Shed Heated
No. 14	800	Shed Heated
Long Wharf A	620	
Long Wharf B	600	Shed Heated
Pugsley Term. A		
Pugs. Term. B & C	1,275	Grain Loading Shed Heated
Pugsley Term. D	770	Shed Heated
Broad St. Wharf	900	Petroleum Berth

CRANES: Floating cranes of 65 short tons capacity.
MEDICAL: Hospital available, also Seaman's Clinic.
STEVEDORES: Stevedores required in morning must be ordered by 1600 hrs. preceding day, and stevedores required in afternoon must be ordered by 1100 hrs. same day.
TANKERS: Controlling depth in channel to tanker wharves at Courtenay Bay is 16 ft. LW. Max. draft of 40 ft. only available at Spring tides.
Canaport: Situated 6 miles from Saint John, 4,100 ft. offshore from Mispec Point. Tankers moor and sail at any time, day or night, at any stage of tide to a Mono-buoy, depth 120 ft. at LW. Underwater pipe-line, diameter 20 – 36 in. connected to terminal with 10 tanks each with capacity of 9 million gallons. There are 2 pumps with total capacity 2,000,000 g.p.h.
FRESH WATER: Available from pipe-lines throughout the docks.
FUEL: Fuel oil and diesel oil available. Diesel and bunker fuel can be delivered by pipe-line in Courtenay Bay, where vessels restricted to high water. Also delivered by barge and by truck to wharves.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 50 cigars or 2 lb. tobacco per person over 16 years old.
Wines/Spirits: total of 40 ounces per person over 21 years old.
Subsequent issues may be authorised to Crew members of foreign vessels, but the max. quantity any Crew member may hold at any time must not exceed 300 cigarettes, 75 cigars, 3 lb. tobacco, and 60 ounces wines/spirits.
DEVELOPMENTS: *Forest Products Terminal:* Length 1,235 ft. depth at LW 36 ft. (formerly Navy Island berths 1a & 1b.).Under construction.
Rodney Container Terminal: Length 2,573 ft., depth at LW 40 ft. 2 cranes. Facility at present under construction.
IDENTIFICATION CARDS: Not required.
CONSULS:

Danish Vice-Consulate	Tel. 652-6990.
Dominican Republic	,, 694-2350.
France	,, 693-1193.
Finland	,, 692-0137.
Norway	,, 693-2681.
Netherlands	,, 657-1905.
Sweden	,, 693-2613.

REPAIRS: Complete repair facilities and equipment available also salvage equipment.
DRY DOCKS: 2. One 1,150 ft. by 125 ft. by 53 ft. deep with 42 ft. of

Private facilities:

Berth	Length (ft.)	Depth at LW (ft.)	Utility and General Remarks
(1) Atlantic Sugar Refineries	475	30	2 cranes for bulk loading
(2) Irving Pulp and Paper Co.	900	22	Used for shipping bleached sulphite pulp and receiving fuel oil and sulphur. Can berth ship 350 ft. in length with draft of 22 ft.
(3) Dept. of Transport, Marine Agency Wharf	550	24	East-side, North of Pugsley Terminals
(4) Irving Oil Co. Ltd. Tanker Wharf		40	In Courtenay bay, capable of handling oil tankers up to 40 ft. draft.
(5) C.P. Rail Ferry Terminal	830	22	Used by SJ-Digby Ferry and auto carriers. This is a roll-on/roll-off facility
(6) MacMillan Rothesay Ltd.	460		This is a roll-on/roll-off facility for loading towed barges at low water the barges rest on a prepared bottom
(7) Cana Port			A floating buoy mooring owned by Irving Refining Ltd. – Cana Port can accommodate the largest tankers afloat

Grain handling Facilities:

Elevator	Capacity in bushels	Loading galleries at berths	Loading capacity bushels per hour	Remarks
(1) Canadian National Elevator (East-side)	500,000	Pugsley B	15,000	Length of conveyor galleries 1,865 ft.
(2) Canadian Pacific Elevator (West-side)	1,000,000	2-3-11-12	60,000	Elevators (2) and (3) are connected by galleries and grain can be transferred from one to the other
(3) National Harbours Board Elevator (West-side)	1,500,000	2-3-11-12	60,000	Combined length of conveyor galleries to berths 10,065 ft.

water over sills at high tide. Smaller one 440 ft. by 60 ft. by 34 ft. deep, 22 ft. water over sills at high tide.
REPATRIATION: Can be arranged.
AIRPORT: Regular services by Air Canada from airport 12 miles from harbour.
TIME: GMT minus 4 hours. In Summer, time is GMT minus 3 hours.
HOLIDAYS: New Year's Day; Good Friday; Queen's Birthday (May 20th); Dominion Day (July 1st); Labour Day; Thanksgiving Day; Remembrance Day (November 11th); Christmas Day. Cargo work can be arranged on any day except for Labour Day.
POLICE/AMBULANCE/FIRE: From waterfront through private telephone which answers only to the number 50.
TELEPHONES: If required can be placed on board. A telex can be placed on board vessels at Pier No. 1 if required. This is for container terminals only.
SERVICES: All services available including compass adjustment.
SHORE LEAVE: Crew allowed ashore.
PORT REGULATIONS: Half speed during fog or when passing a dredge or tow of barges.
AUTHORITY: National Harbours Board.

ST. JOHN'S, Newfoundland: 47.33 N. 52.40 W.

(See Plan)

DOCUMENTS:
Quarantine
Completed Declaration of Health (QSI).
Valid Derating Certificate.
International Vaccination Certificate against smallpox for all on board.
Customs
Crew Declarations (Y.14).
3 Ship's Stores (E.1).
Inward Report (A.6).
Complete copy of each Manifest for goods to be discharged in Canada.
Clearance from Last Port.
Immigration
2 Immigration Crew Lists (200).
2 Tally Sheets (201).
3 Passenger Manifests for passengers not disembarking.
Immigration Control Cards for each person.
PILOTAGE: Compulsory and necessary. Pilots picked up approx. 2 miles from Harbour entrance, 3 hours notice should be given through St. John's Marine Radio VON addressed "Pilots St. John's". Pilots also listen on VHF Channel 16 transmit and receive 156.6 Mc/s. Lights and sound signals international. Channel 11 for harbour operations. Pilot boat 50 ft. long, black hull, white top, modern design.
ANCHORAGE: No anchorages near harbour. Safe anchorage in harbour.
MAX. SIZE: No restrictions except draft 35 ft. max.
HEALTH: Pratique, cable name and nationality of ship, ports of call during voyage, nature of cargo, number of crew and passengers, port of destination and Agent, condition of health of all on board with details of any sickness, and whether all vaccinated. Also see "Montreal".
RADIO: St. John's Marine Radio, call sign VON duplex R/T on 2118 kc/s., 2206 kc/s, and 4110.8 kc/s.
TUGS: As required by Pilots. Normally ship's lines used. 2 small tugs available.

BERTHING:
N.H.B. Facilities:

Berth number (usual name)	Wharf length (ft.)	Depth at Low Water (ft.)	Remarks
No. 1	575	10–20	
2	540	30	C. N. operation shed
3	600	30	Berth 3–4–5 serviced by a shed
4	390	30	Dangerous cargo berth. Note that explosives in small amounts to be approved by National Harbours Board prior to arrival
5	525	29–30	
6	520	20–23	
7	400	23–26	(repairs) machine shop
8	500	26–30	
9	500	24–26	
10	520	30	
11	510	30	
17	600	26–40	Golden Eagle, also shedded berth
19	375	19–25	
20	533	18–27	
21	192	28–34	
32	575	9–4	Small fishing vessels only

Private Facilities:

Berth	No.	Length (ft.)	Depth Low Water (ft.)	Utility and general remarks
Harveys	12	375	24–28	Bulk automobiles
Harveys	14	500	19–30	Bulk and general cargo
Harveys	15	350	27–31	Bulk cargo
Furness Withy	16	475	25–33	General cargo
Mobil Oil	22	500	22–30	
Imperial Oil	23	475	25–33	
Irving Oil	24	225	31–34	
Cold Storage Job	25	450	16–24	
Imperial Oil	26	200	22–24	
Bowring	27	500	18–23	
Gulf Oil	28	225	17–23	
Gulf Oil	29	375	17–25	
M.O.T.	30	325	17–18	
M.O.T.	31	600	23–25	
C.N.R.	33	350	4–16	Dry Dock
C.N.R.	34	350	16–23	Dry Dock
C.N.R.	35	300	25–28	Dry Dock
C.N.R.	36	350	19–25	Dry Dock
C.N.R.	37	375	22	Dry Dock

CRANES: Heavy-lift cranes available up to 150 tons capacity.
STEVEDORES: Advise before 1600 hrs. ETA in order to commence 1800 hrs. same day or 0800 hrs. next day.

MEDICAL: No advance notice except in case of serious illness to be included in arrival cable, ample hospital facilities available.
TANKERS: Discharge lines 6 in., 8 in., 10 in., 12in. No slop facilities.
Holyrood Refinery: 47.23 N. 53.08 W.

A bunkering port of Golden Eagle Canada Ltd., situated in the South Arm of Holyrood Bay at the head of Conception Bay, S.E. coast of Newfoundland. Finished, refined petroleum products are exported from Holyrood, and crude petroleum is imported.

Channel depth: 35 ft. right up to wharf. Tidal range is 4–5 ft. at springs, and 3.5 ft. at neaps. Good anchorage anywhere in Holyrood Arm.

One 275 ft. long berth, depth alongside 34 ft. 6 in. high water, 32 ft. low water, with moorings for Bow and stern lines on shore. Situated at Golden Eagle Refinery. 3 in. water mains for fresh water.
DENSITY: 1025.
FRESH WATER: Fresh water available all berths. Rate approx. 25 t.p.h.
FUEL: Gas oil, bunker C, and intermediate fuel provided ex pipe-line at 8 berths.
GANGWAY/DECK WATCHMEN: Usually ship's crew.
OPENING/CLOSING HATCHES: Stevedores or ship's crew whichever to ship's advantage.
CERTIFICATES:
Construction Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Load Line Certificate.
Cargo Gear Book.
CUSTOMS ALLOWANCES: Tobacco: Each man 200 cigarettes per week. Wine and Spirit: Each man 40 oz. wine or spirits, per week.
CREW IDENTIFICATION CARDS: Not required.
CONSULS:

France	726–3837	Dominican Rep.	579–5081
Portugal	726–6958	Netherlands	726–2961
U.S.	726–4524	Norway	579–5006
Brazil	726–7702	Spain	726–1804
Denmark	726–8000	West Germany	722–1525
Sweden	726–8000	Iceland	722–4270

REPAIRS: Most deck and engine repairs can be carried out.
DRY DOCKS: 1 dry dock length 570 ft. width 76.5 ft. depth over sill 27 ft.
REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.
AIRPORT: Distance 4 miles served by Air Canada 4 flights daily.
TIME: GMT less 3.5 hours. Last Sunday in April clocks advanced 1 hour. Last Sunday October clocks retarded 1 hour.
POLICE/AMBULANCE/FIRE: Police 722-5111; Ambulance 726-3037; Fire 722-1234. Emergency No. 911.
SERVICES: Compass adjusting, radar repairs, RT repairs, gyro compass repairs, all types electronic equipment repaired. Divers available for surveys and underwater repairs.
SHORE LEAVE: No Restrictions.
REGULATIONS: Fishing ships must advise of weekend arrival on Friday so that permit to take supplies can be obtained from Federal Dept. of Fisheries.
HOLIDAYS: New Year's Day; St. Patrick's Day; Good Friday; St. George's Day; Commonwealth Day; Discovery Day; Memorial Day; Orangemen's Day; Labour Day; Armistice Day; Christmas Day; Boxing Day.

Except for Easter and Christmas, the above holidays are normally taken on the nearest Monday to the festival date.
AUTHORITY: Port Manager, Harbours Board.
AGENTS: Blue Peter Steamships Ltd., PO Box 5758, St. John's. Tel. 726–2440 Area Code 709. Telex. 016–4510. Cables Bluepeter.

SARNIA, Ontario: 42.59 N. 82.25 W.

Refer to "St. Lawrence Seaway" for important general information.
DOCUMENTS: All documentation carried out by Authorities in Montreal. Only when vessels have called at United States port after departing Montreal will any changes in documentation be necessary, which will consist of a United States Customs Clearance Certificate, to be available on board.
Immigration Papers.
1 copy QS2 (Health Certificate).
3 Stores Lists.
Crew Personal Effects List.
Customs Clearance.
All of the above will have been stamped in Montreal.
RESTRICTIONS: Navigation season – ice forms about December 15th and breaks up about the middle of March. Vessels size restricted by Seaway locks.
MAX. SIZE: Length 730 ft., beam 75 ft. 6 in., draft 25 ft. 6 ins.
PILOTAGE: Notice of ETA should be given to Pilots at least 6 hours before arrival at Sarnia to avoid delays. Accommodation ladder should be rigged in readiness.
RADIO: Sarnia Radio, call sign VBE, communicate on either AM or FM radio telephone.
HEALTH: Pratique granted at Montreal.
BERTHING: Over 2 miles of water front including main wharves listed below:

C.N.R. – C.S.L. Dock, length 1,100 ft., depth alongside 23 ft.; Empire Hanna Coal Dock, length 700 ft., depth alongside 19 ft.; Elevator Dock, length 900 ft., depth alongside 24 ft.; Dept. of Transport Dock, length 1,045 ft., depth alongside 27 ft.; Dalton Fuels Ltd., length 590 ft., depth alongside 20 ft.; Imperial Oil Ltd., Dock A, length 592 ft., depth alongside 22 ft.; Dock B, length 326 ft., depth alongside 19 ft.; Dock C, length 610 ft., depth alongside 25 ft.; Dock E, length 600 ft., depth alongside 25 ft.; Polymer Corp. Dock, length 600 ft., depth alongside 21 ft.; Sun Oil Co. Dock, length 300 ft., depth alongside 22 ft.; Dow Chemical Co. Dock, length 300 ft., depth alongside 20 ft.; Canadian Oil Co. Dock, 1,500 ft., depth alongside 24 ft.
DENSITY: Fresh water.
MEDICAL: Hospital facilities at Sarnia. All assistance available.
FRESH WATER: Available at all berths.
FUEL: All grades available from Imperial Oil and Shell Co. berths.
REPAIRS: Hull, boiler and engine repairs can be effected. No dry docks.
AUTHORITY: Department of Transport.

SAULT STE. MARIE, Ontario: 46.28 N. 84.22 W.

Refer to "St. Lawrence Seaway" for important general information.
DOCUMENTS: See "Montreal".
PILOTAGE: River or local Pilots available on 6 hours notice. U.S. Corps of Engineers, Sault area operate and control St. Mary's River Falls Canal and regulate traffic through all locks in both cities.
HEALTH: Board of Health Officers can make a call to the ship.
RADIO: Good ship-to-shore telecommunication available through Department of Transport Radio Station, Canadian Pacific Telecommunications and Canadian National Telecommunications. United States Coast Guard maintain fully equipped Coast Guard Base and have radio communication for all frequencies in entire St. Mary's River and Harbour area; they are available immediately for information pertaining to shipping in area and movement of ships in River.
TUGS: Harbour tugs available when required, but prefer advance notice order avoid delays. In Sault Ste. Marie, Ontario tugs available.
BERTHING: Government dock, "L" shaped pier length 500 ft. on East side 18 ft. deep on South side, the river side, it is 356 ft. long, 20 ft. deep. This dock is used for discharging general cargo. No crane facilities for loading and unloading, unless ship's gear is used, mobile cranes have to be brought in. No tug required to berth or unberth a ship at this dock under normal weather conditions.

Algoma Central Railway Terminals Dock. A slip approximately 700 ft. long on East side 18 ft. 6 in. deep with inner 200 ft. having less than 16 ft. depth; South side this dock 350 ft. long with depth 16 ft. Used for aggregates, ores and materials. Tug required to berth or unberth at this slip.

Algoma Steel Corporation Dock. Situated above Canadian Canal with following berths available:
(a) Coal and ore dock with a combined length of 2800 ft.
(b) Commercial dock on West side of slip 400 ft. long.
(c) Limestone dock, "L"-shaped dock on West side 355 ft. long and on South side 450 ft. For loading finished steel.

All 3 Algoma Steel Corporation docks 21 ft. 6 in. deep. Only material consigned to or being shipped from Algoma Steel Corporation have access to these docks.

Seaway Pier: Northeast pier at Canadian Canal which could be used for berthing ships and also used occasionally to load or unload cargo into trucks. This pier approx. 500 ft. long and mobile lifting equipment could be utilised here if necessary. Depth of water 18 ft. Pier mostly used as tie-up for making minor repairs afloat, for medical purposes, or waiting for berth at Algoma Steel Corporation Dock. Berthing and unberthing carried out any time, Sundays and holidays with exception of extreme bad weather, high winds, or fog.
STEVEDORES: Available for loading and unloading at any berths in Sault Ste. Marie area.
FRESH WATER: Available either by hose or by pumper truck at any dock.
FUEL: Diesel bunkers available at any berths via tank trucks. No bunker "C" facilities available at Sault St. Marie, but can be obtained at Lime Island about 50 miles down river. This station is open during entire navigation season.
REPAIRS: Normal ship repairs are carried out on very short notice if required.
AUTHORITY: Dept. of Transport.
AGENT: The Algoma Steel Corporation, Marine Division.

SEPT ILES (Seven Islands) Quebec: 50.11 N. 66.23 W. **(See Plan)**

The city of Sept-Iles is located on the Northeast side of the Baie des Sept-Iles, a sheltered circular basin screened to seaward by 7 small islands on the North shore of the St. Lawrence River.
DOCUMENTS: The following inward papers are to be completed prior to arrival and presented to custom officer on boarding:

Health	QS-2001	Quarantine Form	in duplicate
Immigration	IMM-200	Crew List	in triplicate
Customs	A-6	Report Inward	in triplicate
Customs	Y-14	Crew Declaration	in triplicate
Customs	E-1	Ship's Stores	in triplicate

Clearance from last port
The above forms will be supplied by mail on request.
Note: On New Canadian or International Crew Lists, black pen or typewriter must be used. Blue is not acceptable.

Arrangements have been made so that loading can commence before customs entry has been completed, and customs outward papers will be completed so as not to interfere with immediate departure after completion of loading.
DOCKING MASTER: The use of a Docking Master is compulsory for Ore Carriers docking, shifting and leaving the dock. Docking

Master will board inside harbour limits in area of 50° 10′ N. and 66° 24′ W.

All vessels shall provide rope ladder for boarding Pilot on arrival and disembarking Pilot on departure. Ladder must be well secured by adequate lashings to rail or deck. Power hoists in good order and properly attended are acceptable for boarding. Vessels over 30,000 d.w.t. shall also provide accommodation ladder with rope ladder. The landing platform of the accommodation ladder should be approx. 20 ft. above water.

ANCHORAGE: Ships should anchor at least 1 mile off dock to facilitate ships movement in bay and should not proceed closer than 1 mile from dock while waiting for Docking Master to board. Vessels may be requested to shift anchorage if their position interferes with normal docking approaches.

MAX. SIZE: Iron Ore Co. Loading Dock (Old): length 850 ft., beam 130 ft., draft 43 ft. Iron Ore Co. Loading Dock (New): length 1,100 ft., beam 175 ft., draft 57 ft. Imperial Oil Dock: length 775 ft., draft 40 ft.

Vessels over 30,000 d.w.t. arriving in ballast to load ore cargoes are requested to present in accordance with the following recommended arrival drafts to insure safe handling procedures, keeping in mind indicated ship loading rates. These drafts are intended to mean minimum draft aft with normal vessel trim.

Summer Deadweight	*Recommended Arrival Drafts*
Under 30,000	4.0 m. to 4.6 m.
30,000 to 40,000	4.6 m. to 5.2 m.
40,000 to 60,000	4.9 m. to 5.8 m.
60,000 to 75,000	5.5 m. to 6.4 m.
75,000 to 100,000	6.1 m. to 7.3 m.
100,000 to 150,000	8.5 m. to 11.0 m.
150,000 to 200,000	11.0 m. to 13.0 m.
200,000 to 250,000	13.0 m. to 14.0 m.
250,000 and over	14 m. and over

Any vessels unable to meet these suggested drafts due to insufficient ballast capacity, anticipated deballasting problems, etc., should state this in 48 hours ETA, along with estimated deballasting time.

Usually ships berth port side to.

RADIO: Sept Iles Radio, call sign VCK, operating on RT and VHF 24 hours daily.

CW	Calling frequency	500 kHz	
	Working frequency	420 kHz	
RT	Calling frequency	2182 kHz	
	Transmitting frequency	2582 kHz	
	Receiving frequency	2206 kHz	
RT (duplex)	Transmitting frequency	2582 kHz	
	Transmitting frequency	2514 kHz	
	Receiving frequency	2206 kHz	
	Receiving frequency	2118 kHz	
	Receiving frequency	2158 kHz	
VHF	Receiving & transmitting	156.6 mHz	Ch. 12
	Receiving & transmitting	156.8 mHz	Ch. 16
VHF (duplex)	Receiving	157.3 mHz	Ch. 26
	Receiving	157.2 mHz	Ch. 24
	Transmitting	161.8 mHz	Ch. 24
		420-Even hours plus 50 GMT	
		2582/161.9-Even hours plus 40 GMT	

Weather Ice Report and Notice to Shipping

Channel 59	Receiving frequency	2582 kHz	
Channel 26 and CW	Receiving frequency	161.9 mHz	1330 GMT
			1830 GMT
			0130 GMT

Ore Carriers:

Advising Arrival: Cable address "Iroccan" Sept-Iles. Please advise ETA 96 hours, 72 hours, 48 hours and 24 hours out, including in 96 hours ETA tonnage of cargo required.

Vessels sailing in ballast from Montreal, Sorel, Three Rivers or Quebec should send ETA on departure these ports with corrected ETA later if necessary.

Advise with 24 hour ETA probable ballast pumping time required on arrival. If any change in ETA or in ballast situation should occur after 24 hour ETA, it should be advised as soon as possible.

Ships inbound for Sept-Iles from seaward between 15th December and 15th April, should advise the Ice Operations Officer, Halifax, N.S., 36 hours prior to entering Cabot Strait, stating position, destination and ballast condition to facilitate the passing of information on conditions in the Gulf. Ships trading during this period should also avail themselves of the Canadian Government publication *Guidance to Merchant Ships Navigating in Ice in Canadian Waters.* Copies available on request.

The Marine Services office is equipped with VHF radio on 156.6 mHz (Channel 12) and should be called direct when ship in range. Office also equipped with 156.35 mHz (Channel 7-A). All vessels calling Sept-Iles for ore should be fitted with local VHF channels for efficient harbour communications. Those not so fitted may be provided temporary sets if their time at anchorage justifies. This expense will be for ship's account.

Docking Instructions: Ships are to request instructions 4 hours before arrival. These instructions will be given as promptly and concisely as conditions permit. However, we suggest all vessels re-check with VCK abeam of Corossol for further traffic.

Marine Services is set up to receive radio messages on 24 hour basis. Radio traffic by ships at anchor is permissible in Sept-Iles harbour area.

HEALTH: Radio Quebec for pratique during office hours and 24 hours before arrival. Address message "Quarantine Quebec" (Ships trading coastwise between Canada and United States consecutively and touching no other foreign port since last granted Canadian pratique are not required to comply with the above. Vessels granted American Duplicate Pratique are also exempt from this requirement.)

Ships arriving Sept-Iles Bay in Quarantine will be inspected by Health Officer at anchorage or on arrival alongside. Should officer board vessel at anchorage proper accommodation ladder must be provided.

Quarantine message should have the following information:

Name and nationality of vessel, port of departure, destination, health condition on board ship, number of crew and passengers, type of cargo or in ballast.

TUGS: Tug service is compulsory at Iron Ore Company docks and Wabash Mines Docks. Two tugs of 4,300 h.p. available.

Additional tug power is available from Port-Cartier when required. All communications between tugs and Pilots is by VHF. Tugs operate on 156.35 mHz for Sept-Iles movements, 156.9 for Pointe Noire.

All ships should be equipped with wire cable towing line with nylon pendant for tug use in undocking. Ships not so equipped will be provided with tug tow lines. Pilot to determine adequacy of ship's tow lines.

BERTHING:

N.H.B. – Facilities

Berth Number (usual name)	*Wharf length (ft.)*	*Depth at Low Water (ft.)*	*Remarks*
Pointe-aux-Basques	600	34	Small open section at East end of Shed No. 1
Shed No. 1			General cargo shed
Shed No. 2			General cargo shed West and behind Shed No. 1
Mgr. Blanche Wharf	900	23	General cargo berth. Also has docking facilities at the end of the Finger Pier, approx. 180 ft. with a draft of 27 ft. Docking on the end and the West side of pier only. Small open berth at upper end of pier
Town Wharf	546	—	Small coastal vessels Finger Pier also used for small cruising vessels and crafts
Pointe Noire Pier	—	—	Not to be used unless directed by Port officials

Private Facilities

Berth	*Length (ft.)*	*Depth at Low Water (ft.)*	*Utilisation and general remarks*
Wabush Dock	650	37	General cargo and mooring berth (East end). Total 1,600 ft. berthing
Terminal	950	37	Iron Ore loading berth (West end). Total 1,600 ft. berthing (Loading ore by means of 2 travelling boom conveyors. Total capacity 8,000 long t.p.h.)
Iron Ore Dock Terminal	800	34	Mooring and general cargo receiving berth (West)
Southeast Berth No. 1 Dock	800	38	Ore loading berth 2 travelling boom conveyors max. design capacity. Total berthing length 1,600 ft.
No. 2 Dock	900	60	Total effective mooring length approx. 1,600 ft. Two travelling shuttle boom loaders with 764 ft. of travel. Max. design capacity 7,500 long t.p.h. each
Imperial Oil Dock	300	40	Dolphins increase capacity for berthing

See also following information on The Ore Company berths. Vessels usually berth port-side alongside.

Number 1 Dock. 2,200 ft. (670 m.) dock divided into 3 berths. The Southeast or loading berth is 800 ft. (224 m.) in length and is fendered with large truck tyres mounted over the dock face. The adjoining 800 ft. (244 m.) mooring or waiting berth is also fendered with large truck tyres. The third and last section, 600 ft. (183 m.) in length, is a Government berth used for general cargo.

Dredged depth at the loading berth is 37 ft. (11.3 m.) at mean low water, 34 ft. (10.4 m.) at mooring berth. Designing depth at the government berth is 27 ft. (8.2 m.). At the loading berth, iron ore is loaded into vessels by means of 2 travelling boom conveyors with a max. design capacity of 4,000 metric t.p.h. each.

The distance from mean low water to loaders in horizontal

position is approx. 35 ft. (10.7 m.). Loaders can operate at an angle of up to 12 degrees from the horizontal. Vessels should present for loading with a maximum distance of 40 ft. (12.2 m.) from waterline to hatch coaming. Number 1 dock is fitted with bollards spaced at 50 ft. (15 m.) centres.

Number 2 Dock. Deepwater berth is located some 900 ft. (274 m.) Southeast of original dock and extends approx. 230 ft. (70 m.) further into bay. This single berth is open cell construction with 9 parallel cribs giving total berthing face of approx. 925 ft. (282 m.). A tenth transfer house crib, inset from dock face and a dolphin, both structures fitted with mooring winch and bollards, are located approx. 150 ft. (46 m.) and 350 ft. (107 m.) respectively from NW. corner of dock face. Two additional dolphins, also fitted with mooring winch and bollards, are situated in a line approx. 150 ft. (46 m.) inside dock face and approx. 100 ft. (30 m.) and 400 ft. (122 m.) from S.E. corner of dock. Dolphins are joined to main dock structure by catwalks. Total effective mooring length is approx. 1,600 ft. (488 m.). Cribs are fendered to waterline with triple sets of extra large truck tyres. Dredged depth is 60 ft. (18.0 m.) m.l.w. Dock is fitted with 2 travelling shuttle boom loaders with 764 ft. (233 m.) of available shiploader travel, and a maximum design capacity of 7,600 metric tons/hr. each. Number 2 Dock is fitted with bollards spaced at 100 ft. (30 m.) centres. Recommended maximum airdraft for this berth is 17.0 m.

Tidal characteristics neaps 5 ft. 06 in. (1.68 m.)
springs 11 ft. 00 in. (3.35 m.)

CRANES: Heavy-lift cranes available. Max. capacity 250 tons.
MEDICAL: Masters are requested to have seamen's smallpox vaccination certificates ready for inspection, also ship's deratisation certificate. Seamen who cannot produce a valid smallpox certificate may require vaccinating in special cases.

All crew members requiring medical attention should be available upon ship's arrival. Sick Mariners dues no longer apply for treatment of seamen. Agent will provide form of application to be given to doctor for crew members requiring medical attention.
TANKERS: Berth at Imperial Oil Dock. Max. draft 40 ft.
FRESH WATER: Can be supplied at the approx. rate of 35 t.p.h. Hose is available on the dock but ships' crew are required for connecting and disconnecting.
FUEL: Available on an emergency basis only at this time. All enquiries should be directed to BunkerEsso Montreal.
CUSTOMS ALLOWANCES: Each crew member is allowed to retain in his possession for his personal consumption 200 cigarettes, 40 ounces of spirits, 50 cigars or 2 pounds of pipe tobacco. All quantities must be declared on Crew Declaration form Y-14 along with all personal effects such as radios, cameras, tape recorders, binoculars, etc., plus serial numbers of each such item.
REPAIRS: Minor repairs can be effected at Sept-Iles. Repairs to be conducted under the supervision of ships' personnel.
TIME: Sept-Iles maintains Eastern Standard Time (GMT minus 5) from last Saturday in October until last Saturday in April. Eastern daylight time (GMT minus 4) is maintained the balance of the year.
SHORE LEAVE: Crew not allowed ashore until permission granted by the authorities.
GENERAL: Ships will be loaded in regular turn of vessels subject to cargo availability and providing they present with starting hatches open and do not have ballast pumping which will exceed expected loading time. This loading time should be calculated at the rate of 6,600 metric tons/hr. at dock No. 1 and 10,000 metric tons/hr. at dock No. 2.

For establishing turn of vessels, a ship will be considered "arrived" at the time of crossing line between Pointe au Corbeau and Pointe aux Basques.

Loading plans should be presented to the loading foreman on arrival.

Ore-Oil and OBO vessels having discharged petroleum products at last port must advise this in first ETA. If gas-free certificate not already granted by independent chemist, arrangements will be made by IOC Marine Services to have chemist attend. Expense for ship's account.

Ships will leave the loading dock immediately upon completion of cargo and secure for sea in the bay. If any delays occur on documentation, crew members missing, etc., ship will leave the dock and all matters will be handled from anchorage.

Present outlook for working hours, subject to change during the season, is as follows: 24-hour operation Sundays included. No work Christmas Day or New Year's Day.

Main engines are required for shifting. Vessels at the mooring dock will be given 30 minutes notice to prepare to shift before departure of loaded vessel. Vessels are requested to have main engine ready when alongside mooring and loading docks.

Permission contrary to the above must be obtained from the Iron Ore Company of Canada in writing.

Most supplies can be readily obtained at Sept-Iles. Quantity orders should be included in 48 hour ETA. Requests for bonded stores should be included in 96 hour ETA.

Garbage service available alongside on request.

Launch service is available on request through Marine Services, Channel 12.
AUTHORITY: National Harbours Board.

SHEET HARBOUR, N.S.: 44.50 N. 62.30 W.

DOCUMENTS: See "Montreal".
ICE: Open all year with aid of icebreaker during January, February and March. Ice forms about January 15th and breaks up between March 1st and 15th.
PILOTAGE: Compulsory. Pilot boards off Sheet Rock light.
ANCHORAGE: Anywhere in harbour in depths up to 10 fathoms.
MAX. SIZE: See "Berthing".
MEDICAL: Hospitals available.
RADIO: Ship-to-shore communications: through Halifax (VCS).
TUGS: None.
BERTHING: Wharf, berthing length 500 ft. depth low water 21 ft. No railroad or handling facilities on wharf. Small Dept. of Transport wharf 20 ft. depth low water.
STEVEDORES: Skilled labour available. Gangs consist of 20 men.
FRESH WATER: Available by hose from mill.
FUEL: None available.
REPAIRS: No facilities available.
AIRPORT: Halifax 75 miles.
TIME: GMT minus 5 hours in Summer. GMT minus 4 hours Winter.
AUTHORITY: Dept. of Transport.

SHIPPEGAN HARBOUR, N.B.: 47.45 N. 64.42 W.
CARAQUET HARBOUR: 47.48 N. 64.56 W.

DOCUMENTS: See "Montreal".
PILOTAGE: Approaching vessel hoists flag "G" and uses siren about 1 mile before reaching fairway buoy. Pilot boat motorised 45-ft. vessel, approaches on leeside. Approaching vessels wait for Pilot about a mile from fairway buoy.
ANCHORAGE: Good anchorage, usually by fairway buoy.
RESTRICTIONS: Entry possible night and day, good vision, lighted buoys and beacon lights.
MAX. SIZE: High tide: 23 ft. low tide: 17 ft. (At Shippegan, max. tide: 20 ft.).
HEALTH: See "Montreal".
RADIO: VCN Grindstone Radio and VCG Fox River.
TUGS: Not required for these ports.
BERTHING: Caraquet Wharf, 28 ft., Shippegan 25 ft.
MEDICAL: No notice required, hospital available, as required when conditions warrant.
FRESH WATER: Available.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per week per man. Wine/Spirits, Spirits allowed to officers. Beer to crew.
REPAIRS: Minor ship repairs and all electrical repairs.
TIME: Atlantic Standard Time GMT minus 4 hours, Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
AIRPORT: Moncton, 150 miles, Chatham, 70 miles.
POLICE/AMBULANCE/FIRE: *Caraquet,* Police RCMP 727-2828; Police Town, 727-3167; Fire, 727-2928; Hospital, 727-3435. *Shippegan:* Police, RCMP, 336-2310, Town, 336-2351. Hospital: 334 2261.
AUTHORITY: Dept. of Transport.

SOREL, Quebec: 46.03 N. 73.09 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crews Declaration (Can. Form Y14).
3 Stores Lists (Can. Form E.1).
Health Declaration (Can. Form QS. 2001).
3 Cargo Manifests.
3 Bills of Lading.
PILOTAGE: Compulsory. Pilot boards at Basques Cove and Quebec.
ANCHORAGE: In St. Lawrence River off Sorel in depths of 30 to 50 ft.
RESTRICTIONS: Ice free approximately from mid-April to mid-December. No tidal influence.
MAX. SIZE: Up to 32 ft. draft.
RADIO: Sorel Radio, call sign VFN, and Three Rivers Radio, call sign VBK.
HEALTH: Pratique may be obtained by radio to Quarantine Quebec. Health Officer boards on arrival. Valid smallpox vaccination certificates required.
TUGS: Available. Tugs join vessel in approach channel.
BERTHING:
Ministry of Transport Wharves – 8 berths of up to 622 ft. length with depth alongside from 24 ft. to 30 ft.
North American Elevators Ltd. – 5 berths of up to 622 ft. length with depth alongside from 24 ft. to 30 ft.
Marine Industries Limited – berth 600 ft. long, 20 ft. depth alongside.
Quebec Iron and Titanium – berth 1,100 ft. long, 30 ft. depth alongside.
BULK HANDLING FACILITIES:
North American Elevators Ltd. – steel and concrete grain elevator, 5,500,000 bushels capacity. Loading capacity 144,000 bushels/hour.
Quebec Iron and Titanium Wharf – electric mobile bridge, capacity 900 t.p.h.
DENSITY: Fresh water.
MEDICAL: Doctors and hospital facilities available.
FRESH WATER: Available by pipe-line at all berths.
FUEL: All grades available by pipe-line at deep water berths. Can also be obtained by barge from Montreal.
REPAIRS: All deck, engine and boiler repairs can be effected.
DRYDOCK: *Marine Industries Limited* – dry-docking facilities for ships up to 12,000 d.w.t.

CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed one bottle wine/spirits, Master up to five bottles.
TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.
SHORE LEAVE: Crew members allowed ashore. No restrictions.
HOLIDAYS: New Year's Day; Epiphany; Good Friday; Ascension Day; St. John the Bapist Day; Labour Day; All Saints' Day; Christmas Day. No work performed on these holidays.
AIRPORT: Nearest at Montreal.
AUTHORITY: Canadian Dept. of Transport.

STEPHENVILLE, Newfoundland: 48.30N. 58.33W.

DOCUMENTS:
Completed Declaration of Health
Valid Deratting Certificate
3 Crew Lists (Form 200)
3 Crew Declarations (Form Y14)
3 Ship's Stores (Form E–1)
3 Passenger Lists
Manifests
Clearance from Last Port
PILOTAGE: Compulsory. Pilot boards at Fairway Buoy. Pilots ordered by Agents. 48, 24 and 12 hour ETA required. The pilot boat is the Labrador Linerboard Limited's tug and is fitted with VHF and RT.
ANCHORAGE: Bay St. George
RESTRICTIONS: Max. draft 30 ft. until harbour dredging and berth construction completed. Daylight sailings only. The channel is 300 ft. wide and 1.5 miles long. Water depth along the berth is 32 ft. with a tidal rise of 3-4 ft.
RADIO: Stephenville Marine Radio, call sign VOJ. Labrador Linerboard Limited also equipped with VHF Channel 11.
Messages with ETA sent to Agents are passed on to Pilots and Customs. Cash requirements and other items requiring attention on arrival should be given in 48 hour ETA. Halifax Marine Radio is recommended for all messages.
TUGS: 1 Medium sized tug available.
BERTHING: 1 berth of 960 ft. which is to be extended to 1,200 ft. Also dolphins used primarily for pulpwood discharge can accommodate vessels of over 600 ft. Max. draft at dolphins approximately 22 ft. The largest vessel to enter port has been 640 ft. long and any anticipated larger vessels should be discussed with Port Officials.
STEVEDORES: Ordered by Agents when ETA reported.
MEDICAL: No advance notice required unless serious. Hospital facilities available.
DENSITY: Salt water.
FRESH WATER: Available from pipes on dock at $1.00 per ton.
FUEL: Marine diesel available.
CONSULS: United States Consul is situated in St. John's, which is approximately 500 miles away.
REPAIRS: Minor repairs are possible locally. No dry dock available.
OPENING/CLOSING HATCHES: Normally carried out by vessel's crew.
IDENTIFICATION CARDS: Not required.
REPATRIATION: Can be arranged.
AIRPORT: 5 miles from dock.
POLICE/FIRE/AMBULANCE: Police 643-2118, Fire 643-2176, Russell's Ambulance 643-2472, Hospital 643-5131
SHORE LEAVE: No restrictions.
GENERAL: Ice is navigable throughout the Winter season. Extra information can be obtained from Ice Operations in Dartmouth, Nova Scotia, telephone 902-426-5664, Cables: Ice Dartmouth. A notice of 48 hours must be given to same before entry into the Gulf of St. Lawrence. Routing and information on conditions will be provided by them.
AUTHORITY: Ministry of Transport.
AGENTS: Labrador Linerboard Limited, PO Box 40, Stephenville, Newfoundland, A2N 2Y8, Telephone 709-643-5191, Telex 016-48147, Cables: Labliner.

SUMMERSIDE, P.E.I.: 46.23 N. 63.47 W.

DOCUMENTS:
2 IMM.200.
3 E.1.
1 Quarantine 2001.
2 Passenger Lists.
1 Customs Document A.6.
PILOTAGE: 24 hours notice of ETA to Agent who notifies Pilot. Pilot boards fairway buoy about 6 miles from wharf.
ANCHORAGE: At fairway buoy in depths of 30-35 ft.
MAX. SIZE: 550 ft. length, 50 ft. beam, 24 ft. draft.
HEALTH: Vessels coming from U.S.A. accepted without pratique. Vessel from other countries radio telephone for permission. See also "Montreal".
RADIO: Halifax N.S., Sydney N.S., Grindstone, M.I.
TUGS: None available.
STEVEDORES: 24 hours notice required.
MEDICAL: Hospital facilities available. Current vaccination/fever certificates required.
FRESH WATER: Available 30 t.p.h.
FUEL: Can be arranged if necessary.
OPENING/CLOSING HATCHES: Crew/Stevedores.
CUSTOMS ALLOWANCE: Tobacco: 1 carton per man per week. Wine/Spirits: Spirits 40 oz. per man per week. Further allowances made if Master requests.
IDENTIFICATION CARDS: Passports required.
REPAIRS: Only minor repairs.
REPATRIATION: Can be arranged.
AIRPORT: Charlottetown Airport 39 miles away.
TIME: Atlantic Standard Time with daylight saving in Summer.
HOLIDAYS: New Year's Day; Good Friday; Victoria Day (19th May); Dominion Day (1st July); Remembrance Day (11th November); Thanksgiving (13th October); Labour Day (1st September); Christmas Day. Plus all Saturday afternoons and Sundays.
POLICE/AMBULANCE/FIRE: Police 436-9222; Ambulance dial "O" call operator; Fire 436-3333.
TELEPHONES: Telephones can be placed on board.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: Leonce Arsenault, Wharfinger.

SYDNEY, N.S.: 46.09 N. 60.12 W.

DOCUMENTS:
Crew's Declaration Y.14 in triplicate.
Ship's Stores E.1 in triplicate.
Crew Tally IMM.201 in duplicate.
Report Inward A.6 in triplicate.
PILOTAGE: Pilots are obtainable inside Fairway Buoy, 46° 18′ N. 60° 08′ W. Vessels approaching Sydney requiring Pilot must report by radiotelegraph or radiotelephone, estimated time of arrival to District Supervisor of Pilots, North Sydney, Nova Scotia, at least 12 hours before vessel's ETA. The time should preferably be GMT. ETA's must be revised if necessary prior to arrival through VCO Marine Radio Sydney, or via any Coast Radio Station.
ANCHORAGES: South Arm and Northwest Arms (good holding ground 40 to 60 ft. depth).
RESTRICTIONS: Berthing allowed day or night. "Harbour Ice", January to March, "Drift Ice" April to May. Navigable with aid of ice breakers requested from Ice Control at Sydney.
MAX. SIZE: Max. draft 37 ft. Governed by least depth in channel of 38 ft. at low water.
HEALTH: Sydney is an official quarantine station. Radio pratique obtained between 0900 and 1700 hrs. local time by radio message to "Quarantine Sydney". Information required from vessel is as follows:
Name and nationality of vessel.
Name of three previous ports called at during voyage.
Port of destination and name of Agent.
Nature of cargo.
Date and place of last derating or exemption certificate.
Number of crew and passengers.
Condition of health of all on board with details of any sickness or death occurring during the voyage.
Vaccination status of crew and passengers.
The ETA and any other information that may be required by the quarantine officers.
The ship will require usual inspection on arrival. However, radio pratique will enable vessel to enter port, dock and commence loading or unloading operations prior to official quarantine clearance. Vessels which have not applied for radio pratique and all vessels with suspected infectious disease aboard will remain in quarantine until cleared.
RADIO:

Place	*Call Letters*	*Freq. kc/s.*
Sydney Radio	VCO	500
Grindstone Island	VCN	500
Canso Radio	VAX	500
Halifax Radio	VBO	530
Cape Race	VCE	500

TUGS: No Tugs.
BERTHING: *International Steel Piers:* No. 1 Pier (Steel loading); berthing length 425 ft. Depth at low water 28 ft.
No. 2 Pier; berthing length 550 ft. Depth at low water 30 ft. Pipe-line for bunker oil, 6 in.; pipe-line for marine diesel, 4 in.; pipe-line for discharging oil, 16 in.
No. 3 pier; berthing length 710 ft. Depth at low water 41 ft. Equipped to unload cargoes by self-unloading boom type vessels and bulk carriers. Cape Breton Development Corporation, Pier No. 4; berthing length 810 ft. Depth at low water 30 ft. Used exclusively for loading coal and coke. Government Wharf (Sydney); berthing length 974 ft., depth at low water 30 ft.
Point Edward Docks: Main jetty length 850 ft. Depth at low water 36 ft. outside, 27 ft. inside. Seaward jetty length 800 ft. depth at low water 21 ft. Quay wall 1,150 ft., depth at low water 18 ft. Finger jetty, length 350 ft., depth at low water 25 ft. outside, 19 ft. inside.

STEVEDORES: Available.
MEDICAL: Two hospitals.
DENSITY: Average 1023.
FRESH WATER: Available from shore by hoses.
FUEL: Marine diesel, bunker fuel and galley fuels are obtainable by pipe-line at piers Nos. 2, 3 and 4. Rate of bunkering approximately 100 t.p.h.
GANGWAY/DECK WATCHMEN: Crew sufficient.
OPENING/CLOSING HATCHES: Crew.
CUSTOMS ALLOWANCE: 200 cigarettes or half a pound tobacco or 15 cigars, each officer. 40 oz. of spirit per officer.
IDENTIFICATION CARDS: Seaman's identity cards.
CONSULS.
British and Canadian Shipping Master.
Portugal Vice-Consul 794-3515.
Honorary French Consular Agent, North Sydney 794-4800.
Norwegian Vice-Consul, Sydney 564-9288.
REPAIRS: Floating repairs by Atlantic Springs Machine and Repair Company or Sydney Engineering and Drydock Company. Largest slipway 3,000 tons. Hull and engine repairs available.
REPATRIATION: Can be arranged.
AIRPORT: Served by Air Canada and Eastern Provincial Airways.
TIME: Sydney is on Atlantic Standard Time from the last Sunday in October to the last Sunday in April, and on Atlantic Daylight Time from the last Sunday in April to the last Sunday in October. GMT minus 4 hours on Atlantic Standard Time and GMT minus 3 hours on Atlantic Daylight Time.
HOLIDAYS: Christmas Day; New Year; Good Friday; Dominion Day; Thanksgiving Day; Labour Day. No work as a rule from 0800 to 0800 hrs. next day.
POLICE/AMBULANCE/FIRE: Police 564-4415; Ambulance 564-5507; Fire 539-3552.
SERVICES: Compass adjusting, tank cleaning.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

TORONTO, Ontario: 43.40 N. 79.25 W. (See Plan)

For important general information refer to "St. Lawrence Seaway".
DOCUMENTS: Master should prepare for boarding of Customs, Immigration Officers:
Customs – Crew Declaration Lists (in triplicate) and Ship Store Lists (in triplicate).
Immigration – Crew List and Passenger List (in duplicate).
PILOTAGE: As required by Great Lakes Pilotage Authority.
ANCHORAGES: Vessels anchor in Humber Bay or in Inner Harbour. Anchorages allotted by the Harbour Master.
RESTRICTIONS: Vessels may enter port area at any time.
MAX. SIZE: The port has facilities to accommodate nearly any vessel which can navigate the St. Lawrence Seaway Locks.
Max. size of vessels permitted to transit the Seaway:
(a) Ships not exceeding 730 ft. overall and 75 ft. 6 in. extreme breadth may transit.
(b) Masts must not exceed 117 ft. above the water level.
(c) Max. draft 26 ft.
HEALTH: See "Montreal".
RADIO: Controlling radio station in the Toronto area is VBG Toronto. A port communications centre is located in the Harbour Master's Office and operated for emergency, safety and operational requirements. Ships entering Toronto Harbour should contact the Toronto Harbour Master's Office for information by radio telephone. Call sign XJF on frequencies:
156.8 mHz – Safety and Calling
156.6 mHz – Working
156.7 mHz – Alternate Working
TUGS: Not normally required but available. Tugs use ship's lines.
BRIDGES: Two bridges – Ship Channel Bridge and Keating Channel Bridge. Both lift bridges, no height restriction.
SPECIALISED CARGO HANDLING FACILITIES: The following companies offer berthage and storage for the bulk commodities indicated:
Liquid Chemicals. Allied Chemical Co., Domtar (no waterside storage tanks, trucked directly from vessel).
Coal. Valley Camp; Weaver Empire Fuels; Rochester & Pittsburg Coal Co.; Milnes Coal Co. Ltd.
Cement. Lake Ontario Cement, Canada Cement Lafarge.
Molasses. Canada West Indies Molasses.
Oil. Texaco, Imperial Oil, Sun Oil, Canadian Fuel Marketers, BP, Gulf, Shell, Roy-L Canadian Fuel, Milnes Fuel Oil, Caloil,
Salt. Canadian Salt Co., Sifto Salt, Iroquois Salt.
Chemicals. Domtar.
Sugar. Canada and Dominion Sugar Co.
Vegetable Oils. Drew Brown, Maple Leaf Mills, Victory Soya Mills.
Grain. Toronto Elevators Ltd., Victory Soya Mills; Canada Malting Ltd.
CRANES: Stationary dockside crane, capacity 300 short tons at Marine Terminal 51, floating crane 50 ton capacity and mobile crane 26 ton capacity available.
STEVEDORES: General rule is 24 hours notice.
To work ship at 1300 hrs., order gangs by 1030 hrs. the same day.
To work ship at 1800 hrs., order gangs by 1600 hrs. the same day.
To work ship at 0800 hrs., order gangs by 1530 hrs. previous day.
MEDICAL: Doctor and hospital facilities available.
TANKERS: Diameter of load/discharge lines are the American Standard 8 in. Max. draft at berths is 26 ft.
DENSITY: Fresh water.
FRESH WATER: Available at all berths.
FUEL: In most cases, vessels bunker in Montreal. Fuel available at 12 hours notice, either by road tanker or at oil berths.
Shipmaster's report: Fuel and lub-oils only delivered by road tankers and vessels are not allowed to bunker while alongside Redpath sugar berth. Bunkers not available on Sundays and holidays due to Department of Transportation regulations ruling that no trucks are allowed on highways those days.
GANGWAY/DECK WATCHMEN: Crew member or someone hired by Agent.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CERTIFICATES:
Certificate of Registry.
Articles of Agreement.
Log Book.
Safety of Life at Sea.
Safety Equipment Certificate.
Safety Construction Certificate issued by the Country to which the ship is registered.
CUSTOMS ALLOWANCES: Tobacco, Crew entitlement on first arrival in Canada – 200 cigarettes, 50 cigars, 2 pounds of tobacco. Wine and/or Spirit, Crew entitlement on first arrival in Canada – 40 oz. of spirits, liquors or wines.
CARGO GEAR: Vessel requires a tackle equipment book and a certificate covering cargo equipment which must be kept up to date and notated every 12 months by a competent person. Port of Toronto has modern equipment including stationary Atlas crane, 300-ton capacity; mobile container crane designed for loading and unloading 20 ft. and 40 ft. containers; 56-ton overhead lift truck equipped with a 40 ft. spreader frame; and 50-ton floating crane.
IDENTIFICATION CARDS: Visitor passes available from port police office.
CONSULS:

Belgium	Germany	Norway
Brazil	Greece	Peru
Colombia	Guatemala	Portugal
Costa Rica	Israel	Spain
Cuba	Italy	Sweden
Denmark	Japan	Switzerland
Ecuador	Lebanon	Thailand
El Salvador	Mexico	Turkey
Finland	Netherlands	United States
France	Nicaragua	Yugoslavia

REPAIRS: Most repairs not requiring dry dock can be carried out in Toronto. Nearest dry dock is located at Port Weller, 30 miles distant.
REPATRIATION: All facilities.
AIRPORT: (1) Toronto Island Airport located at Western end of harbour. General aviation only with regular airlines.
(2) Toronto International Airport approximately 15 miles distant. Airport is served by nine regular airlines.
TIME: GMT minus 5 hours. Two alterations made to clocks during year (1) Last Sunday morning in April, Eastern Standard Time to Eastern Daylight Time 1 hour ahead. (2) Last Sunday morning in October, Daylight Time to Eastern Standard Time 1 hour back.
HOLIDAYS: Work can be arranged on any holiday at double time rate with the exception of Labour Day which is the first Monday in September of each year. No work is done on this day.
POLICE/AMBULANCE/FIRE: Emergency numbers as follows: Harbour Police 361–1111; Port Police 863–2140; Fire Department 363–2133 or 361–1111; Ambulance 361–1111.
TELEPHONES: Arrangements not available for placing telephones on board.
SHORE LEAVE: No restrictions.
AUTHORITY: The Toronto Harbour Commissioners.

TROIS RIVIERES, Quebec: 46.22 N. 72.34 W. (See Plan)

DOCUMENTS:
2 sets Crew Lists.
2 sets Passenger Lists.
3 sets Customs Documents.
3 copies Health Documents.
6 sets Manifests.
6 sets Bills of Lading.
3 sets Ship's Papers.
PILOTAGE: Pilots take charge of vessel at Quebec for Trois Rivieres destination. See "Quebec" for further information.
ANCHORAGES: No vessel shall, except in an emergency, anchor within the harbour without prior permission from the Port Manager and then only at such place as is assigned. The anchorage area used for Trois-Rivieres is located approximately 2 miles up river.
MAX. SIZE: Berths vary from 30 ft. to 35 ft. depth.
HEALTH: Trois-Rivieres is a Port of Entry. Port doctor at the service of vessels. See also "Montreal".
RADIO: St. Lawrence River Marine Traffic Control call system letters VBK Trois-Rivieres.

TUGS: Not needed. Pilot boat can be of service on special occasions.
BERTHING: 22 berths are available, including 12 open and 10 shedded, total 11,254 ft. Private wharves, 3 berths, total length 1,398 ft.

N.H.B. Facilities:

Berth number (usual name)	Wharf length (ft.)	Depth at Low Water (ft.)	Remarks
1A	500	30	Paper Loading Warehouse Loading — 1 and 2 total berthing length 900 ft. paper conveyor along front of sheds 1A and 2
1B			
2	400	30	
3	715	30	Total berthing length 1,400 ft.
4	385	30	
6	300	30	
NHB office Wharf 7	300	30	
9	715	30	
10	545	30	Total berthing length 2,555 ft.
11	715	30	
13	580	30	
14	500	35	
15	395	35	
16	575	35	
17	750	30	
19	700	33	
20	706	35	
Cap de la Madeleine 21	402	30	

Private Facilities:

Berth	Length (ft.)	Depth at Low Water (ft.)	Remarks
Canadian International			Receiving pipe-line for bunker oil
Paper Company's Wharf	744	30	Four 2.5-ton cranes for pulpwood

Grain Facilities:

Elevators	Capacity in bushels	Loading galleries at berth	Loading capacity bushels per hour	Remarks
No. 1	2,300,000	16	55,000	2 Marine legs at Berth 17 Unloading capacity 72,000 bushels per hour
No. 2	1,800,000			
No. 3	2,100,000			

CRANES: Mobile cranes up to capacity 140 tons available.
STEVEDORES: Stevedores at Trois-Rivieres are also Agents.
MEDICAL: If medical service is required upon arrival, call through No. 7 (St. Lawrence River Marine Traffic Control System). Port doctor. Hospital facilities available.
TANKERS: Diameter of oil lines 8 in. and 12 in. No slop discharge facilities. 7 tanker berths – 5 for 30 ft. draft and 2 for 35 ft. draft.
FRESH WATER: Hoses connected to harbour hydrants; 20 t.p.h.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not necessary except if dangerous cargo on board.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCE: 200 cigarettes each and/or 2 lb. tobacco. Wine and/or Spirits: One bottle each.
IDENTIFICATION CARDS: Seamen's card and/or passport.
CONSULS: At Montreal.
REPAIRS: Minor repairs done by local machine shops.
REPATRIATION: Can be arranged.
TIME: EDST from last Sunday of April to last Sunday of October, then normal EST.
AIRPORT: 5 miles distant. No scheduled flights.
HOLIDAYS: New Year's Day; Easter Monday; Confederation Day; Thanksgiving Day; Christmas Day; Good Friday; Queen's Birthday; Labour Day; Remembrance Day. One Civic Holiday taken June 24th.
POLICE/AMBULANCE/FIRE: Police and Fire 374–3535; Ambulance 375–6456 and 374–6225; Poison Treatment 374–6211.
SERVICES: Compass adjusting only.
SHORE LEAVE: Members allowed ashore.
AUTHORITY: National Harbours Board.
AGENT: Malone Maritime Agency Ltd., 2 Rue de Forgef, Trois Rivieres, P.Q. Canada. Cables, "Malone", Tel. 379–2854. Telex 05–837131.

VANCOUVER, B.C.: 49.17 N. 123.07 W. (See Plan)

PORT LIMITS: The seaward boundary of the inner port within which a vessel is considered to be an "arrived vessel" is a line drawn between Port Atkinson and Port Grey at the entrance to English Bay. The seaward boundary of the outer port is running North-South between the North Arm of the Fraser River and the International Boundary and being 5 miles offshore in the Straits of Georgia.
DOCUMENTS: Master to keep Pilots, Victoria, advised of ETA Pilot station. Agent concerned forwards blank Canadian Crew List and Immigration Forms together with port instructions to Pilot. Forms should be completed by Master for presentation to Customs and Immigration on arrival.
Immigration Authorities require 2 sets of Immigration Forms, Canadian Customs require 3 copies list of Bonded Stores and 3 copies Crew Personal Declaration Forms.
A vessel proceeding to B.C. outports (i.e. Port Alberni, Prince Rupert, Tasu, Kitimat), which does not require Pilot at Fairway Buoy, Victoria, may apply Quarantine Victoria for permission to proceed direct. Where such permission has been granted Master to notify Agent concerned.
PILOTAGE: Compulsory. Pilot station at Victoria, B.C., equippefwith VHF radio telephone and watch maintained on both Channels 16 and 17. No designated anchorage for vessels requiring Pilot. Normal method of boarding is by pilot ladder (no boat-rope), but under favourable conditions accommodation ladder may be used.
ANCHORAGE: There are 25 designated anchorages in the port which are available during periods of congestion. 18 in English Bay, 5 in main harbour and 2 above Second Narrows. Main Harbour anchorages reserved mainly for vessels awaiting berths or tides. Those outside mainly reserved for vessels expecting long waits. Main Harbour anchorages range from 9 to 21 fathoms and English Bay anchorage from 8 to 16 fathoms. Largest vessels using and expected to use Vancouver Harbour can be accommodated at all anchorages. Holding ground is good and anchorages are protected. Requests for permission to anchor must be made to the Harbour Master. Requests may be made through the First Narrows Signal Station.
RESTRICTIONS: Vessels enter harbour night and day. Low-water depth in First Narrows (harbour entrance) is 50 ft. Vessels bound above Second Narrows are restricted to high water to 1 hour after, inbound; and from 1 hour before high water to high water, outbound.
MAX. SIZE: Berthing for vessels up to 150,000 d.w.t. and draft up to 60 ft. at Roberts Bank.
HEALTH: Vessels inbound from a foreign port: Agent notifies quarantine station, Victoria, giving name, ETA Pilot station, where bound from and where bound to. Vessel arriving from Fiji, Australia, New Zealand, Honolulu, United Kingdom or Balboa, C.Z., may radio Victoria Quarantine Station requesting Radio Pratique and may proceed direct to her destination, where will be boarded by quarantine officials on arrival alongside. Free pratique granted only to vessels coming from the U.S. with duplicate pratique; same rule applies to vessels proceeding from B.C. to U.S. ports, where duplicate pratique is issued, prior to arrival, same being brought on board by quarantine doctor at Pilot station, Victoria.
Advise Quarantine Station, Victoria, in event of suspected contagious disease on board.
RADIO: VAI/Vancouver Coast Guard Radio.
VHF: VAS/Vancouver Traffic located just North of the First Narrows Bridge. Manned 24 hours per day. Pilots on radio/telephone contact with Vancouver Traffic at all times. Vessels normally communicate on Chanel 12 from Iona Jetty/Cape Roger Curtis inwards. Other frequencies available for communication are 16, 6, 14 and 11.
RADAR: Vancouver Traffic continuous radar surveillance from Point Grey/Point Atkinson inward Second Narrows. Anchorage assistance available.
TUGS: Meet vessels East of First Narrows and off berth. Ship's lines are used. Pilots communicate with tugs by VHF Channel 11 or Channel 6.

N.H.B. Facilities:

Berth number (usual name)	Wharf length (ft.)	Depth alongside at LW (ft.)	Remarks
Pier B-C	2,100	26-36	General cargo – passengers
Centennial Pier (Gen.)	3,127	33-40	General Cargo
Centennial Pier (Container Term.)			
Berth 6	687	40	Containers heavy lifts
Ballantyne Pier	2,610	30-40	General cargo – grain
Seaboard Terminal	1,898	40	Forest products
Neptune Terminals	2,100	48	Bulk loading – A-frame – 2 silos
Roberts Bank	900	65	Dual – quadrant shiploader – 6,000 t.p.h.
Lynnterm	2,400	50	General cargo – bulk steel and forest products
Vanterm	4,230	30–50	Container Terminal and General cargo

Private Facilities:

Berth	Length (ft.)	Depth alongside at LW (ft.)	Utility and general remarks
Pier A1		30	Railway and truck barge loading
Canadian National Pier	2,000	20–30	Outside storage, 69,380 sq. ft.
Burlington Northern Dock	600	30	Coastal traffic
B.C. Sugar Dock	425	30	Bulk sugar imports
Terminal Dock	2,010	33	Outside storage, 365,000 sq. ft.
Pacific Coast Bulk Terminals	1,265	38	3 A-frame sheds for coal, sulphur and potash
Hooker Chemicals Dock	500	35	Loading pipe-line for bulk barges – outside storage
Cassier Asbestos Dock	955	33	General cargo – coastal
Vancouver Wharves	2,456	35 2 berths 40 2 berths	A-frame bldgs for potash, sulphur and ores – 2 silos – transit shed

Grain Facilities:

Elevator No.	Capacity in bushels	Loading galleries at berths	Loading capacity bushels per hour
U.G.G.	3.6 m.	1	40,000
Pacific	7.0 m.	1	90,000
Alberta Wheat Pool	7.0 m.	1	72,000
Saskatchewan Wheat Pool	5.0 m.	1	108,000
Burrard Terminals	1.5 m.	1	30,000

SPECIALISED CARGO HANDLING FACILITIES: There are 12 berths equipped for loading grain; depths vary from 28 ft. to 50 ft. at low water. The port has three specialised coal berths – Neptune Terminals, Pacific Coast Bulk and Westshore Terminals. Bulk sulphur, potash and ores are handled at Vancouver Wharves, Pacific Coast Bulk Terminals and Neptune Terminals (not sulphur). One container berth is located at Centennial Pier, length 687 ft., depth 40 ft. at low water, back-up area 15 acres; it is equipped with one "STARPORTER" container crane. Two container berths are located at Vanterm, length 900 ft. each, depth 50 ft. at L.W. Back up area of 76 acres. It is equipped with two high speed 40 ton container cranes. LPG is handled at a specially equipped berth at the Trans Mountain Oil Dock.

Forest products terminal opened with 3 berths, 50-acre lumber assembly area, and large shed for plywood storage.

CRANES: Fixed crane capacity 300 tons, floating cranes, 45, 75 and 100 tons and mobile cranes of 150 and 250 tons available.

STEVEDORES: Gangs normally ordered day before ship's arrival, can be ordered same day for afternoon or evening work.

MEDICAL: All services available.

DENSITY: Density varies in different sections of harbour, according to times of year.

FRESH WATER: Laid on at berths. Hose supplied. Delivery 25 t.p.h.

FUEL: Fuel and diesel oil in any quantity available to ships at oil company's wharves, or delivered by tank barge alongside. Gulf Co., Home Oil Oil Co., Imperial Oil Co., Shell Oil Co., Texaco Canada Ltd., and Standard Oil Co. of B.C. have stocks of bunker fuel oil, intermediate diesel oils, and light and medium marine diesel oils.

FIRE PRECAUTIONS: All vessels carrying dangerous materials to have suitable towing wires over offshore bow and offshore quarter.

CONSULS: All major countries represented in Vancouver.

GANGWAY/DECK WATCHMEN: If required, employment arranged through Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, except in cases of bulk carriers.

REPAIRS: All types of engine and deck repairs.

DRY DOCKS: Available. Max. capacity 12,000 tons.

AIRPORT: Half hour from Vancouver International Airport.

TIME: Pacific Standard Time GMT minus 8 hours. Clocks will be adjusted to Summer Time (plus 1 hour) when advised.

HOLIDAYS: New Year's Day*; Good Friday; Easter Monday; Victoria Day; Dominion Day; Labour Day*; Thanksgiving Day; Remembrance Day; Christmas Day*; Boxing Day*.

*No cargo work these days.

POLICE/AMBULANCE/FIRE: Police 684–7111; Ambulance 879–4511; Fire Vancouver FI–1234; Air-Sea Rescue 732–4272; Harbour Board Police 689–3441.

TELEPHONES: Are placed on board vessels at all berths.

GENERAL: Vessels not permitted pump bilges or discharge oil, contaminated ballast or galley refuse into water. Every vessel boarded on arrival by Harbour Patrol Personnel and furnished with applicable excerpts from Harbour by-laws.

SERVICES: Stevedore companies equipped with tank cleaning equipment. Sludge barge available. Services of compass adjuster may be obtained.

SHORE LEAVE: No restrictions, but Immigration will advise of any special circumstances where restrictions might be enforced.

AUTHORITY: National Harbours Board.

VICTORIA, B.C.: 48.25 N. 123.22 W.

DOCUMENTS: See Vancouver".

PILOTAGE: Pilots embark at Victoria for all British Columbia ports. Pilot station within 2 mile radius of buoy in position 48° 22' 45" N. 123° 24' 56" W. Radio Pilots Victoria through radio station VAK giving ETA not less than 6 hours in advance.

ANCHORAGE:

"A" 48° 23' 46" N., 123° 26' 58" W.
"B" 48° 24' 09" N., 123° 27' 36" W.
"C" 48° 24' 14" N., 123° 26' 43" W.
"D" 48° 24' 24" N., 123° 25' 54" W.
"E" 48° 24' 44" N., 123° 26' 37" W.
"F" 48° 24' 54" N., 123° 26' 00" W.

Anchor berths "A", "C" and "D" have a swinging radius of 1,500 ft. and "B", "E" and "F" 1,200 ft.

HEALTH: Quarantine Officials board with the Pilot. Advise Agent of ETA.

RESTRICTIONS: Outer Harbour: depth 35 ft. MLLW. Inner harbour: depth 21 ft. MLLW. Largest vessel to use the port, length 575 ft. draft 34 ft.

RADIO: King Boos.

VHF: Pilot station. VAK.

TUGS: Available.

BERTHING:

Berth	Length (ft.)	Depth (ft.)	Remarks
Ogden Point "A" N. Side	800	35	For handling lumber, pulp, paper, plywood and general cargo. Fresh water available at 20 t.p.h.
Ogden Point "A" S. Side	1000	35	
Ogden Point "B" N. Side	800	35-40	Grain loading facility on North side. Capacity of elevator 1,040,000 bushels. Loading rate 35,000 b.p.h. No facilities for discharging grain. Fresh water available at 900 short t.p.h.
Ogden Point "B" S. Side	800	33-35	The South side is used for loading lumber. Fresh water available at 20 t.p.h.

STEVEDORES: 13 gangs available. Refer "Vancouver" for holidays, etc., arranged by Agent.

MEDICAL: Doctors and hospital facilities available.

DENSITY: Salt water.

FRESH WATER: Available at wharves.

FUEL: Supplied by barge from Vancouver.

CONSULS: Norway.

CUSTOMS ALLOWANCES: See "Vancouver".

SURVEYORS: Lloyds at Vancouver.

GANGWAY/DECK WATCHMEN: Crew are required to act as deck watchmen.

OPENING/CLOSING HATCHES: By crew or stevedores.

CARGO GEAR: Ship's gear.

REPATRIATION: Possible, arranged by Agent.

AIRPORT: International Airport 19 miles from Victoria.

HOLIDAYS: 11 statutory holidays, however work can be arranged.

POLICE/AMBULANCE/FIRE: Available at dockside 24 hours a day.

REPAIRS: All repairs facilities available.

DRY DOCK: At Esquimalt: Length 1,173 ft.; breadth 125.6 ft.; depth 49.5 ft.

TELEPHONES: Can be arranged through Agent.

SERVICES: Compass adjusting possible.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Seamans' book sufficient.

AUTHORITY: Dept. of Transport, Harbour Master.

AGENT: King Bros. Ltd., P.O. 577, Langley St., Victoria. Tel. 384–1174 and 383–1653. Telex: 044–8319. Cables: "Kibro Victoria".

WEYMOUTH, N.S.: 44.27 N. 66.01 W.

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
3 Customs Documents.
3 Health Documents.
3 Manifests.
Ship's Papers.

PILOTAGE: Ship's Agent contacts vessel through Marine Radio Station, Yarmouth and notifies Pilot, who will then be on lookout. Ship gives standard whistle signal for Pilot, who boards about 2 hours before high tide. In meantime, ship should ride at anchor about quarter mile N.W. of Fairway Buoy. No special pilot boat. Boat used for Pilot is 35 ft. fishing boat.

ANCHORAGE: Good safe anchorage outside harbour in 33 ft. over mud. Also quarter mile N.W. of Fairway buoy.

MAX. SIZE: Max. length permissible 375 ft. Breadth, no limit. Draft, approx. 26 ft. of water at high tide.

TUGS: No tugs required. The fishing-boat will run lines to wharf if required.

BERTHING: North Weymouth, L-shaped wharf 280 ft. in length, and leg 40 ft. width. Depth alongside 9 ft. low water.

STEVEDORES: Available. Experienced loading lumber and pulpwood.
MEDICAL: Hospital: at Digby, 20 miles distant. Ambulance can be arranged.
FRESH WATER: Available; delivery by truck.
DEVELOPMENTS: Redredging of channel in near future. Dates not finalised.
GANGWAY/DECK WATCHMEN: No watchmen necessary.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
POLICE/AMBULANCE/FIRE: Police 245–4162; Ambulance 245–2205; Fire 837–5142.
TELEPHONE: No arrangement for placing telephones on board ship. Telephone available near dock.
AUTHORITY: Dept. of Transport, Harbour Master.

WINDSOR, Ontario: 42.19 N. 83.03 W.

For important general information refer to "St. Lawrence Seaway".
DOCUMENTS:
Sanitary Health Certificate – fixed on outside of container for agriculture plant protection. 1 paper affixed to each container.
Meat locker Certificate.
Quarantine Certificate.
3 Crew Lists.
3 Passenger Lists.
3 Stores Lists.
Manifest – 3 A.6 – 2 A.6 out.
Bill of Lading.
Valid Smallpox Certificates.
PILOTAGE: Pilots board ships at Sarnia Eastbound and Port Weller Westbound.
ANCHORAGES: Windsor Harbour Anchorage lies approximately half mile North of Fighting Island marked by 4 white buoys, showing flashing white lights, an area of 800 ft. wide and 0.75 of a mile long. Depth of 5.5 to 6 fathoms.
MAX. SIZE: Can handle any ship the seaway passes. No tide.
HEALTH: In the case of vessels arriving via the St. Lawrence River radio pratique may be obtained from Quarantine Quebec. See also "Montreal".
RADIO: WFS Detroit Marine Radio.
RADAR/VHF: No radar service. Harbour Master may be contacted on VHF Channel 16.
TUGS: Only on rare occasions is tug necessary.
STEVEDORES: Advice as to number of gangs should be received no later than 1600 hrs. on day preceding.
MEDICAL: Four hospitals.
TANKERS:

British American; hoses	= 8 in. Max. depth 19 ft.
Shell Canada; hoses	= 8 in. Max. depth 19 ft.
Petrofina; hoses	= 8 in. Max. depth 22 ft.
Imperial Oil; hoses	= 8 in. Max. depth 18 ft.
Sterling Fuels; hoses	= 14 in. & 10 in. Max. depth 27 ft.

Slop tanks available – Sterling Fuels only.
DENSITY: No tide, the water is fresh.
FRESH WATER: Tank truck delivery.
FUEL: Tank truck delivery. All grades – 24 hours notice. Coal bunkering dock available 24 hours per day. No notice.
FIRE PRECAUTIONS: Fire Dept. requires man at tank installations ashore while pumping, also notify Fire Dept. re any spillage.
GANGWAY/DECK WATCHMEN: Not required, but can be supplied.
OPENING/CLOSING HATCHES: Normally done by the stevedoring company.
CUSTOMS ALLOWANCE: See "Montreal".
IDENTIFICATION CARDS: I.D. cards should be carried.
CONSULS: U.S. Consul, tel. 253–5203. Italian Consul, tel. 256–0092.
REPAIRS: All repairs above water can be carried out.
AIRPORT: Windsor Airport approximately 5 miles. Regular flights 7 days a week by Air Canada.
TIME: GMT minus 5 hours from October to April. DST subject to local vote.
HOLIDAYS: The following are the legally observed holidays; however, vessels will be worked on these days at prevailing rates: Christmas, New Year, Good Friday, Victoria Day, Dominion Day. Civic Holiday, Labour Day, Thanksgiving and Veteran's Day.
POLICE/AMBULANCE/FIRE: Police 253–4211; Fire 254–2881; Ambulance 945–2391.
TELEPHONES: Phones can be placed on board.
GENERAL: Fluctuation of water level; high Westerly wind drops water level. Detroit River Light should be contacted for water gauge on VHF 16 for upbound ships, and Belle Isle Coast Guard Stations on VHF 16 for downbound ships.
SERVICES: Tank truck available for tank-washings, also radio telephone and radar service. Compass adjustor not available.
SHORE LEAVE: No restrictions on shore leave.
AUTHORITY: Port of Windsor, Windsor Harbour Commission.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Canary Islands

ARRECIFE: 28.57 N. 13.33 W.

PILOTAGE: Pilot meets vessel 1,000 m. off the port.
Minor port of island of Lanzarote. Port situated to the South of the town, and consists of 3 moles:
Muelle Viejo: 200 m. long.
Muelle Pesquero de Naos: 300 m. long.
Muelle los Marmoles: 700 m. long.
The first 2 quays named above are both suitable for fishing vessels. Muelle los Marmoles is the principal berthing quay, for all commercial traffic, with a depth alongside of between 8 to 15 m. Fuel, gas oil, and fresh water available by pipe-line.
Two tugs of 250 h.p. available. From Las Palmas.
Small slipways up to 400 tons capacity available, also workshops for minor repairs.
AUTHORITY: Commandancia Militar de Lanzarote.

LAS PALMAS: 28.05 N. 15.27 W.

DOCUMENTS:
5 Crew Lists.
4 Transit Passenger Lists.
2 Provisions Lists.
8 copies of Manifest, with Bills of Lading covering cargo for Las Palmas.
8 Lists of Passengers Disembarking.
Passports of passengers landing (required by Immigration Authorities).
1 Maritime Health Declaration.
PILOTAGE: Compulsory. Masters send radio message to Agents 48 hours prior to arrival giving ETA (GMT). Pilot station may be contacted by VHF Channel 16, 155.56 kc/s. Call for Pilot by whistle, 2 long and 1 short blasts, "G" flag during day; white over red signal during night. Sound signals prohibited from 2200 to 0800 hrs. local time. Pilot boats have black hull, white wheel house, with black "P" and boat number painted both sides of wheel house; they fly "G" flag with black "P" on centre. Pilot boards approximately 1 mile off breakwater, where vessel should await Pilot.
ANCHORAGE: Good anchorage in roads. Sandy bottom. Mean tidal range 5 ft. to 6 ft. Tidal velocity negligible.
RESTRICTIONS: No tide restrictions. Vessels berth alongside mole day and night in accordance with draft.
Vessels carrying explosives or dangerous products must apply to the Port Authority, through their Agent, with sufficient advance notice, regarding permission to enter port.
MAX. SIZE: Vessels of any length and beam can safely berth and normally discharge and load cargo while bunkering. Max. allowable draft 42 ft.
RADIO: Las Palmas Radio, call sign EAL.
TUGS: The following tugs are available: harbour and/or salvage tugs *Gran Canaria*, 2,800 i.h.p.; *Tamaran*, 2,375 i.h.p.; *Aracus*, 2,200 i.h.p.; *El Guanche*, 1,375 i.h.p.; *Nublo*, 1,060 i.h.p.
Harbour tug: *Doramas*, 1,375 i.h.p.
BERTHING: Subject to availability. Information should be radioed to Agent 48 hours prior to arrival, if berthing required, and for what purpose. Main breakwater, Generalisimo Franco, runs North to South, is 2,000 m. long, fitted with oil bunkering points. Safe berths alongside for vessels up to 41 ft. draft. Harbour approach from open sea with no impediments.
La Luz mole, is 1,200 m. long, with berths alongside.
BULK CARGO FACILITIES: Grain silo with 4 extractors. Draft alongside 32 ft. Cement silo with 2 extractors.
STEVEDORES: Number of gangs required, cargo details, tons per hatch, should be announced to Agents, with ETA, 48 hours prior to arrival.
MEDICAL: Master should advise Agent if medical attention required on arrival. Hospital and ambulance services available day and night. Vaccination and inoculation available any time but notice should be given prior to arrival.
TANKERS: No facilities for slop discharge. Crude oil tanker berth.
FRESH WATER: Available at any mole delivered by hose at rate of approx. 50 t.p.h. per hose, while bunkering and/or loading/discharging cargo.
FUEL: Masters to include in messages to Agents amount, grade and viscosity of oil required, and name supplier, 48 hours prior arrival.
DEVELOPMENTS: A new breakwater is under construction East of present breakwater which will provide additional deep water bunkering berths, a basin for fishing vessels and other facilities.
GANGWAY/DECK WATCHMEN: Recommended. Arranged by Agents.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCE: No restrictions for tobacco, wine and/or spirits.
IDENTIFICATION CARDS: Not necessary.
CONSULS: Consuls or Consular representation of most maritime nations available.
REPAIRS: All types of deck and engine repairs carried out afloat.
DRYDOCK: One available with following characteristics. Mooring length 560 m. depth 8-12 m. Syncrolift platform, lifting power 9,000 tons, suitable for vessels up to 175 m. length, 30 m. beam and 30,000 g.r.t. 5 mooring points of 180 m. and 2 of 220 m.
REPATRIATION: All facilities for crew changes, repatriation by sea and air.
AIRPORT: International Airport 26 kilometres South of Las Palmas.
TIME: GMT in Winter. Summer-time is GMT plus 1 hour.
HOLIDAYS: Local holidays: 29th April; 8th September; National Holidays: 1st January; 6th January; 19th March; 1st May; 18th July; 1st November; 8th December; 25th December; Feast Days: Maundy Thursday (half-day); Good Friday; Ascension Day; Corpus Christi.
Cargo handling during holidays and feast days; no stevedoring labour available from 2000 hrs. from day prior to Good Friday, Christmas Day and 1st January, until 0800 hrs. on following day.
POLICE/AMBULANCE/FIRE: Police, 260715. Ambulance, 245921. Fire, 243100.
TELEPHONES: Line connected to vessels alongside wharves from Harbour Board exchange if required.
SERVICES: (Special) Underwater hull cleaning, painting, surveys are carried out in clear water in outer harbour. Compass adjusting, etc.
SHORE LEAVE: Permitted. For some nationalities, passes must be issued by immigration authorities.
AUTHORITY: Port Commandant, Comandancia de Marina.
AGENTS: Miller Y Cia, SA, Muelle Santa Catalina, (PO Box 12), Las Palmas, Canary Islands. Telex 95353 Midat E and 95153 Midat E. Tel. 26.08.50 (5 lines). Telegrams "Miller Laspalmas".

LAS SALINETAS:

Private loading quay for nitrogen and fertiliser factory about 10 miles South Puerto de La Luz, Las Palmas, only used by vessels loading or discharging for Compania Insular del Nitrogeno, S.A.
Accommodation one mole 145 m. length, depth alongside 7.5 to 15 m. Fresh water available.

SANTA CRUZ DE TENERIFFE: 28.28 N. 16.16 W. (See Plan)

DOCUMENTS:
6 Crew Lists.
6 Passengers in Transit Lists.
8 Passengers Landing Lists.
7 Cargo Landing Manifests.
2 Stores Lists.
1 International Health Declaration.
1 Free Pratique.
If no passenger or cargo landing, must present negative declarations.
PILOTAGE: Compulsory. Recommended give Agent 48, then 24 hours notice of ETA. Contact Pilot station by VHF Channels 14 or 16. Pilot station located at shore end of Muelle Norte. Pilot boards up to 1.5 miles off extreme end of Muelle Sur. In daytime Pilot cutter identified by blue flag with white "P" superimposed; night-time, red and white light. When Pilot cutter unable proceed out of harbour due heavy weather, Pilot awaits in lee of extreme end of Muelle Sur. Pilots called by VHF when entering; on sailing called by local Agent, or by blowing "C" on ship's whistle.
ANCHORAGE: Vessels proceeding to anchorage are conducted by Pilot. Anchorage outside breakwater in depths 4 – 12 fathoms.
RESTRICTIONS: No berthing or sailing from floating pipe-line discharge terminal between 1800 and 0600 hrs. At Dique del Este, vessels over 35 ft. draft are allowed to berth in daytime only.
MAX. SIZE: Floating pipe-line terminal, up to 200,000 tons d.w.t. Dolphins, up to 45,000 d.w.t. Dique del Este (old part), max. length 200 m. and draft 39 ft. 6 in. (new part), 700 m. long with 300 m. LOA limitation, draft up to 54 ft.
HEALTH: Free pratique not granted by radio. "Q" Flag must be flown until vessel cleared inward by Port Health Authorities, which procedure is very quick. If suspected disease or fever on board, Agent or Port Health Authorities must be notified by radio.
RADIO: Teneriffe Radio – call sign EAT working frequency 472 kc/s. Short-wave EAT 3 working frequency 1930 to 0830 hrs., 8742 kc/s. Short-wave EAT 4 working frequency 0830 to 1930 hrs., 13092 kc/s. Radio telephone call sign "Teneriffe Radio" working frequency 1740 kc/s.
There is a 24-hour telephone link with vessels within 100 miles range, which vessels may utilise by calling Teneriffe Radio on VHF Channel 16 for connection to Agent's telephone number.
TUGS: Join vessels entering approximately half mile to 1 mile from extreme end of Muelle Sur. Use of tug's lines optional, but when supplied by the tug, extra charges incurred.
Tugs normally available; *Punta Anaga*, 1,900 i.h.p.; *Orotava*, 1,900 i.h.p.; *Tacoronte*, 1,800 i.h.p.; *Guimar*, 1,800 i.h.p.
BERTHING:
Dique del Este: 650 m. length, depth alongside 18 m.; 295 m. length, depth alongside 12 m.; 80 m. length, depth alongside 10 m.
Dique Muelle Sur: 803 m. length, depth alongside 12 m.; 213 m. length, depth alongside 10 m.; 240 m. length, depth alongside 8.50 m.
Muelle de Ribera: 537 m. length, depth alongside 10 m.; 301 m. length, depth alongside 8.50 m.
Muelle Norte: 103 m. length, depth alongside 8 m.
CRANES: *Muella de Ribera:* Four 6 ton electric Portal cranes and eight 3 ton Portal cranes.
Muelle Norte: Two 6 ton electric Portal cranes.
STEVEDORES: Monday to Saturday gangs ordered at 0730, 1330 and 1930 hrs. On Sunday there is only one shift from 0800–1400 hrs. and gangs for Sunday work must be ordered at 1930 hrs. on Saturday. Telegraphic information from Masters to be despatched 48 hours prior arrival giving first ETA. Gangs work 3 six-hourly shifts, viz. 0800–1400, 1400–2000, 2000–0200 hrs. Fourth shift from

0200–0800 hrs. by special request. All necessary gear supplied by stevedores.

MEDICAL: Masters to advise by radio if medical attention required on board. Yellow fever and smallpox inoculations possible in daytime subject prior notification.

TANKERS: Local refinery (Compania Espanola de Petroleos SA) have ample couplings, hoses and reducers. Slop facilities available. Tankers discharge at Floating Pipeline Terminal, and at Dique del Este.

Loading terminals situated at Dique del Este, at Puerto Honduras for 45,000 d.w.t., and 2 berths at extreme end of Muelle Sur.

Cepsa Buoy Berth Dique del Este, Shipmaster's Report:

Mooring Operation: Vessel 190,000 d.w.t.

1647 hrs. – Pilot boarded vessel, swung and proceeding inwards. Starboard Anchor veered to 2 shackles in water and takenken out of gear.

5 Tugs in attendance as follows.

1 Starboard Quarter Ship's Rope.

1 Port Quarter Ship's Rope.

1 Port Bow Ship's Rope.

1 Pushing Starboard Bow.

1 Pushing Starboard Quarter.

1751 hrs. – Let go Starboard Anchor, finished up with 10 shackles.

1802 hrs. – Two lines to Buoy No. 6.

1814 hrs. – Lines to Buoys No. 1 and 2.

Mooring continues:

1943 hrs. – Vessel in position.

2022 hrs. – Final rope to buoys. Tugs away, Pilot departs. (12 ropes all told).

2028 hrs. – All fast and secured.

Total mooring time from let go anchor to all fast 2 hours 27 minutes.

Berth Information: The berth consists of a series of 7 buoys laid in water which varies in depth from 30 to 60 m., the stern buoys are attached to the breakwater by means of heavy chains.

A total of 12 parts of synthetic or natural fibre mooring lines is required.

Wire moorings are not permitted, the reason being that the buoys have no Quick Release Gear and the depth of the water is such that heavy wires could not be lifted off the hooks by hand.

The Starboard anchor is also used with about 10 shackles in the water when the vessel is in position.

The berth is suitable for tankers of up to 200,000 d.w.t.

The discharge system consists of a string of floating hoses to the portside, 2 cargo and 1 bunker/diesel, the former requiring 12 in. and the latter 8 in. connections.

Bunker C Diesel and Marine Gas Oil is available.

Pilot boards about 1.5 miles south of the breakwater.

5 tugs are used for berthing, 3 make fast using ship's ropes, the other 2 pushing as required.

4 tugs are used for unberthing, but do not make fast.

The prevailing wind is from a N.N.E. direction and quite strong gusts can be experienced. It is necessary to load ballast simultaneously with the discharge of cargo, in order to keep the windage area within reasonable limits.

A terminal operator is on board at all times and in contact with the shore by VHF.

DENSITY: About 1025.

FRESH WATER: Available at all berths, delivered by hose any time day or night. Water barge available daytime to supply vessels at anchorage, 400 tons capacity. May be available at night-time at extra cost. If water delivered by barge, there is an additional charge for towage of barge each way.

FUEL: All grades available from CEPSA (cables "Spanoil Madrid" and/or "Teneriffe"). Fuel available at all berths, average rate of loading 500-600 t.p.h. Bunkers at anchor can be supplied by bunkering barge *Mayorga,* 1,400 tons capacity, or *Ciudad Rodrigo,* 4,300 tons fuel; 1,300 Gasoil or diesel. Notice required for refuelling 72 hours, to be confirmed at 48 and 24 hours before arrival.

FIRE PRECAUTIONS: All tugs equipped fire-fighting equipment including foam and 4 water/foam monitors. Refinery well equipped with shore fire-fighting equipment, including mobile foam trucks.

GANGWAY/WATCHMEN: Available but not compulsory.

HATCHES: Normally opened by crew, stevedores lifting beams. If whole operation carried out by stevedores, extra charge possible.

CUSTOMS ALLOWANCE: Free port, no restrictions presently in force.

REPAIRS: NUVASA, offer a new system in slipways, the synchro-lift, lifting capacity 2,000 tons, and vessels up to max. 83 m. LOA can slip at their yards, where there is space for 14 vessels at a time. Dry docking can be effected day and night.

Their workshops can carry out major repairs to ships afloat, including engine and boiler work, and is equipped with modern machinery.

SURVEYORS: Lloyds and A.B.S. available at Las Palmas. NV available in Teneriffe.

REPATRIATION: All facilities available for repatriation and crew changes. Daily air flights to Madrid and Europe.

AIRPORT: International Airport situated 12 km/s. from port, served by Iberia, KLM, Air France, Lufthansa, British Caledonian and others. Daily flights to and from most European capitals.

TIME: GMT in use throughout year. In 1974 Summer-time (GMT plus 1 hour) introduced for first time.

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph's); Easter Thursday; Good Friday; 1st May; 15th May; 25th May; 5th June; 29th June; 18th July; 25th July; 15th August; 12th October; 1st November; 8th December; 25th December.

No work 1st January, Good Friday, and Christmas Day. Other holidays worked as overtime.

POLICE/AMBULANCE/FIRE: Police 271217; Ambulance 241502; Fire 242349.

TELEPHONE: Facilities exist for connecting telephones on board.

SERVICES: Underwater hull cleaning, tank cleaning-compounds (Basic Chemicals, etc.), compass adjusting.

SHORE LEAVE: No restrictions, except for Crew members of East European countries, who must obtain Identification Cards from local Immigration.

IDENTIFICATION CARDS: Not required. For citizens of East European countries local Immigration will deliver Identification Cards, which should be returned to Agent before sailing.

CONSULS:

Austria	Finland	Netherlands
Belgium	France	Norway
Bolivia	Germany	Panama
Brazil	Great Britain	Peru
Colombia	Italy	Portugal
Costa Rica	Liberia	Sweden
Chile	Luxembourg	Uruguay
Denmark	Monaco	Venezuela
Dominican Rep.		

DEVELOPMENTS: The South mole is to be lengthened to over 1,000 m. with depth alongside of 33 ft.

AUTHORITY: Marine Commandant, Santa Cruz.

AGENTS: Miller Y Cia S.A., Marina 39 (P.O. Box 79), Santa Cruz de Tenerife, Canary Islands. Telex 92143 MIDOC E. Tel. 24.48.80. (Shortly to be changed to 28.91.00). Telegrams "Miller Tenerife".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Cape Verde Islands

ST. VINCENT:

PORT LIMITS: Inside of a direct line running from Pta. Joao Ribeiro to Pta. do Morro Branco.

PORT: Porto Grande at 16° 52′ 55″ N. 25° 00′ 25″ W. City: Mindelo.

HARBOUR: Porto Grande is a natural semi-circular harbour sheltered and safe, facing island of Santo Antao over a channel approximately 10 miles wide at nearest points. In this channel but nearer St. Vincent is the rock of Ilheu dos Passaros on which is a lighthouse. Entry to harbour is from North to South. Weather conditions throughout year usually good to excellent.

DOCUMENTS: On arrival Masters should hand to Agent:

3 Crew Lists.
3 Passenger Lists.
1 Maritime Health Declaration Certificate.
1 copy Stores List.

Port Doctor will also wish to sight ship's Deratisation Certificate.

When discharging cargo a minimum of 5 copies of Bill of Lading and 5 copies of Manifest are required. No special form for Passenger Lists and Crew Lists, and those in general use by the vessel will be accepted.

PILOTAGE: Radio notice of ETA must be sent by Master to Agent at least 48 hours before arrival. Pilot boards mid-way between Bird Island (Ilheu dos Passaros) and the Quay. The Pilot prefers to use Jacob's ladder. Signal for Pilot is two long and one short blast on ship's whistle. However, sound signals prohibited between 2000 and 0800 hrs. local time. Time between Pilot boarding to vessel's anchoring or berthing at piers is 10 to 45 minutes. See "Radio".

Important: The Harbour Master requests Masters not to anchor in harbour before Pilot on board. Pilots available day and night. Pilotage compulsory for all vessels entering harbour for anchoring, or berthing. When sailing, pilotage not compulsory for vessels which anchored in harbour. Pilotage compulsory for all vessels berthing and unberthing at piers.

ANCHORAGE: Anchorage berth in 4 to 20 fathoms.

MAX. SIZE: The harbour of Porto Grande can accommmodate vessels up to any size. Also see "Berthing" and "Tankers".

HEALTH: Free pratique can be obtained before arrival on application by radio to Guarda Mor (port doctor) of Sao Vicente de Cabo Verde confirming that crew are in good health. The port doctor, however, usually boards vessel on arrival in company with police and Customs guards, order provide any medical assistance which may be required. Crew and passengers should be in possession of Smallpox Vaccination Certificates. Production of these certificates will not, however, be called for unless there is a very good reason for doing so.

RADIO: Advice of ETA should be sent by radio to Agents at least 48 hours prior to entering port. Bunker and water requirements, if any, should also be requisitioned in same message. Cash to Master, provisions, cigarettes, spirits, etc., should be also added. ETA message should also advise number of hatches to be worked and number of tons in each hatch.

St. Vincent radio operates on CQA–500 kc/s. and 8.738 mc/s. 24 hours a day – working frequency 435 kc/s. on 8 mc/s. Listening every 2 hours over the hour and again each half hour on the hour. Pilot station may be contacted on VHF Channel 13-16.

BERTHING:

Pier No.	*Max. Depths metres*	*Length of Pier metres*
1*	11.50	310.00
2	11.50	310.00
3	9.50	160.50
4	9.50	160.50
5	8.50	90.00
6	6.50	122.00
7	4.50	61.50
8	3.50	106.75
9	3.50	40.00
10	4.50	100.00
11	5.50	100.00

(*This pier is open to the sea and usable subject to prevailing winds and swell).

Floating and suspended fenders are available at the piers. Suspended fenders are each of 3 lorry tyres, 3 ft. wide with a diameter of 2 ft. 6 in. suspended at intervals of 70 ft. Floating fenders are of 5 tyres with a wooden core and are 4 ft. 6 in. long and 3 ft. 6 in. in diameter and are placed at intervals between the suspended fenders. Cruising vessels normally berth at pier No. 2 Max. draft 33 ft.

Height of Pier No. 2 above sea level approximately 2 m. Vessels moor port side to pier. No shore gangways available. Cruising vessels with drafts too deep to berth alongside piers can anchor in harbour about 1,250/1,500 m. distance from Custom House pier where passengers may land. Ship's launches must be used for the transport of passengers to and from shore. With tug assistance vessels may berth or unberth at any time of day or night at piers Nos. 2, 3 and 4, but in adverse weather or other adverse conditions berthing at night may be prevented. Berthing and unberthing at night at other piers generally not possible.

STEVEDORES: If quantity for loading or discharging is of 10 tons or under, and in comparatively small parcels, then cargo can be loaded or discharged using the only small lighter available for vessels at anchorage. If larger quantity to be handled vessel must berth alongside quay. In both instances ship's tackle must be used. Discharging rate for bagged cargo, i.e. flour, rice, etc., is about 30 t.p.h. per hatch. In all cases vessel's derricks and winches are used. There are no lighters available, therefore as described above all cargo in excess of 10 tons must be loaded or discharged at the piers. The opening/closing of hatches is the responsibility of the crew on board, but can be done by the stevedores by arrangement with the Master under the supervision and responsibility of the ship's officers.

TANKERS: Max. length 775 ft.; max. draft 36 ft. Underkeel clearance 4 ft. Max. d.w.t. 53,000 tons.

Discharge effected by barge from starboard side of tanker at anchorage, also through submarine pipe-line in harbour at: Lat. 16° 53′ 30″ W. Long. 25° 00′ 50″ W. length of line, 1,000 m.; diameter, 20 in.; berth, Buoys; hoses 12 in.; number of hoses, 7; position of hose connections, midships starboard side; Max. rate per hour, 2000 metric tonnes; density of water at berth 1025.

Submarine pipe-line buoy berth. Tankers moored to 1 forward buoy and 3 stern buoys. Tanker also uses port anchor which is dropped before tying up to buoys. Nature of bottom is coarse sand and gravel. Berthing at buoys carried out 24 hours a day and port tugs of up to 1,200 h.p. used always on berthing and on unberthing according to weather conditions.

Cleaning tanks: 50 miles from shore only.

Gas freeing: At present no facilities available.

FRESH WATER: Can be supplied at anchorage or at piers or ex lighter day or night. Water suppliers request at least 48 hours notice giving quantity required. A minimum charge covering costs of supply of 20 tons is made on supply for under that quantity. To supply over 750 tons during a 12-hour stay in port with 2 lighters, giving between 25 to 50 t.p.h per hose, would be difficult. Connections of hose couplings from water barges are 3 in. male, 11 threads per in.

FUEL: Oil bunkering carried out ex lighter at anchorage at rate of up to 300 t.p.h. dependent upon speed at which vessel can receive. Both fuel and diesel oil bunkers can be supplied at the piers. Gas oil can be supplied in drums to vessel at anchorage or in bulk ex pipe-line on piers. All bunkering at anchorage ex barge takes place on starboard side of vessel.

GANGWAY/DECK WATCHMEN: Two Maritime Police are always in attendance and are compulsory.

CUSTOMS ALLOWANCES: Tobacco and Wine and/or Spirits, no restrictions within reason.

CONSULS:

Belgian (Vice-Consul)
Danish (Vice-Consul)
Netherlands (Vice-Consul)
Norwegian (Consul)
Swedish (Vice-Consul)
Venezuelan (Belgian Consul acts in a friendly capacity).

REPAIRS: At present voyage repairs of limited scope carried out, but slipping facilities are available for craft up to 250 tons only. Facilities expected to improve in the near future.

REPATRIATION: Facilities exist for effecting crew changes by air, but recommend that TAP Lisbon be contacted by Owners for crew making flights into Sal Island order join vessel St. Vincent. Agents should also be informed to make necessary arrangements for flight on local plane from Sal Island to St. Vincent. All crew travelling to Cape Verde must have transit visa issued by Portuguese Consul in country of origin. All crew, except cases for hospitalisation, must be in possession of a passport before Portuguese police will permit them disembark for repatriation. Crew possessing valid passports or sailors' books can land in Cape Verde for medical and/or hospital treatment or for repatriation to country of nationality provided it is country with whom Portugal has diplomatic relations and provided Agents of vessel take full responsibility on behalf of Owners for all expenses.

AIRPORT: Airport served by Dove planes for inter-island service only. 20 flights a week in and out of St. Vincent, 4 direct from Praia and 6 via Sal Island inwards. 5 via Sal and 5 direct Praia outwards. Main Airport is at Sal Island where 5 flights a week by Boeing 727 call to and from Lisbon. At Sal Island the only hotel is situated at the Airport.

TIME: One hour behind GMT all the year round.

HOLIDAYS: New Year's Day (1st January); National hero's day (20th January); St. Vincent's Day (22nd January); Women Day (8th March); Workman Day (1st May); Childrens Day (1st June); National Independence Day; (5th July) Nationality's Day; (12th September); Christmas Day (25th December).

Although offices closed on holidays, loading and discharging of vessels not generally affected.

POLICE/DOCTOR/AMBULANCE/FIRE: Contact police on board or local Agent.

AUTHORITY: Capitao Tenente, Capitania dos Portos.

AGENTS: Millers & Corys. Cape Verde Islands Office Box No. 1, St. Vincent, Cape Verde Islands, (via Lisbon). Cables: "Orlop Saovicentedecaboverde". Tel. General Office, St. Vincent 9418; Manager's Office, St. Vincent 2477; Managers' Residence, St. Vincent 2420; Assistant Manager's Residence, St. Vincent 2421; Resident Engineer's Residence St. Vincent 2419.

Ceylon refer to Sri Lanka

Chile

GENERAL INFORMATION

ARRIVAL ADVICE: Ship's Masters are required to give the Captain of the Port 24 hours notice of arrival, stating time and date in their radio messages. They should also inform their Agents of ETA.

The telegraphic address of the Captain of the Port at all Chilean ports is "Maritgob". Should there be no radio station in the port of destination, the nearest station must be used, and an acknowledgement of the message received. This will justify the non-arrival of the message at destination in time.

The radio message should include the following information:

1. ETA (hour and date).
2. Number of passengers.
3. Number of bags of mail for the port (or negative).
4. State of health on board.
5. Draft.

DOCUMENTS: The standard ALALC forms are required, and must be made out in Spanish. The number of documents required by each port varies, but the maximum likely to be required is shown below, unless otherwise stated under the port "Document" Reading.

	First Port	*Each Subsequent Port*
General Health Declaration	1	
Clearance	1	1
Clearance Declaration (Alalc No. 1)	3	2
Crew List (Alalc No. 3)	20	20
Crew Personal Effects	3	3
Passenger List for Port or negative (No. 4)	15	8
Passengers in Transit (or negative)	6	4
Mails List or negative	6	4
Store List (No. 5)	20	20
Manifest for Port	20	20
Manifest for in Transit Cargo	20	20
General Cargo Manifest (No. 2) (all on board)	3	see note
Declaration of Arms and Munitions	2	see note

Note: The General Cargo Manifest should be presented in triplicate at the first port and should list all cargo on board, whether intended for Chile or otherwise. A copy of all the documents above is stamped and returned to the Master for retention on board, and must be presented to the Authorities at all subsequent ports of call.

The Port Captain will wish to see all the standard ships papers, and also the receipt for payment of Chilean Light Dues, which is valid for 12 months as from date of issue.

Store List. Separate lists must be made for cabin stores and deck/engine room stores.

Documents required on sailing: 1, Clearance; 2, Health Declaration signed by Health Authority; 3, Two Crew Lists; 4, Passenger List; 5, Receipt for Light Dues; 6, Arms Declaration; 7, Permit for coasting cargo if required.

On sailing, all hatches must be tightly closed. The sailng permit is valid for 24 hours but no cargo operations can be carried out after it is granted. If the vessel has not sailed within 24 hours, the clearance papers must be returned to the Port Captain for new despatches to be issued.

HEALTH: All vessels arriving from abroad are required to call at one of undernoted ports for free pratique: Arica, Valparaiso or Punta Arenas. Vessels are also allowed to call direct to Tocopilla, Iquique, Antofagasta, Coquimbo, San Antonio, Talcahuano and San Vincente.

Vessels can be exempted from call at one of these ports, and proceed direct to the port of loading and/or discharge provided permission is obtained, with 8 days notice from National Health Service.

Following details in order to apply for exemption on behalf of a vessel are required:

Name and flag of vessel.
Net registered tonnage.
Last port of call.
Cargo carried, or if in ballast.
Port of arrival in Chile and date of arrival.

FLAG: All vessels arriving in Chilean ports must fly their own ensign and also the Chilean Flag, from the highest mast.

On entering port the "Q" flag should be flown until pratique is granted.

The use of whistles or sirens in port must be strictly in accordance with the Rules for The Prevention of Collisions.

RADIO: There are 69 radio stations down the coast. Meteorological Bulletins are broadcast regularly by the following stations: Antofagasta, Valparaiso, Talcahuano, Puerto Montt, Punta Arenas.

Notices to Mariners are transmitted from Valparaiso, Punta Tumbes, Puerto Montt, Corona Lighthouse, Punta Arenas and Punta Delgada.

For weather forecasting the coast is divided into six zones:

Zone 1. Arica to Coguimbo;
Zone 2. Coguimbo to Constitucion;
Zone 3. Constitucion to Guafo Island;
Zone 4. Guafo Island to Evangelist Isles;
Zone 5. Evangelist Isles;
Zone 6. From 60° S. to 90° S.

The forecasts from Zone 1 to 5 covers the coast to 120° W. Zone VI includes the area between 53° W. and 90° W.

Chile is normally 4 hours behind GMT, but from the 2nd Saturday in October to the 2nd Saturday in March clocks are retarded 1 hour. However radio transmissions will continue to use GMT minus 4 hours.

ETA advices are best made using GMT.

FUMIGATION: If a vessels Derating Certificate is overdue an Exemption Certificate may be granted provided traces of rats are only slight, and no ports infected by Bubonic Plague have been visited recently. Fumigation can be carried out by the Farming and Cattle Bureau. In such cases the vessel anchors in the inner port or roads, all crew are landed for a period of 24 hours, and the fumigation carried out before the vessel is berthed.

STEVEDORES: Under Chilean law, all foreign vessels are required to employ gangs of shore riggers to rig gear, open and close hatches and carry out all the work normally attributed to the deck crew whilst the vessel is in port. A minimum of 8 men and a foreman must be employed, and remain on board constantly. If the ships crew do the work, the shore riggers must still be paid.

There are no stevedoring companies in Chile, and the Agent must pay for and supervise the operation. The stevedores are considered as employees of the shipowner, and any damage caused to ship or cargo will be for the shipowners account. The ship or Agent is not permitted to select stevedores, who are drawn from a union pool on a rota system, experienced and inexperienced men alike.

It is necessary to employ a gangway watchman for 24 hours a day in all ports.

The Customs or Port also place a watchman.

Cleaning of wharves. The cost of cleaning alongside is for account of the vessel in discharge, or shipper when loading. The Port will do the work and make the corresponding charge.

HOLIDAYS: The following are public holidays: January 1, New Year's Day; April 12th, Good Friday; April 13th, Easter Saturday; May 1st, Labour Day; May 21st, Navy Day; June 29th, St. Peter and St. Paul; September 18/19th, Independence Day; October 12th, Discovery of America; November 1st, All Saints Day; December 8th, Immaculate Conception; December 25th, Christmas Day.

Work in the ports is possible on all of these, paying overtime, except for January 1st, May 1st, September 18th and December 25th. On December 24th and 31st work may cease earlier than usual.

CREW: Signing on of new crew members is restricted to Chilean members of the local Seaman's Union. To sign on a foreign crew man is difficult.

A crew member absent without leave from his ship for 48 hours or more is considered a deserter, and the Port Captain must be notified.

Landing Permits are required by all crew members. The one pass is valid for all Chilean Ports for 30 days. At the last port all Permits must be returned to the Authorities.

Curfew: There is a strict curfew in all ports. Infractors are arrested, and released the following day after paying a fine or doing a days hard labour. The crew should be warned of this as it could lead to their missing their ship. Curfew ends in all ports at 0530 hrs., unless otherwise noted.

FUEL: No clause guaranteeing bunkers can be accepted in any charter party affecting Chilean Ports. The department of Maritime Transport must approve all requests for Bunkers. Such applications must be made 30 days in advance. Furthermore, heavy duties are levied on bunkers, which make Chilean ports very expensive, and should be used only in an emergency. Bunkers can only be obtained ex-pipe-line from Salinas, Valparaiso, and San Vicente. Small quantities can be obtained by truck in other ports.

POLLUTION: It is expressly forbidden to throw overboard any ballast, rubbish or waste, or to spill petroleum or any derivative or residue, contaminated waters from mineral processing plants or any dangerous or noxious substance of any kind either into ports or Chilean jurisdictional waters (200 miles limit) without prior authority from the Port Captain: Standing regulations stipulate that no tanker may dump hydrocarbons within fifty miles of the coast, and that no vessel may pump bilges or dump waste within 10 miles of the coast.

Should there be any accident leading to contamination of waters, this decree authorizes the uses of any means which may be necessary to ensure the protection of natural resources.

Under Article 188 of this Decree all vessels navigating in Chilean waters, or entering any port must have on board an Insurance policy against all risks of contamination, if they are carrying any cargo of petroleum or derivatives; this must insure against all risks whether through leakage, spillage or otherwise. Any infraction of these regulations carries a fine of from 1,000 to 1,000,000 gold pesos and vessels are also responsible for the total elimination of the contaminating element, even if the contamination is due to fortuitous reasons.

ANTOFAGASTA: (including La Chimba Cove) 23.39 S. 70.25 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Pilot should be awaited in position bearing 239° and 480 m. from the beacon at the head of protected mole. The Pilot will not board before 0700 hrs., and if the vessel is at anchor an extra charge will be made for heaving aweigh while the Pilot is on board. The accommodation ladder must be rigged for the Pilot. Pilot can be contacted by VHF.

ANCHORAGE: About 1,200 m. from green light on coast mole. Vessels that do not go into port anchor in what is known as "old or outer port" where best anchorage is bearing 103° from anchor painted on hillside, about 5 cables from coast in 37–22 m. of water.

Small vessels anchor about 4.5 cables from old passenger quay in 22–18 m. of water. Ships should use two anchors and follow the indications of the port pilot.

RESTRICTIONS: From May to July the surge is stronger and results in rough seas which last from 2 to 4 days interrupting the traffic of small craft.

MAX. SIZE: A, B and C have a permissible draft of 30 ft. D is restricted to 27 ft:

Berth No. 1 – 15 ft.
Berth No. 2 – 29 ft.
Berth No. 3 – 30 ft.
Berth No. 4 – 32 ft.
Berth No. 5 – 36 ft.

La Chimba Cove: Situated about 5 miles North of Antofagasta. The port entrance is 2 cables wide. Max. length 150 m. Draft 30 ft. Vessels use both anchors, and moor to two stern buoys on each quarter. Ship's head 345°T. A further line is sent from the port bow to the shore.

RADIO:

Station Call Sign	Category	Frequency	Type	Receives	Transmits	Schedule
Antofagasta CBA 3	(P)	8 Mc/s.	A1	8354, 8374	8730	H00–30
		4 Mc/s.	A3	4091.6	4396.6	H30–45
		8 Mc/s.	A3	8230	8780	H45–60

Also see "General" before first port.

TUGS: Available.

BERTHING: Inner dock measures 4.5 cables long N. to S. and 2.5 cables wide at entrance.

Water is 10 m. deep alongside berths No. 2 to 5 and A to D, except number 1 berth which has only 5 m. of water.

CRANES:

8×5 ton mobile cranes on berths A to D.
4×3 ton cranes No. 2 berth.
3×5 ton cranes No. 3 berth.
6×3 ton cranes Nos. 4 and 5 berths.
1×35 ton heavy lift crane No. 5 berth.

TANKERS: Buoy moorings for tankers, owned by Standard Oil, Shell and Copec.

Standard Oil Mooring: Max. length 170 m. Max. draft 28 ft. Flexible hoses. One 10 in. line for products. One 12 in. line for fuel oil.

The Copec Buoy: Max. length 180 m. Max. draft 30 ft. fwd., 34 ft. aft. 10 in. lines for fuel oil and clean products. Max. pressure 150 p.s.i.

Shell Buoy: Max. length 200 m. Max. draft 40 ft. 8 in. flexible hose for products and luboils.

Vessel berths using both anchors forward and lines to 3 mooring buoys astern. Hoses lifted midships on port side. No slop disposal facilities.

La Chimba Cove: A 6 in. hose is brought on board on the starboard side. Discharge rate 180 cu.m./hr. 250 p.s.i.

STEVEDORES: Available. 240 stevedores, divided into gangs of 9 men (permanent). 70 stevedores (replacements), 280 longshoremen, 275 dockworkmen, 50 permanent riggers, 25 replacement riggers. Working hours are 0800–1430, 1500–2200. Sundays and holidays one shift only available. Also see "General" section before first port.

MEDICAL: Hospital with 600 beds, also a sanatorium (Rest Home).

FRESH WATER: Port has 42 standpipes of 2.5 in. situated at the various moles. Delivery is at the rate of about 10 t.p.h.

FUEL: Coal: in case of necessity can be obtained in limited quantities. Fuel and diesel oil supplied by Standard Oil, Shell Mex and Copec from petroleum terminals. For quantities less than 70 tons diesel oil can also be supplied from tank cars on the mole. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Crew.

OPENING/CLOSING HATCHES: Done by Stevedores.

IDENTIFICATION CARDS: Required.

CONSULS:

Argentina	French	Peruvian
Belgium	German	Spanish
Bolivian	Greek	Swedish
British	Guatemalan	U.S.A.
Columbian	Honduran	Venezuelan
Dutch	Italian	Yugoslavian
Ecuadorian	Norwegian	
El Salvador	Panamanian	

REPAIRS: There are 2 shipyards for repair of small craft, also several workshops, and foundries.

REPATRIATION: Facilities available.

AIRPORT: The airport is at Cerro Moreno 23 km. to the North of Antofagasta.

TIME: Local time GMT minus 4 hours.

HOLIDAYS: See "General" before first port.

SHORE LEAVE: Allowed.

REGULATIONS: It is prohibited to anchor between Paita rock and the extreme North of the protected mole. Zone for explosives and inflammables: these must be discharged at Caleta La Chimba and vessels take a Pilot who boards at Antofagasta.

AUTHORITY: Empresa Portuaria de Chile.

ARICA: 18.29 S. 70.20 W.

PORT LIMITS: Ships are considered "arrived vessels" the moment they drop anchor within the safe anchorage zone indicated on the chart, or at the Pilot station.

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Ships approaching port should fly international signal flag "G" to request Pilot. Pilot boat is small craft painted white, with "P" or "H" flag on the mast. Pilot boards incoming vessels at Pilot station, located 3 cables and 165° from red light at end of breakwater. If more than one ship is awaiting Pilot, vessels are requested to hoist, below the flag "G", a numeral, indicating order of arrival, especially if arrived overnight. Vessels waiting to be docked can anchor in Road at Pilot station in 10 fathoms of water. Pilot station maintains a VHF watch.

ANCHORAGE: Safe anchorage for vessels arriving after sunset can be found in a line bearing 194° Faro Isle Alecran distance 7 cables in depths varying from 9 to 10 fathoms.

RESTRICTIONS: Port officially closes at 2100 hrs.; however, if necessary, ships docked and undocked at any time, weather permitting, if application presented in advance to port Captain.

MAX. SIZE: Six berths available within port area. They are numbered from East to West.

Berth	*Vessel Max. Length* m.	*Vessel Max. Draft* ft.
Berth No. 1	70	13
Berth No. 2	145	15/18
Berth No. 3	175	25/31
Berth No. 4	165	34
Berth No. 5	165	34
Berth No. 6	165	34

If necessary, vessels over 600 ft. in length can be accommodated in berths 4 to 6, providing the area available for docking. Oil carriers have mooring buoys outside port area in depths of 48 ft. Installations consist of two groups of buoys, located in the North part of the bay, outside the port but sheltered from the swell prevailing in the coast, by the breakwater. 3 buoys are used to moor tankers loading crude oil from Bolivia. 2 buoys are used to moor tankers discharging clean products for city service.

HEALTH: Health officer boards ship after Pilot has docked. Pratique granted after routine inspection of certificates and papers requested internationally. Yellow flag is lowered to signal the rest of the boarding party to embark to clear the ship.

In case of fever, and/or suspected diseases on board, Captains are to radio to Port Captain of the above situation. Upon arrival, vessels will be anchored in Quarantine, and inspected according to international procedures. From another Chilean port, pratique is automatic. Also see "General" before first port.

RADIO:

Use "Maritgob Arica" via coastal radio CBA 4. Listening watch kept on 8360 kc/s. Transmissions at 0800, 1000, 1200, 1400, 1600 and 1800 hrs. on 8478 kc/s. A1. Alternatively if necessary use Valparaiso CBV on 500 kc/s.

It is advisable however to request Agents at previous port to notify Arica well in advance of arrival.

Also see "General" before first port.

TUGS: Only one tug in this port and normally joins vessel at the end of the breakwater. Tug is compulsory for docking and undocking. Tug provides the line at no extra charge.

CRANES:

Berth 1 – None.
Berth 2 – 3×3 tons.
Berth 3 – 3×3 tons.
Berth 4 – 1×3 tons.
Berth 5 – 2×5 tons.
Berth 6 – None.

SPECIALISED CARGO HANDLING FACILITIES: Six conveyor belts and pall-loaders to operate with bulk ores, grain, coal, etc., at a rate of 100 t.p.h. per conveyor approx.

Containers are handled with conventional gear, but the port has a Container Yard, served by railroad and a bridge crane capable of lifting 65 tons. Service to containers also includes 10-ton fork-lift trucks, mobile cranes from 12 to 13 tons capacity, and specially designed wagons for their proper transportation.

STEVEDORES: Generally, stevedores are nominated the day before ship arrives, according to ETA, by the Agent. Also nomination can be made during the day. Working hours are 0800–1200, 1400–1800. Also see "General" before first port.

MEDICAL: Medical assistance can be obtained at any time requiring no advance notice. Hospital in the city.

TANKERS:

Esso Buoys: Position 053°×830 m. from breakwater light. Can handle vessels up to 45,000 d.w.t., 35 ft. draft. Vessels moor to 3 stern buoys. Wires must not be used for berthing.

Bolivian Export Buoy: Position 039°×1,084 m. from breakwater light. Can handle vessels up to 60,000 d.w.t., 43 ft. draft. 12 in. hose connection. Loading rate 9,000 bbls.p.h. No deballasting facilities.

Also see "General" before first port.

Berthing is generally in the morning or early evening. Wires must not be used for berthing. Vessels moor to 3 stern buoys.

San Martin Bay Buoy: Used for discharge of Bunker C for fishing fleet. Max. draft 45 ft. No length restriction. 8 in. hose connection. Vessels moor to 3 stern buoys. A bolt is required to attach mooring lines to the ring type eyes on the buoys. No wires may be used.

DENSITY: Sea water: 1025.

FRESH WATER: Fresh water is available. Hoses to be provided by vessels. Rate of delivery about 10 t.p.h.

FUEL: No fuel facilities.
FIRE PRECAUTIONS: Red label explosives stowed in cargo hatches, require special permission to discharge within the port. Explosives for Arica are discharged into lighters, at mooring buoys located outside the port area. For tankers who load or discharge outside the port area, usual fire precautions are enforced.
DEVELOPMENTS: Project to build a new mole in the Northern part of the port, with accommodation for two ships of approximately 540 ft.
GANGWAY/DECK WATCHMEN: Port regulations call for a gangway watchman.
OPENING/CLOSING HATCHES: Riggers provided to attend to these services, nomination is by number of hatches working. 5 men to a hatch.
CERTIFICATES:
Tonnage Certificate.
Lighthouse Dues (Chilean).
Safety Radio Certificate.
CUSTOMS ALLOWANCE: One carton cigarettes per man, and one bottle wine/spirits per man.
IDENTIFICATION CARDS: Needed to leave and/or enter port area.
CONSULS: The following countries are represented at Arica:

Argentina	El Salvador	Netherlands
Belgium	France	Norway
Bolivia	Germany	Paraguay
Denmark	Great Britain	Peru
Ecuador	Italy	Spain

REPAIRS: Only small repairs can be performed in Arica, like welding, lathe, mechanical and adjusting of motors. Also possible to repair electric motors.
DRYDOCKS: There are 2: intended for fishing boats. Max. capacity 200 tons.
REPATRIATION: Crew changes can be arranged through the local office of immigration, if repatriated.
AIRPORT: Distance to airport: 7 miles. No international flights are served in Arica, except 2 flights weekly to Bolivia. Domestic flights are available at the rate of 2 per day.
TIME: GMT minus 4 hours, advanced 1 hour from September to March.
HOLIDAYS: Cargo can be arranged on all holidays except Labour Day (1st May).
POLICE/AMBULANCE/FIRE: In same order: telephone 31959; 31331; 31312.
TELEPHONES: Not available on board.
SHORE LEAVE: Permitted.
DELAYS: No delays under normal conditions. Port congestion causes ships to wait at anchorage 24 hours or more, depending on unusual facts as labour strike, swell, or lack of room to bring vessels alongside (when 5 ships are docked).
AUTHORITY: Empresa Portuaria De Chile.

BARQUITO: 26.21 S. 70.38 W.

DOCUMENTS, HEALTH: See "General" before first port.
PILOTAGE: Pilot available in Chanaral Bay.
ANCHORAGE: Open anchorage with no difficulty. The anchorage position lies on the cross bearing between Point Piedra Blanca bearing 110° and Point Brusen bearing 200°. Depth of water 82 ft. Anchoring prohibited to the South of the marker buoy.
MAX. SIZE: Up to 30,000 d.w.t.
TUGS: Not required for mooring. 2 tugs used for towing lighters only.
BERTHING: Three buoys suitable for mooring large vessels situated in depth of 9 fathoms. Buoys 4 and 5 are used for general cargo vessels.
Position: Buoy 4 Barquito Pier bearing 043°×714 m.
Buoy 5 Barquito Pier bearing 027°×390 m.
Vessels moor stern onto the buoys and discharge into lighters, which in turn discharge at the pier head. There are several barges of capacity 2.500 tons.
STEVEDORES: Order 24 hours before arrival. Working hours 0800–1200 and 1400–1800. There are 9 gangs of stevedores. Vessels arriving should ensure that hatches are closed and booms secure in order to avoid labour problems. Also see "General" before first port.
MEDICAL: Facilities available.
TANKERS: Buoys 1, 2 and 3 are for the Oil Terminal.
The hose marker buoy is in position Barquito Pier bearing 180°×268 m. Vessels use starboard anchor to pivot onto the 2 stern buoys. The hose connection will then be made on the port side. Max. draft 27 ft. Max. length 225 m.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: No fixed limits.
IDENTIFICATION CARDS: Required.
CONSULS: Nearest at Antofagasta.
REPAIRS: No facilities for major repairs. Two slipways for vessels up to 100 tons.
AIRPORT: At Chanaral, 2 miles away. About 2 flights a week.
TIME: GMT minus 4 hours.
TELEPHONES: Ship-to-shore communication by walkie-talkie radio.
SHORE LEAVE: Allowed.
AUTHORITY: Andes Copper Mining Co.

CALDERA: 27.03 S. 70.53 W.

PORT LIMITS: A line joining Punta Caleta with Punta Fuerte.
DOCUMENTS: See "General" before first port.
PILOTAGE: Arranged by advice of ETA. Vessels may anchor inside the port while waiting for Pilot.
ANCHORAGE: Prohibited within 800 m. of Mechanised Quay.
When working to lighters is 740 m. East of a line from the Mechanised Quay. 1 anchor is normally sufficient, but with Northerly winds 2 anchors and a kedge are recommended.
MAX. SIZE: Vessels up to 80,000 d.w.t. berth at Mechanised Quay. Max. draft 13.50 m. Berthing only at high water.
HEALTH: Pratique given after official visit, and automatic for vessels from another Chilean port. In case of contagious disease on board, advance notice is required and vessel may need to be cleared first at Valparaiso.
RADIO: Radio Costera Valparaiso – CBV 2; working during even hours only between 0800–1200 and 1400–2200 hrs.
Radio Costera Caldera – CBD 2, receiving on 2182 kc/s. only at following times: 0830–0900, 1030–1100, 1430–1500, 1630–1700 hrs.
TUGS: None available.
BERTHING:
Fiscal Mole: Length 225 m. Depth 29 ft. Vesels can berth stern onto the mole using 3 lines, and 6 or 7 shackles on the starboard anchor. Ship's head should be on 360°. It is advisable to shut all ports and doors prior to berthing due to the large clouds of dust from the Iron Ore Berth.
Iron Ore Berth: Max. length 235 m. Max. draft 42 ft. The loading arm is fixed, hence vessels must shift to position each hatch under the tower. All cranes or derricks must be swung out to starboard prior to mooring. Vessels berth port side to, using 6 mooring buoys for head and stern ropes, and 2 dolphins for springs. Loading rate 1,500/2,000 t.p.h. Berthing allowed only by day, but night sailing permitted.
TANKERS: Tankers moor to 2 stern buoys, using both anchors. No length restriction. Water depth 33 ft. Hose connection 12 in. Daylight berthing only.
STEVEDORES: In ETA to Agent indicate number of gangs required for loading/discharging. Also see "General" before first port.
MEDICAL: First-aid only at Caldera. If needed advance notice necessary to prepare transport to Copiapo, nearest city 75 km. away. Fumigation only carried out at ports of Arica, Valparaiso, or Punta Areas.
DENSITY: 1026.
FRESH WATER: Not available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Arranged by Agent.
OPENING/CLOSING HATCHES: Done by riggers.
CUSTOMS ALLOWANCES: Only amount needed while vessel in port.
CONSULS: None at Caldera.
REPATRIATION: Can be arranged provided that a police agent accompanies crew member to Santiago airport.
AIRPORT: At Copiapo, 75 km. away, a daily flight to Santiago where international connections available.
TIME: GMT minus 4 hours, no changes.
HOLIDAYS: See "General" before first port.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

CALDERILLA: 27.05 S. 70.52 W.

Installation of Mitsubishi Ore Transport Co. Can accept vessels up to 60,000 d.w.t. at mechanised quay.
Vessels bound for Calderilla must first call at Caldera for Pilot and official clearance.
DOCUMENTS: See "General" before first port.
ANCHORAGE: Vessels less than 180 m. in length can await a berth 4 cables N.N.E. of the East Peninsula, in 42 to 54 ft. of well sheltered water. Larger vessels must anchor in Caldera Bay.
MAX. SIZE: Max. length, 240 m. Draft 40 ft. 60,000 d.w.t.
BERTHING: A mechanical loading belt has been built to the N.E. of the Peninsula. There are 2 loading arms each 50 m. long that can load at 1,000 t.p.h. The arms are fixed and vessels must shift to place each hatch under the tower. Vessels moor to 7 buoys, 3 forward and 4 aft. Entry can be made by day only.
MEDICAL: Nearest doctor and hospital 30 miles away. Ambulance available.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: Only of a minor nature.

CHANARAL: 26.21 S. 70.38 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory for foreign vessels and tankers and for mooring at mechanised quay. There is one Pilot at the port. Pilot must be waited for in position bearing 289° and 2,025 m. from reference point indicated on Chilean navigation chart.
ANCHORAGE: Between Point Piedra Blanca and Point Piedra Negra at 325°, 2 cables from head of the Fiscal quay in 15-12 m. of water, with good holding ground of sand.
MAX. SIZE: Draft 42 ft., length 800 ft., breadth 100 ft.

RADIO:

Station call sign	Category	Frequency	Type	Receives	Transmits		Schedule
Chanaral	(T)	2 Mc/s.	A 3	2182	2182	2000	H30-45
CBH-2		4 Mc/s.	A 3	4091.6	4396.6	4396.6	H45-60

TUGS: There are 4 small tugs.

BERTHING: Fiscal Quay: About 3 cables S.W. from Point Piedra Negra, 70 m. long by 8 m. wide, depth is 5.5 m. Vessels should lie about 5 cables off the head of the pier and moor to the stern buoy in 40 ft. of water.

Mechanised Quay: At Point Piedra Blanca there is a mechanised pier, property of Compania Minera Santa Fe for loading bulk iron ores. 60 m. long by 10 m. wide, with 14.5 m. depth; sand and mud bottom. Ores transported by means of a conveyor belt to a loading tower from which it is loaded direct to ship's hatches. At present loading tower is fixed so that vessels have to be moved to change hatches, but studies are being made as to possibility of converting it into a mobile tower. Loading rate is of 1,000 t.p.h. Vessels up to 224 m. length, 36 ft. draft have loaded alongside up to 34,000 long tons. Vessels moor at head of quay, which has 4 buoys (2 forward and aft.). In addition the quay is provided with bitts to secure mooring ropes, fore and aft.

STEVEDORES: 85 stevedores (9 gangs of 9 men each). Ordinary working hours are from 0700 hrs. to 1100 hrs., and continuing from 1300 hrs. to 1700 hrs., but by special agreement and paying for meals, work can be carried on straight, i.e. from 0700 hrs. to 2000 hrs. and continuing from 2000 hrs. till 0700 hrs. of the following day with a 100% surcharge on wages, etc. Also see "General" before first port.

MEDICAL: Modern hospital and doctors available.

FRESH WATER: No means for supplying vessels.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS: None at Chanaral, the nearest are at Antofagasta.

REPAIRS: 2 shipyards to repair tugs and lighters only.

REPATRIATION: Facilities exist.

AIRPORT: The airport is located 2 km. North of Chanaral.

TIME: Local time is GMT minus 4 hours.

SHORE LEAVE: Allowed.

DELAYS: There is frequent surf during June and August, sometimes interrupting traffic and cargo operations in the bay for a short time. Surfs generally come from the N.W. or the West. Fogs are frequent between April and August, but sometimes they are quite heavy during other months of year.

AUTHORITY: Empresa Portuaria de Chile.

CONSTITUCION: 35.19 S. 72.29 W.

DEVELOPMENTS: A new port under construction at Maguellin, about 6 km. South of Constitucion.

Facilities to include a main jetty, 244 m. long, with 2 berths for vessels up to 32,000 gross tons.

Two smaller jetties and a mole for fishing vessels are also envisaged.

Depth of water is estimated to be 16 m. The facilities will be used for export of paper and cellulose.

Although the pier has been built, no vessels have berthed here yet due to the dangers of the Southerly wind. It appears likely that this port will never be used.

COQUIMBO: 29.57 S. 71.21 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory for vessels mooring to quay. Pilot boards in position bearing 101° and 1,215 m. from Point Tortuga Lighthouse, between Lat. 29° 55' 38.5" S. Long. 71° 19' 56" and Lat. 29° 56' 10" S. Long. 71° 20' 34" W.

ANCHORAGE: Vessels lie in roads until ready to tie up to quay. Bay has good anchorage with a sandy bottom and depths varying from 15-10 m. A forbidden zone is indicated on charts.

Vessels frequently have to anchor first before mooring to the quay as this only has capacity for 2 vessels at a time.

MAX. SIZE: 375 m. long and 30 ft. draft.

RADIO:

Station call sign	Category	Frequency	Type	Receives	Transmits	Schedule
Coquimbo	(S)	4 Mc/s.	A 3	4091.6	4396.6	H00-30
CBC-2				6265.5		
		6 Mc/s.	A 1	6280	6505.5	H30-60

TUGS: No tugs available, only motor launches to assist the Pilot and for passing mooring lines.

BERTHING: Buoys: Santa Fe Mining Company has 2 private buoys at berth 2 for mooring ore vessels using the portable and semi-mechanised system of loading.

Mooring Mole: 375 m. long, for 2 vessels of 180 m. each with draught of 30 ft. Berth number 1 is on the South side and number 2 on the North. Can be used at all times except during stormy weather, or when heavy swell is experienced.

Passenger Mole: to the South of mooring mole.

Rail Mole: is an extension of berth number 2 and serves for mooring small vessels.

North of berth number 1, Santa Fe Mining Company has installations for storing ore in bulk, consisting of two subterranean ore yards. The loading system includes some incline conveyors, some field conveyors, a stacker conveyor, a loading conveyor and a 77.5 ft. loading tower featuring a 56 ft. aluminium boom. All these components are movable on rubber tyres.

Ore through a system of belt conveyors is passed to these portable conveyors made up in sections and then to loading tower with a loading boom from which ore is loaded direct to ship's hatches. Usually, vessels are shifted when changing hatches. Rate of work is 600 t.p.h. and vessels moor with the bow to the North, port side alongside.

Discharge of Explosives and Ballast – Explosives are discharged direct to quay prior to authorisation by Maritime Authorities and due precautions being taken.

STEVEDORES: Ordinary rate of loading per gang, hatch, hour: Sacked goods up to 80 kilos each 25 tons; Cases, boxes, etc., 18 tons; Sacked ores 40 tons; Copper concentrates 60-80 tons; Manganese ore in bulk 80-100 tons; Iron ore 100-1000 tons.

Unloading: Wheat in Bulk 60 tons; Coal 50 tons; Timber 30 tons; Rails 33 tons.

Working hours are 0800-1200, 1400–1800 hrs. Also see "General" before first port.

MEDICAL: Hospital at Coquimbo and La Serena.

FRESH WATER: Can be obtained in limited quantity at quay at rate of 25 t.p.h. Quality is good.

FUEL: Coal can be obtained in limited quantity. Diesel oil and gasoline can be obtained at the quay from truck or railcar.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS:

British	Peruvian
Italian	Spanish
Liberian	Danish Vice-Consulate
Panamanian	Swedish Vice-Consulate

REPAIRS: No shipyards. There is a private workshop for minor repairs.

REPATRIATION: Facilities exist.

AIRPORT: 7 km. to the East of La Serena.

TIME: Local time GMT minus 4 hours.

SHORE LEAVE: Allowed.

AUTHORITY: Empresa Portuaria de Chile.

CORONEL: 37.02 S. 73.10 W.

PILOTAGE: Is compulsory. Pilot boards 400 m. N.W. of the coal pier.

BERTHING: Both anchors are used to the final shackle, Ship's head bearing 180°. There are 5 mooring buoys, and the vessel berths starboard side alongside. Loading rate 400 t.p.h. Vessels will be required to shift so that each hatch is under the loading arm.

Max. size 170 m. Draft 24 ft. However, it should be noted that there is only 18 ft. of water near the stern buoy. The berth is exposed to Northwesterly winds and vessels should be ready to sail at short notice.

FRESH WATER: Available.

FUEL: Not available.

MEDICAL: Doctors and Hospital available.

CONSULS: Only at Talcahuano.

CRUZ GRANDE: 29.27 S. 71.20 W.

(No longer in use as a commercial port.)

LOCATION: Approximately 32 miles North of Coquimbo. Lat. 29 26' 45" S. Long. 71° 19' 50" W.

DOCUMENTS: See "General" before first port.

APPROACHES: Seaward approach should be made to clear all navigational dangers. The vessel should proceed until due North of Mostacilla Lighthouse, and then anchor. See "Anchorage".

The depth at the anchorage varies from 18 to 22 fathoms.

NAVIGATION AIDS: There are two diamond-shaped range markers, equipped with lights on the East shore of the harbour and a set of range lights at the South end of the loading basin. The two diamond-shaped markers are painted red with a yellow cross. The one on the beach, about 200 ft. in from the surf line, supports a red light and the marker, 775 ft. further inland (mounted on top of a large concrete building) supports a green light. The green light at the South end of the loading basin is approximately 165 ft. South of the red light. These range markers and lights are used by the Pilot in docking and undocking vessels.

Red and green lights also mark the entrance to the loading basin, a red light on top of the ore dock structure, and a green light on the breakwater.

All these lights and markers are visible from the anchorage.

PILOTAGE: Ships calling at Cruz Grande should anchor and have a pilot's ladder (Jacob's ladder) ready with a boat rope long enough to make sure the pilot boat's crew have no trouble in holding the boat in position for the Port Authorities and Pilot to board the vessel. Pilotage service for docking and undocking is compulsory.

Ship's engines must be stopped when the pilot boat approaches the vessel and must not be used again until it is clear. On sailing they must not be used from the moment the pilot boat casts off until it is clear.

ANCHORAGE: Approximately one third of a mile due West of Point Medanitos good holding ground for all vessels anchoring is encountered. The position assures clear swing for all vessels in about 18 to 22 fathoms of water. It also assures free navigation for any vessel which may be at the ore dock.

RESTRICTIONS: If advance ETA is received, ships generally will be received during daylight hours, beginning at 0700 hours, with the following exceptions: January 1st, Good Friday, May 1st, September 18th, December 25th.

WEATHER: South-westerly winds prevail in all seasons of the year. North breeze may be encountered in the early morning. There is seldom fog in the harbour.

RADIO: Vessels should advise ETA 7 days, 96 hours, 48 hours and 24 hours prior arrival, by radio.

It is of utmost importance that all ETA's of the vessel be given and be as exact as possible so that all officials can be advised and be on hand for receiving the ship.

Cable address is ROMERAL, LA SERENA, CHILE, and all messages having their origin in North America should be routed via Western Union and in the rest of the world via Cable and Wireless Limited. Ship's radio messages should be routed via West Coast Cables.

BULK HANDLING FACILITIES: The basin dock is located South of the anchorage. The basin is 250 ft. wide by 720 ft. long. The ore bins are located on the East side and have a capacity of 30,000 long tons. Ore is loaded through 17 spouts spaced on 20-ft. centres, and the No. 1 spout, which is the nearest thereto, is 165 ft. from the South end of the basin.

The ends of the spouts are 30 ft. horizontally from the face of the ore dock in the loading position.

MOORING: Vessels moor port side to the dock. A ship arriving at the port for the first time will be instructed by the Port Superintendent and Pilot regarding the docking and the mooring procedure.

Vessels can only be docked during daylight hours, but may undock at any hour.

A total of 8 mooring bitts are available on the dock for spring lines. Stern lines are made fast to two dolphins at the North end of the basin.

At the South end, mooring bitts are anchored in concrete.

A ship must be able to handle six mooring lines independently on deck machinery. Two bow lines, two stern lines, one back spring and one fore spring are used. The bow lines and stern lines are 1.25 in. diameter wires supplied by Compania de Acero del Pacifico S.A. There are also available 1.50 in. diameter spring wires for ships that are suitably equipped to handle them. If the ship does not have winches properly located to handle the latter, lines (either cables or manillas) from the ship must be used. The most satisfactory spring lines are usually 1.25 in. diameter wires with a 30 ft. nylon pendant. Two manilla spring lines are used as safeties and, if there are no winches or capstans available for them, they are placed on bitts.

The ship must have available three 450 to 500 ft., 1 in. diameter, manilla ropes; two to be used as messengers to haul the bow lines aboard and one to haul the stern lines aboard. There must also be heaving lines to send the spring lines ashore to be placed on mooring bitts. As noted above, the Port Superintendent and Pilot will give instructions regarding the sequence of putting out the lines.

Boats will be available fore and aft to receive the messengers and make them fast to the mooring lines. The Harbour Master will be aboard the vessel during docking to instruct the boatmen.

During the time the ship is moored in the loading basin, whether loading ore or pumping ballast, all mooring lines must be kept uniformly tight so that no line is overloaded and stressed to the breaking point. In order to meet these requirements, sufficient crew members must be stationed where they can maintain the proper tension on the lines at all times and they must be under the supervision of a responsible officer.

When the required cargo has been lifted, vessels must return to the anchorage to close their hatches and finish any paper work.

Engines must be available on short notice.

Anchors are only used in emergency, but should be ready as a standby.

BALLAST: Vessels should be ballasted to meet the spout clearance requirements. In order to clear the spouts, all vessels should not exceed 56 ft. from the water-line, at which the ship is ballasted, to the highest outboard structure,

Ballast should all be discharged at the dock. The tonnage of cargo lifted must be determined by the vessel's draft as there is no other means of determining exactly the amount of cargo loaded.

Vessels are liable to fines by Maritime Authority for any oil discharged in the bay, either from tanks or from pumping bilges.

LOADING: Pier and loading facilities are privately owned and Compania de Acero del Pacifico S.A. reserves the right to moor and load vessels in the order it deems advisable.

All holds should be clean and prepared for cargo on arrival.

Any lost time through failure of compliance will be charged to vessel.

Holds will be inspected by a representative of the shipper, prior to commencement of loading.

A walkie-talkie radio will be placed on board so that the ship-to-shore or shore-to-ship communication is available at any time while the ship is waiting to load.

Loading is effected on regular work-days, but not on Sundays or holidays unless by agreement with the Shipper or Charterer and Compania de Acero del Pacifico S.A., the owner of the port.

A complete stowage plan should be delivered to the Port Superintendent or his representative on their boarding the vessel on arrival.

The following information is required:

Total cargo required.

Calculated tons/hold.

Draft required, forward and aft, on completion of cargo.

Any change in tonnage of cargo required must be reported to the Port Superintendent or his representative before loading of the last 2,000 tons.

Careful check of the vessel's trim should be maintained by the Ship's Officers at all times during loading operations.

On completion of loading, the vessel shall leave the dock. Delays of port operations, including delays of other vessels waiting to berth, caused by a vessel which for any reason is not prepared and able to move from the dock when so ordered, are chargeable to the vessel which causes such delays, at the rate of $1,000 per day or pro-rata for part thereof.

FRESH WATER/FUEL: Fresh water and fuel are not available at this port, although water and diesel fuel may be obtained in nearby Coquimbo, or at Salinas, near Valparaiso. Bunker "C" type fuel can be had at Salinas also.

REPAIRS: Only in cases of extreme emergency can ship repairs be effected at this port.

MEDICAL: Medical attention may be arranged through the port Agent. No person will be attended unless he is provided with a letter from the Master, authorising such treatment. All costs incurred will be charged to the vessel.

OPENING/CLOSING HATCHES: Hatch covers that are hinged or fold in such a manner that they present a face upon which the wind can set must remain closed until the vessel is alongside and moored. Those that remain in a horizontal position when open may be opened at the anchorage providing they do not interfere in any respects with the handling of the mooring lines during docking.

CERTIFICATES: In the case of combination ore carrier/tanker type of vessel, the Master must present a gas-free certificate from an Agent acceptable to Lloyd's before notice of readiness will be accepted. Such certificates may be obtained from a Coquimbo firm and request for same should be included in the ETA message.

CONSULS: In Coquimbo, or the adjacent city of La Serena, there are consuls or consular agents for Peru, Liberia, Great Britain, Denmark and Italy.

SHORE LEAVE: Shore leave may be granted at the Master's discretion. There are no restrictions by local authorities, but men should be certain to carry their Identification Cards.

Masters are requested to have all vouchers and list of personal effects in triplicate covering the crew members remaining ashore, whether hospitalised or deserters, prepared for delivery to the Agent, prior to sailing.

A letter of authorisation is required when the port Agent is expected to provide hotel accommodations, meals, medical attention, transportation or travel expenses and/or cash advances for account of vessel.

AUTHORITY: Compania de Acero del Pacifico S.A.

EASTER ISLAND: 27.08 S. 109.22 W.

PILOTAGE: Not available, although assistance can be given by the local natives.

ANCHORAGE: The best anchorage is at Hanga Roe from October to April. Vessels should anchor outside the 16 fathom line. Anchorages in general are poor, and vessels should be prepared to sail at any time with the onset of bad weather.

BERTHING: Vinapu Roads. Length 150 m. Max. draft 28 ft. Two 6 in. flexible hoses. manifolds must be no more than 65 m. from the stern.

MEDICAL: Doctors and hospital available.

GUAYACAN: 29.58 S. 71.22 W.

DOCUMENTS: see "General" before first port.

APPROACHES: Seaward approach should be made to clear all nevigational dangers. From the sea, the entrance ranges in line bearing 136.5° will lay the vessel directly to and between Point Miedo and Point Herradura, two headlands to the North and South of the bay entrance, which is 800 yards wide. The bay broadens inside to 1 mile and extends 1.25 miles in a S.E. direction.

The depth of the entrance varies between 23 to 36 fathoms, decreasing gradually to the shore. Islita, a small islet, lies a short distance off Miedo Point.

The approach to Herradura Bay is a fishing zone and caution must be maintained in navigation. Trawlers and hand-propelled craft are used.

Two diamond-shaped range marker boards, painted with diagonal stripes, are mounted on poles on the beach. With these in line, bearing should be 136.5° when coming through the entrance. Lights, foreground red with green behind, are fixed to the markers for night approach. In clear weather they are visible at approx. 5 miles.

Currents from the South and S.W. tend to lay the vessel to the N.N.E. when entering the bay. There is a light at the entrance to Herradura Bay on Herradura Point.

PILOTAGE: Ships calling at Guayacan should arrive with their accommodation ladder and Jacob's ladder ready to be lowered for the Pilot. Pilotage is compulsory. Ship's engines shall be stopped when the pilot launch approaches the vessel. The pilot's launch under no circumstances will go outside the limits of the port. It is imperative that the ETA of the vessel be as exact as possible so that the Pilot and officials are on hand and may board the vessel before anchoring. The Pilot and officials must be collected and brought to Guayacan by car.

ANCHORAGE: Good holding ground for anchoring in the bay with sheltered conditions. Entering on the ranges a cross bearing may

be obtained with a set of docking diamond markers and lights, bearing 094° similar to approach markers and the anchor dropped. This position assures clear swing for all vessels in about 15 fathoms and assures free navigation for any vessel which may be at the pier.

RADIO: Operators' cable address is Cap, La Serena, Chile, and all messages having their origin in North America should be routed via All America Cables, and in the rest of the world, via Cable and Wireless Limited. Ship's radio messages should be routed via I.T.T. hours out by radio. Also see "General" before first port.

Vessels should advise ETA 7 days, 96 hours, 48 hours and 24 hours out by radio. Also see "General" before first port.

BERTH DESCRIPTION: The ore pier, of steel construction with a concrete deck, is 700 ft. long and located at the N.E. part of the bay. A total of 10 mooring bitts are available on the main pier, with 2 each on mooring dolphins to the South and North of the pier. Two twin mooring buoys, 1 North and 1 South, a distance of 350 ft. and 410 ft. from each dolphin and slightly inshore of the pier, are also available. A twin buoy to assist in docking and undocking is located 460 ft. to the West of the North end of the pier. Depth of water at the pier is 55 ft. at mean low water.

MOORING: Vessels dock port side to the pier. On approaching the pier, the starboard anchor is dropped at a position indicated by cross bearing on markers located on the shore to the N.E. and at the South end of the pier and the shore. Lights are located on the markers for night docking. Nine shackles of cable are laid.

A motor launch assists in rope handling to the pier and buoys. Manilla pendant lines at dolphins may be used. Sufficient deck crew must be available at all times to shift the vessel if required and to adjust moorings during loading.

Engines must be available at short notice. Permission for any major repair to the engines at the dock must be obtained from Maritime Authorities.

LOADING: In the case of combination ore carrier/tanker type of vessel, the Master must present a gas-free certificate before notice of readiness will be accepted. Such certificate may be obtained from a Coquimbo firm and request for same should be included in the 96 hours ETA message, reporting if there is or there is no tank gas detecting instrument on board.

The loading boom extends 51 ft. from the face of the pier and can be retracted 22 ft. It may be raised or lowered 18° from the horizontal when loading.

The tower is mobile with a run of 390 ft. Vessels may have to be shifted. Aft hatches should be loaded first when possible to facilitate efficient loading. When not loading the rig is parked at the centre of the pier with the boom in a vertical position inside the pier face. In the horizontal loading position the boom is 40 ft. from the water at low-water level and vessels should be ballasted to ensure hatch coamings and other fixed structure at the hatches have a height less than 40 ft. above water at low-water level. Booms and other tackle should be cleared from all hatches.

Rated loading capacity is 3,000 t.p.h.

Emergency stops only are permitted on the conveyor system. Vessels on which cargo reaches coamings should note that 390 tons are on the belts between the stockpiles and the ship and this must be cleared before stopping the system.

Cargo is belt trimmed only. Hire of trimmers, if required, is for vessel's account.

On completion of loading, the vessel shall leave the pier. Delays of port operations including delays of other vessels awaiting berth, caused by a vessel which for any reason is not prepared and able to move from the pier when so ordered, are chargeable to the vessel which causes such delays, at the rate of $1,000 per day or at the demurrage rate of any other vessel that may be delayed – which ever is higher.

BALLAST: Vessels should be ballasted to meet the loading tower information given and to ensure safe handling. Wind condition can make docking of light vessels difficult. Ballast may be discharged at the pier. Upper wing tanks emptied by gravity should have covers fitted over discharges. Vessels are liable to fines by Maritime Authority for any oil or other contaminate discharged in the bay either from tanks or from pumping bilges.

TANKERS: Vessels moor to 2 stern buoys with ship's head bearing 225°. The hose is brought upon the starboard side.

MEDICAL: Medical attention may be arranged through the port Agent. No person will be attended unless he is provided with a letter from the Master authorising such treatment.

FRESH WATER/FUEL: Fresh water and fuel are not available at this port, although water and diesel fuel may be obtained in nearby Coquimbo, or at Salinas, near Valparaiso. Bunker "C" Type fuel can be had at Salinas also.

REPAIRS: Only in cases of extreme emergency can limited ship repairs be effected at this port.

CONSULS: In Coquimbo, or the adjacent city of La Serena, there are consuls or Consular Agents for Peru, Liberia, Great Britain, Denmark, Italy and Sweden.

HOLIDAYS: If advance ETA is received, ships will generally be received every day with the following exceptions: 1st January; Good Friday; 1st May; 18th September; 25th December. Also see "General" before first port.

SHORE LEAVE: Shore leave may be granted at the Master's discretion. There are no restrictions by local authorities, but men should be certain to carry their identification cards.

SERVICES: Mail for vessel and crew should be addressed care of Compania de Acero del Pacifico, S.A.; all mail that is received for holding by the Agent will be delivered to the vessel upon arrival.

Do not have parcel post packages sent, as they must go through customs in Santiago and are delayed from 2 weeks to a month for their despatch.

Spare or repair parts for the vessel should be sent via air express, addressed to the ship, care of Compania de Acero del Pacifico, S.A., Coquimbo, Chile and marked "Ship's Stores in transit", so as to avoid paying customs duties. Information regarding the shipment should be sent to the Company via air mail correspondence.

A limited supply of provisions is available, but requests should be sent by radio 48 hours prior to arrival.

AUTHORITY: Compania de Acero del Pacifico, S.A.

HUASCO: 28.27 S. 71.14 W. (See Plan)

DOCUMENTS:

1 Clearance.
12 Cargo Manifests, or 5 No Cargo Manifests.
6 Passenger Lists, or 2 No Passenger Lists.
9 Crew Lists.
4 Stores Lists.
3 Crew Personal Effects.
2 Stowage Plans.
2 per passenger Baggage Declarations.
1 Health Certificate.

PILOTAGE: Compulsory, for vessels mooring to Santa Barbara and Guacolda mechanised quays. Vessels waiting for Pilot and/or clearance must anchor in position bearing 050° and 1,800 m. from Guacolda lighthouse, in the centre of the bay, between Guacolda peninsula and Panulcillo islet.

ANCHORAGE: Vessels anchor in roadstead, larger vessels finding good anchorage ground 2 cables N.N.E. of Cayo Isle in 26-24 m. of water and small vessels 2 cables bearing 090° from Cayo Isle in 12 m. of water, sandy bottom.

Depth is generally moderate and level with a sand and shell bottom, while at the maritime terminals of Santa Barbara and Guacolda is quite deep, around 50 m., which has to be taken into account when anchoring. The bottom at these terminals is mud, offering a good holding ground.

MAX. SIZE: See "Berthing".

RADIO:

Station call sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Huasco CBH-3	(T)	2 Mc/s.	A 3	2182	2182	H30-60

TUGS: No tugs available. At Huasco there are 4 motor launches for use of Pilot.

BERTHING: There are 2 cargo terminals in service Guacolda and Santa Barbara. Both property of Compania de Acero del Pacifico. A third Guacolda II is under construction. The particulars of these installations are:

	Santa Barbara (m.)	*Guacolda I* (m.)	*Guacolda II (Building)* (m.)
Max. Length	265	265	Over 300
Max. draft	15	13.50	20
Max. coaming Height	13	12.80	28
Max. breadth	40	40	—
Cargo rate (L/T hours) Max.	2,400	2,200	—
Run of the loader on ship deck	50	100	—
Largest ship attended (d.w.t.)	120,000 up to 15 m. draft	120,000	— up to 13 m. draft

Santa Barbara Terminal: Used exclusively for loading iron ore. No dock to berth only 1 loading tower protected by dolphins (Duque de Alba). Ships berth without tugs to 7 buoys using the starboard anchor. Vessel has to be shifted to receive cargo in all the hatches. Transit through the installations is not allowed, and taxi boat service is provided to go ashore to Huasco wharf.

Guacolda Terminal: Normally used to load iron ore. Length 183 m. However it is intended in future to use the berth to discharge oil or coal for internal company use. The loader has a 100 m. run. If it is neccessary to shift the vessel, this must be done by crew members, as shore gangs are not available.

STEVEDORES: There are 50 stevedores for up to 4 gangs. In addition there are 20 longshoremen and 14 lightermen. Working hours are 0700-1200, 1400-2100.

MEDICAL: There is only a first-aid station. Freirina, 15 km. distance, has a small hospital and there is a first-class hospital at Vallenar, 52 km. away. A modern hospital under construction at Huasco.

FRESH WATER: No means for supply to vessels. Guacolda maritime terminal could deliver water in a very limited quantity and only in case of emergency.

FUEL: None available.

DEVELOPMENTS: A new iron-ore loading berth being constructed close to the present berth at Isla Guacolda. Pier length of 250 m. with depth sufficient to accommodate up to 250,000 d.w.t. vessels.

The present facilities at Isla Guacolda will be retained.

OPENING/CLOSING HATCHES: Done by stevedores in general cargo ships.

IDENTIFICATION CARDS: Not required.

CONSULS: None, nearest are at Antofagasta.

REPAIRS: Only for the repair of minor craft.

AIRPORT: Nearest commercial airport is at Vallenar, 52 km. away.

TIME: GMT minus 4 hours in Winter (15 Mar. to 15 Oct.) and GMT minus 3 hours from (15 Oct. to 15 Mar.).

TELEPHONES: None available.

GENERAL: Zone for ballast: it is prohibited to deballast in port except clean water from deep tanks. For any other kind of ballast

authorisation should be requested first to the maritime authority who will indicate the appropriate place.
SHORE LEAVE: Allowed.
AUTHORITY: Capitan de Puerto de Huasco.

IQUIQUE: (including Patillos Cove) 20.13 S. 70.10 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory. During daytime pilot vessel flies blue ensign marked with a "P" and during night the usual Pilot lights. Pilot boards 1,570 m. from Serrano Island lighthouse or 3 cables from the end of the breakwater. Pilotage hours for mooring operations are from 0600 onwards; for vessel's departure no restriction, but preferably before midnight.
ANCHORAGE: Masters arriving for the first time in this port should keep watch for numerous fishing boats. These boats leave port between midnight and 0300 hrs. they are all equipped with navigation lights. The bay of Iquique is wide and offers good anchorage. Vessels awaiting a berth or those not mooring, find good anchorage in depths from 40 to 14 m. with sandy bottom; the best anchoring place is found 900 m. from the breakwater lighthouse and 500 m. from the mooring quay. Tankers mooring to buoys use both anchors. Vessels carrying explosives or gunpowder moor 1,400 m. from lighthouse situated at the end of the breakwater. There are 2 zones where there are submarine cables and where it is forbidden to anchor.
RESTRICTIONS: Fog occurs more frequently from December to March. A current runs from South to North at 0.5 to 3 m.p.h. and is stronger at Point Piedras and Cavancha. Rough seas are more frequent from May to September, but they are relatively weak within the harbour.
MAX. SIZE: Berthing areas are as follows:
1. Embankment of 526 m. length; berths 1, 2 and 3, depth of 9 m. LW
2. Pier, West-side; 335 m. length, berths 4 and 5, depth between 9 and 12 m. LW.
3. Pier, East-side; 280 m. length, berths 6 and 7, depth between 9 and 12 m. in berth No. 7 and 12 to 15 m. in berth No. 6.

Vessels in berths Nos. 5 and 6 must move out to allow other vessels to berth at Nos. 4 or 7.

Patillos Cove: The port is used for the bulk shipment of salt. It is situated 33 miles South of Iquique. Pilot boards by tug from Iquique. Vessels berth to 6 buoys, but must move to present each hatch to the port loader. Max. Size: length 225 m., draft 40 ft.
RADIO: The Chilean Navy has a navy radio station (C.B.I.) for general marine service and another radio station, Radio Coastal Service (S.R.C.) situated in the same building of the Port Captaincy for cases of emergency.

Station call sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Iquique	(S)	2 Mc/s.	A 3	2182	2182	H00-30
CBI/CB2		4 Mc/s.	A 3	4117.2	4422.2	H30-60

TUGS: Available with sufficient h.p. and capacity to assist vessel berthing and unberthing.
CRANES: Berths 4 and 5 – 3×2.5 ton cranes; 1×6 ton crane; 7×5 ton cranes.
STEVEDORES: Gangs are ordered according to arrival of the vessel, the previous day at 1800 hrs. and confirmed before 0800 hrs. Working hours are from 0800–1200 hrs. and 1400–1800 hrs., both on board and on shore. One shift is worked on Sundays or holidays. Also see "General" before first port.
MEDICAL: Good hospital and medical services in the port.
TANKERS: North of the harbour there are buoy berths for discharging, operated by Esso, Shell and Copec.

The Esso hose connections are 8 in. Vessels must berth by day, but can sail at any time. Vessels moor to 3 stern buoys using the port manifold. Both anchors are used, and the ship's bows must lie on a bearing 270°. Max. draft 32 ft.
FRESH WATER: Available from stand-pipes at mooring quays at a rate of 150 tons every 8 hours. Also delivered by barge.
FUEL: Usually no fuel for merchant vessels available. Can be obtained in case of emergency from oil terminals or by tank truck.
GANGWAY/DECK WATCHMEN: Shore watchman employed on the gangway.
OPENING/CLOSING HATCHES: Carried out by stevedores of the Syndicate. Crew not allowed to do this while vessel in port.
CUSTOMS ALLOWANCES: Normal port consumption allowed.
IDENTIFICATION CARDS: Required if no passports.
CONSULS:

Norway	Tel. 254	Panama	Tel. 820
Italy	,, 669	Sweden	,, 283
Great Britain	,, 310	Colombia	,, 860
Spain	,, 282	China	,, 213
Peru	,, 522		

REPAIRS: There are firms to repair diesel engines up to 500 h.p., also spare parts.
DRYDOCKS: There are dry docks for vessels up to 500 tons, also a floating dock, 300 tons capacity.
REPATRIATION: No repatriation problems for crew holding passports.
AIRPORT: Distance to Cavancha Airport 5 minutes by car. One national airline for passengers, connected with other foreign airlines in Santiago de Chile (capital).
TIME: GMT minus 4 hours.
HOLIDAYS: See "General" before first port.
POLICE/AMBULANCE/FIRE: Police Tel. 231; Hospital 307; Fire 1920, 1699, 1657, 1219, 1955.
TELEPHONE: Inside the port less than 100 m. from berthing area, but they cannot be connected on board.
SERVICE: Possible to get service for cleaning tanks and wells.
SHORE LEAVE: Allowed.
AUTHORITY: Gobernador Maritimo de Iquique.

LOTA: 37.06 S. 73.10 W.

DOCUMENTS: See "General" before first port.
ANCHORAGE: Northwest of the Lutrin Light. The Pilot will board here.
BERTHING: Vessels moor to 4 buoys, using both anchors, and lie with their bows on 190°T. The pier is 220 m. long, depth varying from 29 ft. at the head to 23 ft. at the 149 m. mark. Vessels are advised to use their own fenders.
Max. length 110 m. Draft 28 ft. 6 ins.
FRESH WATER: Available.
FUEL: Not available.
CONSULS: At Talcuhuano.

MEJILLONES: 23.06 S. 70.28 W.

DOCUMENTS:
Vessels directly from foreign ports:
3 Crew Lists.
3 Passenger Lists.
3 Stores Lists.
5 Import Cargo Manifests.
11 Manifests for cargo destined for Bolivia.
Vessels coming from another Chilean port.
1 Crew List.
1 List of Passengers.
1 Stores List.
5 Import Cargo Manifests.
13 Manifests for cargo destined for Bolivia.

PILOTAGE: Service carried out by the Pilot Corps of Antofagasta (65 km. from this port). Service is compulsory. Agent has to apply for the Pilot, and it is important to give arrival notice in good time.
ANCHORAGES: Open bay very well protected and with deep water.
MAX. SIZE: No restrictions. Vessels work cargo at anchor.
HEALTH: Pratique is automatic for vessels coming from another Chilean port, otherwise it will be granted after Sanitary visit.
RADIO: Antofagasta radio station CBA-3. Listens out between 0800 and 1200 hrs. and between 1400 and 1800 hrs.
Transmits 8,370 receives 8,354 Telegraphy H 00–30.
Transmits 4,396 receives 4,091 Speech H 30–45.
Transmits 8,780 receives 8,230 Speech H 45–60.
The station is active listening out every 2 hours, i.e. 0800, 1000, 1200, 1400, 1600 and 1800 hrs.
TUGS: There are none.
BERTHING: There are no berths. Vessels work cargo at anchor.
STEVEDORES: Agent to be informed before 1800 hrs. the day before arrival to order gangs.
MEDICAL: There is a doctor in the port but no hospitals are available and patients are transported to Antofagasta.
DENSITY: Sea water.
FRESH WATER: No fresh water available.
FUEL: Not available.
GANGWAY/DECKWATCHMEN: This service is recommended.
OPENING/CLOSING HATCHES: This work can be carried out by crew and/or stevedores. Derricks operated only by crew.
SHIP'S CERTIFICATES:
Register Certificate.
Tonnage Certificate.
Radio Certificate.
Safety Equipment Certificate.
CUSTOMS ALLOWANCES: 200 cigarettes for each member of the crew besides the ones in the stores. One bottle wine/spirits per person.
REPAIRS: There are no workshops. Vessel repairs done by the crew are allowed.
IDENTIFICATION CARDS: Not necessary, only passport and boarding card.
REPATRIATION: There are facilities for changing the crew.
AIRPORT: 25 km. from Mejillones is the airport Cerro Moreno. To travel to U.S.A. one must go via Santiago. There are daily flights from Antofagasta to Santiago, and from Santiago to U.S.A. with stops in various countries.
TIME: There are two official times:
Summertime: from the second Sunday in October to the second Saturday in March. Local time is GMT minus 3 hours.
Wintertime: from the second Saturday in March to the second Saturday in October. Local time is GMT minus 4 hours.
HOLIDAYS: It is possible to work on these days with a surcharge of 100%.
New Year's Day; Good Thursday; Good Friday; 1st May; 21st May; Ascension Day; 18th September; 19th September; 12th October; 1st November; 8th December; 25th December.
POLICE/AMBULANCE/FIRE: Police Tel. 7 Mejillones; Ambulance 24142 Antofagasta; Fire 41 Mejillones.
TELEPHONES: It is not possible to install lines on board.
SHORE LEAVE: Members of the crew are allowed ashore.
AUTHORITY: Captain of the Port.

PUERTO MONTT: 41.28 S. 72.57 W.

PORT LIMITS: Between the meridians of 72° 55′ 50″ W. and 72° 59′ 00″ W. The Southern limit is the parallel of 41° 29′ 48″ S.
DOCUMENTS: See "General" before first port.
PILOTAGE: Ordered by Agent on receipt of vessel's ETA at least 24 hours in advance. Otherwise request directly to Port Captain, cable address "Maritgob Montt". Vessels should anchor as indicated below and exhibit code flag "G". Pilot boards from a motor boat at the anchorage.
ANCHORAGE: Vessels of any size can anchor in the outer roads of the port. Recommended position 800 m. off Isla Tenglo buoy bearing 254°. In Winter bad weather, use of 2 anchors recommended.
RESTRICTIONS: Vessels not generally moored in hours of darkness. Vessels over 10,000 tons are restricted by tides. Unberthing and leaving port can be effected at night.
MAX. SIZE: At the quays: length 170 m., draft 24 ft. Tankers up to 25,000 d.w.t.
HEALTH: All ships are boarded by authorities on arrival unless coming from another Chilean port. In case of suspected disease on board vessel must advise authorities by radio before arrival.
RADIO: Radiocostera Puerto Montt, operating between 0800 and 1845 hrs.
TUGS: None available.
BERTHING: Effected in daylight hours only. Tankers moor at buoys in the Eastern part of the bay. The port was largely destroyed in the 1960 earthquake and as a result berthing at the new pier presents difficulties due to the remains of the old one, reducing the turning circle.

The new pier is at present 350 m. long, with plans to extend this to 500 m.
CRANES: There are 8 Portal cranes, six of 3 tons capacity and two of 5 tons. There is also a 20 ton mobile crane normally used for shore work.
STEVEDORES: Vessel should advise Agent before arrival the number of gangs required and amount of cargo for discharge.

Working hours are generally 0800–1200 hrs. and 1400–1800 hrs. Also see "General" before first port.
MEDICAL: All medical facilities available. Advance notice preferred if possible. Possible to obtain vaccination and inoculation certificates.
TANKERS: Tanker buoy mooring. Vessel moors using both anchors forward and two buoys aft. 10 in. submarine pipe-line, two 8 in. hoses connected. No slop facilities.
FRESH WATER: Available from the quays, at rate 10 t.p.h.
FUEL: Available by barge. Larger quantities obtainable at the tanker moorings, rate 100 t.p.h. Advance notice required. See "General" before first port.
DEVELOPMENTS: Outer berths are being dredged to a depth of 8.50 m.
OPENING/CLOSING HATCHES: It is obligatory to employ shore labour for this purpose.
CUSTOMS ALLOWANCES: Two cartons of cigarettes and two bottles of liquor for each man, which are to be declared in his personal effects.
CONSULS: Germany, Spain, and Netherlands are represented locally.
REPAIRS: Minor engine and electronic repairs can be effected.
REPATRIATION: Can be arranged.
AIRPORT: Situated 17 km. from the port. Daily flight to Santiago where international connections can be made.
TIME: GMT minus 4 hours. In Summertime: GMT minus 3 hours.
HOLIDAYS: Work may be arranged on most holidays. Also see "General" before first port.
POLICE/FIRE/AMBULANCE: Police: Tel. 2240; Fire 2888; Ambulance 2331.
SHORE LEAVE: Allowed.
AUTHORITY: Direccion Gobernacion Maritima de Puerto Montt.

PUNTA ARENAS: (Including Lenadura, Cabo Negro, Clarence Cove, Port Percy, Gregorio) 53.10 S. 70.54 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory for foreign vessels. Vessel entering from Pacific will usually embark Pilots in Valparaiso or any other nearest port. Vessels coming from the Atlantic embark Pilots in Bahia Posesion, 30 miles to the West side of the Eastern entry of Magellan Strait. Pilot vessel is a landing craft called "Concon" which has radio-telephone frequencies of 2,182 and 2,638 kc/s. Four hours before arrival of the vessel, the craft keeps watch on 2,182 kc/s. Craft carries International Pilot lights; the hull is black and yellow with white housing. ETA at Bahia Posesion has to be given at least 24 hours in advance. In bad weather, vessel to anchor and wait in Lat. 52° 17′ 5″ S., Long. 69° 12′ W. Pilots usually board near the buoy of Banco Narrow and disembark off the lighthouse of Punta Delgada.

The Pilot for West-bound vessels travels to Bahia Posesion by air from Valparaiso. It is therefore important to order the Pilot through Valparaiso Agent with as much advance notice as possible, and keep Agent closely advised of vessel's ETA.

For vessels transitting Magellan Straits Westbound, the Pilot will disembark at Valparaiso. Pilot's travelling expenses from and to Valparaiso are included in pilotage charges.

It is advisable to have the accommodation ladder rigged as the Port Authorities will board prior to berthing if cargo work is to commence immediately.
ANCHORAGE: Recommended anchorage area is 4-5 cables from the head of the Fiscal Quay, 11 fathoms depth. Anchorage is prohibited within 300 m. of the quay.
RESTRICTIONS: No tidal restrictions, vessels can come alongside day or night.
BERTHING: The pier is 372 m. long with 36 ft. depth at the seaward end, reducing to 28 ft. on both sides toward the land. Vessels berth bow first, and care must be taken to avoid the shallow patches on both sides of the jetty about 120 ft. off. Normally 4 headlines, 4 stern lines and 2 or 4 springs are used.

Berthing is usually at night or early morning as strong winds blow during the day, occasionally rising to Force 12 in the Summer. The port is often closed due to inclement weather.
Weather signals are shown at the north end of the pier.

Weather	Signal Day	Signal Night	Meaning
Variable	Black Ball	1 green light	Put out extra moorings
Bad weather	Flag M	1 red light	Put out extra moorings
Storm	Flag R	2 red lights	Port closed

Tankers: See below. No limits for vessels at anchor.

Magellan Straits: Max. draft 70 ft., no limit on d.w.t. tonnage for very large vessels. Vessels with a draft in excess of 70 ft. may be allowed to pass through but only after the authorities have studied the vessels characteristics. As a safety measure large vessels navigate the First Narrows in daylight only and with good visibility.
HEALTH: At first Chilean port, doctor will come aboard with Authorities. In other Chilean ports there is no need to ask for pratique or to hoist the "Q" flag as pratique is automatic.
RADIO: There are 2 radio stations: *(a)* CBM Radio Naval of Magallanes permanent watch on 500 kc/s. Telegraphy (A1). *(b)* CBM2 Radio Costera Magallanes operating from 0830 to 1830 hrs. on frequencies 4390, 8694 (transmitting) and 4085, 8360 (receiving).
TUGS: Not normally used to go alongside in Punta Arenas but only to berth in tanker terminals – ship's lines used.
STEVEDORES: Gangs to be requested 24 hours before arrival. Loading/discharge rate depends on type of cargo but can be estimated at an average of 15 tons/hour/gang. According to the working rules of this port, when a vessel starts its operations of loading or discharging without working overtime, it has to follow them for the whole time, but if it starts working with overtime, it must continue doing overtime every day.
MEDICAL: No advance notice to Agent required. There is a hospital with all facilities. International anti-smallpox vaccination required to go ashore.
TANKERS: There are the following terminals for tankers:

Lenadura: Position 53° 12′ S. 70° 54′ W. Max. length 160m., draft 30 ft., 18,000 d.w.t. Vessels moor to 3 buoys, 1 astern and 1 on each quarter, using both anchors. Ship's head Bearing 090°T. Manifold Connection 8 in.

Cabo Negro: Position 53° 01′ S. 70° 51′W. Max. length 170 m. Draft 30 ft., 25,000 g.r.t. Vessels berth port side alongside, using the starboard anchor, and a stern line to a warping buoy 180 m. off the jetty. The manifold hose is 10 in. Gas is loaded at 1,000 t.p.h. A tug is usually available for berthing.

A new pier is expected to be completed in 1978 to service a new liquefying plant and will handle vessels of up to 70,000 d.w.t.

Clarence Cove: Position 52° 55′ S. 70° 09′ W. Max. length 200 m. Max. draft limited by the entrance to the cove to 33 ft. Vessels berth to 4 buoys, using both anchors. 4 headlines, 3 stern lines, 4 lines to the starboard quarter buoy, and 3 to the port quarter buoy are required. A tug is available. Ship's head 255°T. There are two 8 in. hoses for loading and deballasting facilities will be available shortly.

Port Percy: Position 52° 54′ S. 70° 14′ W. Max. length 400 ft., draft 33 ft. vessels use both anchors, vessels head on 242°T. 10 lines are required to the 4 buoys, 3 headlines, 3 to the starboard quarter, 2 astern and 2 to the port quarter. Wires must not be used. There is a 10 in. line for gas loading, with a 6 in. return line. Load rate 250 t.p.h. A 4 in. line is also available for diesel. Load rate 50 t.p.h

Gregorio: Position 52° 38′ S. 70° 11′ W. Max. length 650 ft. Max. draft 42 ft. (subject to tidal conditions), 75,000 d.w.t. Vessels moor with Ship's head 232°T, using both anchors to 8 or 9 shackles. 14 mooring lines are required to 4 buoys. There are two 10 in. and 8 in. floating hoses for loading crude oil. Loading rate 1700 cu. m./hr. Deballasting facilities are being installed, although at present clean ballast must be discharged to the sea.
DENSITY: 1025.
FRESH WATER: Only available at Punta Arenas Quay through hoses at a rate of 8 t.p.h. In case of emergency it can be delivered by vessel of the Chilean Army, if advance notice is given.
FUEL: Only diesel oil available in Puerto Percy with advance notice of at least 7 hours. Also available ex-barge at Punta Arenas, capacity 300 tons (diesel). See "General" before first port.
FIRE PRECAUTIONS: Tankers are forbidden alongside at the quay.
DEVELOPMENTS: Port is being dredged to increase draft to 33 ft. in berths 1 North and 1 South.
GANGWAY/DECK WATCHMEN: Foreign vessels obliged to employ a watchman, except on Tanker Terminals.
OPENING/CLOSING HATCHES: Carried out by riggers. Crew from the vessel and stevedores not allowed to do this work.
CERTIFICATES: All international Certificates to be shown on arrival.
CUSTOMS ALLOWANCES: Quantity in possession of every member of the crew to be declared at the Customs.
IDENTIFICATION CARDS: Chilean International Police (Extranjeria) provides a provisional card to stay in the country. It has to be held each time a member of the crew goes ashore.

CONSULS:

Germany	Italy	France
Argentine	Norway	Great Britain
Austria	Paraguay	Peru
Belgium	Colombia	Sweden
Brazil	Denmark	Switzerland
Greece	Spain	Yugoslavia
Holland		

REPAIRS: "Asmar" (Astilleros de la Armada) has a shipyard for small vessels up to 1,500 tons as well as a good workshop to effect floating repairs. Some nautical spares can be found.
REPATRIATION: Facilities for repatriation, subject permission of International Police (Extranjeria) and Maritime Authority.
AIRPORT: Distance to airport 18 km. national airline (LAN). Daily flights from and to Santiago. Argentina Airlines fly to Argentine cities twice a week.
TIME: GMT minus 4 hours.
HOLIDAYS: See "General" before first port.
POLICE/AMBULANCE/FIRE: Maritime Police tel. 22356; Fire 21212, 21264; Ambulance 22658.
TELEPHONE: There is no connection on the quay.
SERVICES: Compass and gyro compass adjusting can be done.
SHORE LEAVE: Crew allowed to go ashore in all ports of the area. Crew must be in possession of provisional Identity Cards issued by police.
AUTHORITY: Maritime Governor of Punta Arenas.
SHIP MASTER'S REPORT: January/March 1976.
Documents required by Research Ships:-
Clearance from Last Port.
10 Crew Lists.
3 Nil Passenger Lists.
3 Nil Cargo Declarations.
1 Health Declaration.
6 Lists of Personnel disembarking.
2 Stores Lists from each department.
2 Bonded Stores Lists.
2 Crew Manifests.
Pilotage:-Vessel entered and sailed via Western end of Magellan Straits. No Pilot is available unless coming from the North. A radio message should be sent to "Commandante Naval Zona Terciera" requesting permission to proceed without a Pilot, giving ETA at Cabo Pilar and Punta Arenas. Messages should also be sent updating ETA and also when passing Cabo Pilar, the latter giving ETA at Paso Tortuoso and speed. This last information should be promulgated to "All ships". The reverse procedure applies when sailing.

Since we had not arrived with a Pilot on board, we waited for the Pilot about 0.25 mile off the jetty for docking. When we sailed, since it was a Saturday morning, I suggested we could manage without a Pilot for undocking. The Port Captain was agreeable to this, but he may have taken a different view had we been in a less convenient berth.
Time: Summertime is kept (GMT minus 3 hours), dates in force not known. (Ended 2nd weekend in March, in 1976).
Stores and Provisions:-Available in limited quantity and range, and very expensive. There is no ship chandler. The Agent's runner will take the Catering Officer around the shops and market, purchasing the items required, and arranging collection and delivery to the ship.
Bunkers:-Gas oil was obtained from Cabo Negro, a tanker terminal some 9 miles to the North. Vessel berthed alongside the jetty head of the terminal, designed for much bigger ships. There was no real problem with lines, although stern lines were very short nips. The forward lines ran to a dolphin connected to the jetty by a catwalk. The stern overhung the jetty head slightly. Docking and sailing can be done on slack water, but was straightforward, the starboard anchor being used to dredge down on to the jetty head, which lies East/West, with the prevailing wind blowing strongly from W.N.W. A boat is in attendance for running lines. Pilots are very capable and experienced. The berth may not always be available when the ship requires it, which might mean delays.

QUINTERO: 32.47 S. 71.33 W.

PORT LIMITS: The seaward limit of the port is a line running 052° from the lighthouse at Los Molles to Punta Ventanilla.
DOCUMENTS:
1 Outwards Clearance Certificate from the last port of call.
1 Certificate of Dues in respect of lighthouses and buoys.
5 Cargo Manifests for the port.
5 General Manifests for cargo.
5 Manifests for Cargo in transit.
4 Lists of Passengers for the port.
4 Lists of Passengers in transit.
10 Lists of Crew Members.
5 Lists of Personal Effects.
1 Fumigation Certificate.
1 Maritime Health Declaration.
PILOTAGE: Pilotage is compulsory, to all except very small vessels. Pilot and port officals board when vessel is inside port limits. Usually boarding between 0700 hrs. and 2200 hrs. The accommodation ladder should be rigged on the starboard side.

ETA should be sent to Agent 72 hours before arrival, with confirmation 24 hours before arrival. The message should state if any special service is required, and additionally Masters are requested to inform CAPUERTO, Quintero.

ANCHORAGE: Vessels may anchor within port limits. The bay is well sheltered with ample room for manoeuvring. Vessels should keep clear of the S.W. portion of the bay, due to rocky nature of the bottom, and of the prohibited zone indicated on the charts. Larger vessels may anchor West of Punta Liles lighthouse, where there are depths greater than 20 m. with sand and mud bottom.

The anchorage at Ventanilla is an open roadstead, exposed to S.W. winds and swell, with the possibility of dragging anchors, especially in the Winter months.
RESTRICTIONS: Quintero Bay is entered between Point Ventanilla and Point Liles, entrance 2.5 miles wide, with a bight extending 1.5 miles towards the S.E.

Point Liles is surrounded by submerged rocks and reefs for a distance of 2 cables.

Tankers discharging at the buoy terminals may be required to disconnect hoses in the event of bad weather, to avoid damage to the installation.
MAX. SIZE: *Enap S.B.M.:* up to 120,000 g.r.t.
Oil Multi-Buoy Terminal: up to 50,000 g.r.t.
Liquid Gas Multi-Buoy Terminal: up to 30,000 g.r.t.
Chilectra – Andina Quay: 160 m. LOA, draft 32 ft.
RADIO: The Naval Radio Station of Valparaiso also handles commercial traffic.

The Coastal Radio Service Station situated in the Port Captain's office, call sign CAPUERTO QUINTERO.
TUGS: No tugs available at Quintero, but they can be requested from Valparaiso, or through Agent.
TANKERS:
S.B.M. Quintero Terminal: The depth at the S.B.M. is 47 m. Max. size for berthing, length 342 m. Draft 25.5 m. (83 ft.). Manifold connection is 16 in. Ship's derricks must be rigged to carry a 12 ton lift. Max. pressure 200 p.s.i. Average discharge rate 8,000 t.p.h. for 25 API crude.

Gas berth: Max. size 15,000 tons. Max. draft 39 ft. Vessels drop both anchors, and moor to 3 stern buoys. Ship's head should lie on 285°. Hose connection 6 in. Discharge rate 240 cu.m./hr.

Vessels may moor or unmoor at any time at these terminals. Mooring warps must be more than 400 ft. in length.

ENAP S.B.M.: Max. draft 50 ft. Vessels berth to 3 stern buoys, using both anchors, ship's head on 305°. Manifold connection starboard side 10 in. Hose lift 6 tons. Normal pressure 100 p.s.i.
BULK HANDLING FACILITIES:
Chilectra Quay, Las Ventanas: Quay is 530 m. long with max. depth of 19 m. at the head of the quay.

Coal berth situated on the North side of the quay, equipped with mechanical discharging tower which loads up to 300 t.p.h.

The South side of the quay is used for loading copper concentrates, with the addition of 4 dolphins vessels up to 160 m., draft 30 ft., can now berth. Bulk grain can also be discharged here, although the loading tower, being fixed, requires vessels to shift berth to unload each hatch. The berth is exposed to a S.W'ly swell.
FRESH WATER: Available by barge from Valparaiso.
FUEL: Only available at Valparaiso. See "General" before first port.
MEDICAL: There is a small local hospital,and there is an ambulance service to Valparaiso. (20 miles away).
REPAIRS: Only minor repairs may be effected at workshops ashore.
CONSULS: Nearest at Valparaiso.
AIRPORT: Nearest commercial airports at Pudahuel and Cerrillos, near Santiago. Military airfield at Quintero may be used in emergencies, subject to necessary authorisation.
SHORE LEAVE: No restriction of shore leave. Crew must carry an Interpol Identity Card. Curfew at night. Also see "General" before first port.
TERMINAL OPERATORS: Empresa Nacional Del Petroleo (ENAP), Compania Chilean De Electricidad (Chilectra), Andean Mineral Company (ANDINA).
SERVICES: Food, laundry, etc. can be supplied.
REPATRIATION: Possible.
TIME: GMT minus 4 hours.
AUTHORITY: Quintero Port Captaincy.

SAN ANTONIO: 33.37 S. 71.37 W.

DOCUMENTS:
1 Customs Clearance Document.
2 Light Dues Certificates.
9 Cargo Manifests.
2 Crew Lists.
2 Passenger Lists.
2 Lists of Stores.
1 List of Personal Effects.
2 Baggage Declarations per passenger.
1 Fumigation Certificate.
PILOTAGE: As port is narrow, pilotage compulsory for entering or clearing the artificial port. Pilots board vessels about 1 mile outside the artificial port, weather permitting. Vessels should wait for Pilot in position bearing 159° and 1,800 m. from Panul Lighthouse.
ANCHORAGE: Vessels over 100 m. length must anchor in position bearing 240° and 1,400 m. from South mole beacon. Vessels under 100 m. length find good anchorage in sandy and muddy bottom, 20 m. deep in position bearing 240° and 650 m. from the above beacon. Only in event of bad weather or strong winds which prevent Pilot boarding vessels outside harbour vessels under 100 m. length can anchor inside North pool and wait for Pilot.

Mooring buoys: inside small or North pool, are 2 mooring buoys.

Fiscal Buoy: situated at 280° and 170 m. from head of Port Authorities' pier can be used for vessels up to 31 ft. draft.

PSNC Buoy: Property of shipping company, situated at 185° and 500 m. from above pier, can be used for vessels up to 40 ft. draft.

RESTRICTIONS: San Antonio is a narrow and a difficult manoeuvring port, entrance to artificial port is subject to weather conditions and during hours the port is open.

Entrance is effected during daylight only. In emergency and specific cases (weather permitting) this can be done up to 2000 hours. Sailing permitted any time, day and night, weather permitting.

RADIO:

Station call sign	Category	Frequency	Type	Receives	Transmits	Schedule
San Antonio	(S)	2 Mc/s.	A 3	2182	2182	2000 H15-30
CBS 2		4 Mc/s.	A 3	4117.2	4422.2	4422.2 H30-60

Local Station CBS2 on 8,360 kc/s. from 1400–1900 hrs. Telephone 0800/1100. However it is advisable to use Radio Play Ancha, Valparaiso. Maritime Control can now be contacted on Channel 16 VHF.

TUGS: 2 tugs available. LLO-LLEO and KIWI.

BERTHING: *Location of Berths:* Berths 1, 2 and 3 situated on the South Mole. Length 452.5 m. Max. depth of water 28 to 31 ft. at L.W.

Berths 6 and 7 situated on Central Pier. Length 322 m. Depth of water 12 to 28 ft. at L.W.

Two more berths are under construction.

Mechanised mole: situated at head of South mole, Berth 1 for mechanised discharge of coal and bulk cargo. Vessels up to 110 m. length can discharge without any difficulty. Vessels over this length will have to be shifted to work number 1 and 2 hatches provided Berth 2 is available. The max. draft is 30 ft. Discharge Rate 400 t.p.h.

Only when raining is work stopped. But as the ground swell is strong and the mole is not well protected, it is recommended that ships be provided with good fenders and moored in a secure manner.

Berth 1 has a grab discharge for coal, but is now mainly a grain berth. The tower travels over 100 m., but vessels may have to shift along the berth.

Central Pier: The Eastern side is used for tankers (Berth 6) and coastal vessels, Berth 7.

The Western side is out of use at present while extensions and improvements are made.

CRANES:

3 Coles cranes, 5 tonnes.
1 Coles crane, 20 tonnes.
12 Gantry cranes of 5, 7.5 and 10 tonnes.
9 Mechanical scoops.
18 Fork Lifts.
Railway trucks and lorries available on quayside.

STEVEDORES: 614 labourers, stevedores, tally-clerks, crane men, watchmen, etc. Cargo is worked expeditiously, especially copper. Port works from 0800 to 1430 and from 1430 to 2100 hrs.The rate of cargo handling capacity is as follows:

Loading: Copper 40–50 t.p.h. per hatch/gang.
Bagged cereals, 30–40 t.p.h. per hatch/gang.
General cargo, 30–40 t.p.h. per hatch/gang.
Discharge: Phosphates (bagged) 30–40 t.p.h. per hatch/gang.
Cereals 30–40 t.p.h. per hatch/gang with mechanical grabs.
General cargo, 30–40 t.p.h. per hatch/gang.
Mechanical scoop rate 50–80 t.p.h.

TANKERS: At Berth 6 there is a 12 in. manifold for luboils, and a 4 in. manifold for vegetable oils.

North Breakwater Mooring: Max. length 170 m. Draft 32 ft. Vessels berth to a stern buoy, hose comes on board on the starboard side. The tanks at present take caustic soda, but are being converted for petroleum and chemical products.

MEDICAL: Hospital with 100 beds and necessary surgeons.

FRESH WATER: All berths equipped with standpipes to supply fresh water direct to vessels at a rate of about 10 t.p.h., but during day rate may be less due to low pressure.

FUEL: Coal: in case of emergency, coal can be received by railway car from the mechanised plant at berth A, or by lighters.

Fuel can be supplied to vessels in case of emergency provided this is requested with sufficient advance notice. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS: Brazil, France, Norway, Sweden and Italy.

REPAIRS: Three workshops; several slipways for repair of small craft.

REPATRIATION: Facilities exist.

AIRPORT: At Pudahuel near Santiago, national and foreign airlines services.

TIME: Local time GMT minus 4 hours.

GENERAL: *Fumigation:* All vessels arriving with a complete cargo of cereals are compelled to be fumigated according to Chilean law. To effect this, vessel is tied up at North mooring buoy. Only the hatches are fumigated and all crew members must go ashore.

Fumigation takes about 18-20 hours. It is recommended these vessels arrive provided with strong ropes (special nylon) and good fenders as protection against heavy swell.

SHORE LEAVE: Allowed. Also see "General" before first port.

DELAYS: S.W. winds generally blow at dawn calming at sunset, leaving a heavy and strong swell in the bay. It is therefore recommended to arrive at the port daybreak from September to March, so as to enter the artificial port immediately. South winds also develop a Northerly current. Fogs are frequent from November to March.

AUTHORITY: Empresa Portuaria de Chile.

SAN VICENTE: 36.44 S. 73.08 W.

DOCUMENTS, HEALTH, etc. See "General" before first port.

PILOTAGE: Compulsory. Pilots board at anchorage in Bahia San Vicente. Pilots will designate anchorage. The accommodation ladder must be rigged if the vessel is at anchor awaiting berth as the Port Authorities will board.

RESTRICTIONS: Daylight only berthing and unberthing.

TUGS: None available.

BERTHING: *Comap-buoy Berth.* Vessel moors with both anchors forward and lines to 2 buoys astern 2×10 in. lines connected starboard side midship. 10 in. hoses 70 p.s.i. backpressure. Gas oil, fuel and kerosene handled.. No slop line.

Hauchipato Steel Mill. Vessel moors stern on to jetty – discharge through stern line. One 6 in. line, 6 in. hoses, 120 p.s.i. backpressure fuel oil only. No slop line.

Cap Pier: Present length 165 m. Depth: 30 ft. 6 ins. North side: 24 ft. South side.

Vessels berth bow Westward, using starboard anchor at the North berth, port anchor on the South berth, usually 10 shackles on the windlass. Stern buoys are used for berthing, and 8 ropes of at least 100 fathoms length will be required, as well as 4 springs. The discharge tower on the South side has a travel of 147 m., and a total clearance at LWST of approximately 62 ft.

General Cargo Berth: Present length 440 m. Future extended length 600 m. Depth alongside 40 ft. Berth has two grain discharge towers, discharge rate 200 t.p.h. each.

TANKERS: *Berth A.* Vessels berth using both anchors to 7 shackles, and 3 stern lines to each buoy. 1 astern, and 1 on each quarter. Ship's head should lie on 235°. Max. length 120-150 m. 1 tug and 1 mooring launch required. There are two 8 in. hoses used for loading bunkers.

Berth B. Similar berthing procedure to A. Ship's head should lie on 230°T. 4 stern lines are required for the port quarter buoy. Max. length 250 m. Depth 42 ft. Two 8 in. lines for crude discharge, or loading fuel oil. Pressure 15 kg./sq.cm.

Berth C. Berthing similar to Berth A. Ship's Head 235°T. Starboard anchor to 9 shackles. Port Anchor to 7 shackles. Max. length 200 m. Two 8 in. lines, 1 for discharging crude, loading fuel oil, and for loading products or discharging gas.

Berth D. Similar to Berth A, though 2 lines are required to each buoy. Ship's head lies on 270°. Vessels must use chain to the final shackle on both anchors. Max. length 120 m. One 8 in. gas line. Discharge rate 1,200 cu.m./hr.

DENSITY: Salt water.

FRESH WATER: Only available at the CAP pier by 2 in. line.

FUEL: Not available, except at Berth A. See "General" before first port.

DEVELOPMENTS: New Oil Terminal. Expected to open in 1977. Situated near the Gualpen Light. It will be for 60,000 d.w.t. tankers. The jetty will be 270 m. long, and used for crude oil discharge.

TALCAHUANO (including Concepcion Bay): 36.42 S. 73.07 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Pilot boards vessel near Belen Lighthouse, 3 cables distance.

ANCHORAGE: Each berth has its own distinct anchorage point.

Berth	Anchorage	Bearing	Depth
Berth 2	Huascar	101° × 600 m.	21 ft.
Berth 3	,,	101° × 900 m.	24 ft.
Berth 4	,,	101° × 1200 m.	27 ft.
Berth 5	,,	101° × 1500 m.	30 ft.
Berth 6	,,	088° × 1000 m.	30 ft.
Berth 7	Mole 500 (Sth. Encl.)	104° × 820 m.	28 ft.
Berth 8	,, ,,	136° × 400 m.	21 ft.
Berth 9	Explosives Anchorage	36°06′S. 73°04′08″W.	

Vessels in quarantine are moored 182° from Belen Lighthouse and 7 cables distant. Vessels carrying explosives are moored in same direction but 9 cables from Belen Lighthouse.

RESTRICTIONS: Port works from 0800 hrs. to 1200 hrs. and from 1400 hrs. to 1800 hrs. Only 6 vessels can moor alongside quay at one time.

MAX. SIZE: Vessels of 28 ft. draft and 195 m. in length can moor on the East side.

RADIO:

Station call sign	Category	Frequency	Type	Receives	Transmits	Schedule
Talcahuano	(S)	6 Mc/s.	A 1	6265	6414.5	H00-30
CBT-4		4 Mc/s.	A 3	4085.2 6280	4390.2	H30-60

TUGS: Port has 2 tugs, one of 120 h.p. and the other of 115 h.p., Shipyard has 2 tugs each of 600 h.p.

BERTHING: *Fiscal Pier:* Length 400 m. The old pier is now being rebuilt and extended.

Berth 1. Max. draft 28 ft. Berth 2 Max. draft 26 ft., but being increased to 28/30 ft.

Mole 500/Naval Pier. Max. vessel size: Length 230 m. Draft 27 ft. 4 headlines, 4 stern lines and 2 springs required. Ships gear used for cargo handling.

Passenger Mole: At a distance of 80 m. from the Fiscal Quay and on the Blanco Encalada Mole is the Passenger Pier with concrete steps for passenger traffic.

Chacabuco Quay: Situated in the Inner Harbour for repairs. Vessels up to 21 ft. draft can moor. No railway line or cranes, therefore vessels must work with own derricks to vans. "Asmar" tugs are used for mooring.

Concepcion Bay:

Lirquen Private Pier: Pilot boards off the end of the pier. Max. length 180 m. Vessels use maximum chain on both anchors, ship's head lying on 340°T, and a stern quarter buoy is used. Vessels require 4 headlines, 4 stern lines, and 4 springs.

Penco Private Pier: The pier is 1700 m. long ending in a platform on which stands a fixed base rotary crane. Vessels bows lie on 348°T, both anchors used to final shackle. There are 4 buoys, 1 on each bow, 1 astern, and 1 on the starboard quarter. Vessels also tie up to 3 dolphins on the East side of the pier. 12 × 600 ft. mooring lines are required and also 2 springs. A tug is required. The berth is exposed to strong Northerly winds, and vessels must be prepared to leave at short notice.

CRANES: 4 × 5 ton Portal crane on the Fiscal Pier. One floating crane 180 tons. One mobile crane 30 tons.

STEVEDORES: 12 gangs available. Loading: assorted goods 12 t.p.h./gang/hatch. Cereals 25 t.p.h./gang/hatch. Timber 100 t.p.h./gang/hatch. Newsprint 20 t.p.h./gang/hatch.

Discharge: assorted goods 12 t.p.h./gang/hatch. Bagged cargo 25 t.p.h./gang/hatch.

When loading is carried out by means of lighters, this is usually done from privately owned moles belonging to the principal commercial firms of the port from their warehouses situated inside the Morro Channel. Working hours are 0800-1430 and 1439-2100. Also see "General" before first port.

MEDICAL: Public hospital with board and sanatorium for infectious/contagious diseases. In addition, private clinics and a naval hospital.

FRESH WATER: Occasionally available on berth 2.

FUEL: Can be supplied only to vessels moored alongside quay and this in small quantities up to 100 tons, by means of cistern-truck or in drums. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: required.

CONSULS: Brazilian and Norwegian consulates. At Concepcion the following:

Argentine	French	Paraguayan
Belgium	Finnish	Panamanian
Bolivian	Guatemalian	Peruvian
British	German	Swedish
Colombian	Dutch	Swiss
Danish	Honduran	Spanish
Ecuadorian	Italian	Uruguayan
El Salvadorian	Mexican	Venezuelan

REPAIRS: "Asmar" or the navy workshop has capable personnel and modern equipment to effect all kinds of repairs, not only to hull, but also to engines, boiler plates, welding, carpentry and electrical works. Chilean Navy has high-sea tugs to effect salvage and assist vessels in danger. 3 private-owned workshops, which can effect small repairs to vessels afloat. Several slipways for construction and repair of small craft.

DRY DOCKS: Naval shipyard and workshops have 2 dry docks, Dock number 1 is 180 m. long by 30 m. wide (605 ft. long by 57 ft. wide). Dock number 2 is 250 m. long by 40 m. wide (800 ft. long by 110 ft. wide).

Two floating docks: one 200 ft. long by 30 ft. wide for vessels up to 1,000 tons, and the other 333 ft. long by 50 ft. wide for vessels up to 3,500 tons. There is also a workshop for repairs to be effected afloat. There are 6 anchored mooring buoys used by vessels when entering Dry Dock 2.

REPATRIATION: Good facilities exist.

AIRPORT: Hualpancillo is situated between Talcahuano and Concepcion, 7 km. N.W. of Concepcion. Lan-Chile has connections from this airport with all the towns of the country from Arica to Punta Arenas and abroad.

TIME: Local time is GMT minus 4 hours.

SHORE LEAVE: Allowed.

GENERAL: South wind affects vessels only when moored outside the port zone. Weather signals are indicated on Signal Station of Port Authorities' Building.

AUTHORITY: Empresa Portuaria de Chile.

TALTAL: 25.24 S. 70.29 W.

DOCUMENTS: See "General" before first port.

PILOTS: No official pilot station at Taltal. If professional assistance required vessel should give ETA 24 hours in advance via Valparaiso Radio. Pilot boards at the anchorage. International code signals used. Harbour Master's office can be contacted by radio-telephone on the following frequencies: 2152, 2708 and 4396.6 kc/s.

ANCHORAGE: Sheltered deep-water anchorage suitable for any size vessels. Locations of designated areas marked on the chart.

RESTRICTIONS: Port closed in Summer from 2000 to 0600 hrs; in Winter from 1900 to 0700 hrs.

MAX. SIZE: Limited only by depths in anchorage.

HEALTH: Vessel boarded on arrival by Health Inspector.

RADIO: Radio Naval de Valparaiso or Radio Naval de Arica. Use CBT on 2182 kc/s. and 2783 kc/s. A3 on the half hour from 0800 to 1800 hrs.

TUGS: One privately owned tug may be called on to assist if necessary.

BERTHING: No berths alongside shore. Vessels work cargo in open anchorage. One buoy berth for tankers. Mooring, unmooring in daylight only. 6 in. hoses for discharging fuel and diesel.

STEVEDORES: At least 24 hrs. advance notice of ETA required to arrange gangs. Also see "General" before first port.

TANKERS: *Caleta Ossa Mooring Berth:* Vessels berth to 2 stern buoys, using both anchors. Ship's head on approximately 225°T. Depth of water 47 ft. A Pilot is required and comes from Antofagasta.

Antofagasta.

MEDICAL: Doctors and hospital facilities available. Advance notice desirable.

FRESH WATER: Not available.

FUEL: Not available.

IDENTIFICATION CARDS: Required by all crew members.

CONSULS: There are no local representatives.

REPATRIATION: No facilities for crew change or repatriation.

AIRPORT: Situated 25 km. away. Four internal flights a week, two Northward and two Southward.

TIME: GMT minus 4 hours.

HOLIDAYS: See "General" before first port.

TELEPHONES: There is no telephone service.

SHORE LEAVE: Allowed.

AUTHORITY: Capitania de Puerto.

TOCOPILLA: 22.05 S. 70.11 W.

DOCUMENTS: See "General" before first port.

ANCHORAGE: A good anchorage can be found 3 cables N.W. of the moles.

PILOTAGE: Compulsory. Pilot will board at any time 7 to 10 cables North of the moles.

MOORING: The port has three buoys for mooring vessels of any tonnage, and which are used exclusively by ships discharging or loading general cargo and bagged nitrate, two buoys for the discharge of oil carriers. The depth of these moorings range from 15 to 30 m.

RESTRICTIONS: Ships are boarded by Pilot and Port Authorities up to 2100 hrs. On special request from the Agent, vessels are received up to midnight.

HEALTH: On arrival vessel boarded by Sanitary surgeon, who will grant full Sanitary Pratique valid for all Chilean ports of call in the present voyage. In cases of suspected disease he will determine if patient or patients should be removed to local hospital, and if feasible declare the affected vessel Sanitary cleared.

RADIO: All calls should be directed via Arica or Iquique Naval Radio Station.

TUGS: No tugs are used for mooring or unmooring of ships.

BERTHING: All berthing is done during daylight; night time only on special occasions, and by Agent's request.

Nitrate Plant: Max. draft 38 ft. The telescopic arm can rotate and deliver over a length of 160 m. Rate 1,000 t.p.h. Vessels must have their cargo gear swung out to starboard prior to loading. Vessels berth port side alongside.

Sulphate Mooring Berth: Vessels berth to 3 stern buoys using the starboard anchor. Ship's head on 276°T.

Lighters' Berths: Vessels berth to a stern buoy, using starboard anchor, ship's head on 265°T. There are 3 berths 410 m., 610 m. and 810 m. North of No. 1 mole.

The port has 36 lighters. Working hours 0700–1100, 1300–1700 and 1700–2400.

STEVEDORES: Number of gangs required for loading and/or loading operations should be radioed 24 hours in advance, indicating last ETA. Also see "General" before first port.

MEDICAL: In case of urgent need of a surgeon on arrival the Master should request medical assistance by radio to Agent and/or Port Captain. Hospital available with moderaee s.

TANKERS: Two buoys used for oil discharge. One of them belongs to Chile Exploration Co. and operates with two lines of 8 in. diameter each line, the other buoy is property of Sociedad Quimica y Minera de Chile S.A. and has two lines of 8 in. diameter for discharge of oil, and one line 4 in. in diameter for diesel oil only.

Power Station Oil Terminals: Vessels berth stern onto a buoy with 2 stern ropes, and a further 3 stern lines are passed ashore. Both anchors are required and ship's head lies 270°T. Depth of water 44 ft. Fuel oil is discharged through to 8 in. flexible submarine hoses. Max. length 220 m. Draft 38ft.

The manifold should be not more than 80 m. from the stern.

FRESH WATER: None available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Recommended to employ services of a deck or gangway watchmen.

OPENING/CLOSING HATCHES: Ship's crew not allowed to work in port opening or closing hatches. Riggers' Union should be employed, one foreman and eight riggers.

CERTIFICATES:

Tonnage.
Deratisation.
Radio.
Chilean Light Dues Certificate.

CUSTOMS ALLOWANCES: No special restrictions.
CARGO GEAR: Gear that complies with standard Port Safety Regulations.
IDENTIFICATION CARDS: Not necessary.
CONSULS: Only Norwegian Vice-Consulate.
REPAIRS: Facilities only for minor repairs.
REPATRIATION: There are facilities.
AIRPORT: Served by Chilean Airways, located very near the town. It can be reached by motor-car in 15 minutes.
TIME: Local time GMT minus four hours.
HOLIDAYS: See "General" before first port.
POLICE/AMBULANCE/FIRE: Police Headquarters 32; Hospital 231; Fire Department 84.
TELEPHONES: No facilities for placing telephone lines aboard.
SHORE LEAVE: Allowed.
REGULATIONS: Not allowed to pump oil or dirty water from bilges or throw rubbish overboard while anchored.
DELAYS: Probable on surf days, mainly in the months of June, July and August.
AUTHORITY: Sociedad Quimica y Minera de Chile S.A.

VALPARAISO: 33.02 S. 71.39 W. (See Plan)

DOCUMENTS:
1 Clearance.
1 Light Dues Certificate.
7 Port Caroo Manifests.
4 General Cargo Manifests.
7 Transhipment Cargo Manifests.
3 Passenger Lists for the Port.
3 Passenger Lists for Transit.
18 Crew Lists.
1 Personal Effects List.
Passenger Baggage Declaration (2 per passenger).
1 Fumigation Certificate.

PILOTAGE: Compulsory. Pilot must be waited for in position bearing 116° and 1,830 m. from Punta de Angeles Lighthouse.
ETA: Port Authorities require 24 hour, and 4 hour notice prior arrival.

Prior berthing, vessels have to be cleared by Port Authorities. After 2100 hrs. Authorities will not come on board and ship has to wait until the next morning.
ANCHORAGE: Outside the harbour and close by vessels find good anchorage in 25–15 fathoms of water. It is always prudent to secure a good anchorage owing to possible strong winds during all periods of the year and causing heavy swells.

In Winter, vessels anchor with one anchor with full chain and have another ready for emergencies. During Winter it is not convenient to anchor near the coast due to the risk of dragging; during Summer the nearer to coast, the better.

With the object of keeping clear the entrance to Valparaiso Bay and to assure a proper anchorage when arriving at this port, the Harbour Master has fixed the following anchorages according to arrival, so that vessels may proceed to berth in order of arrival.

Anchorage No.					
1	104°	True and	980 m.	from breakwater's	red light.
2	099°	,,	1,400 m.	,,	,,
3	079°	,,	820 m.	,,	,,
4	083°	,,	1,220 m.	,,	,,
5	056°	,,	980 m.	,,	,,
6	066°	,,	1,340 m.	,,	,,
7	070°	,,	1,730 m.	,,	,,
8	041°	,,	1,250 m.	,,	,,
9	052°	,,	1,550 m.	,,	,,
10	059°	,,	1,900 m.	,,	,,

If any vessel does not occupy the anchorage assigned, she shall be shifted by a Pilot of the Harbour Master's Office for Account of Owners.

Should the ten anchorages be occupied when vessel arrives, a provisional one shall be expressly given by the Harbour Master's Office to the vessel that requires it.
RADIO: Naval Radio Station of Valparaiso in Playa Ancha which attends the public maritime service. Coastal Radio Service (SRC) with its station situated in the Port Captaincy Building, also attends the public maritime service, both national and foreign (CB V-2).

Station Call Sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Valparaiso		8 Mc/s.	A1	8354	8478	H00–30
CBV–2				8374		
		12 Mc/s.	A1	12531		
				12561	12714	H00–60
	(C)	16 Mc/s.	A1	16708		
				16748	17285.6	H30–60
		4 Mc/s.	A3	4117.2	4422.2	H00–45
		8 Mc/s.	A3	8223.6	8773.6	H45–60

VHF: Pilot boat is not equipped with VHF. The only VHF contact can be done via tug-boat *Ultramar I.*
TUGS: There are 11 tugs without considering those belonging to the Navy. The Cia. Sud-Americana de Vapores has one tug: "El Aguila".

BERTHING:

	Length	*Beam*	*Draft*
Berth No. 1	±500 ft.	75 ft.	32 ft.
Berth No. 2	±500 ft.	75 ft.	32 ft.
Berth No. 3	±750 ft.	75 ft.	33 ft.
Berth No. 4	560 ft.	75 ft.	32 ft.
Berth No. 5	410 ft.	75 ft.	32 ft.
Berth No. 6	700 ft.	79 ft.	32 ft.
Berth No. 7	329 ft.	79 ft.	32 ft.
Berth No. 8	700 ft.	79 ft.	32 ft.
Berth No. 9	550 ft.	75 ft.	29 ft.
Berth No. 10	490 ft.	75 ft.	29 ft.

Berthing in Daylight only.
STEVEDORES: The stevedoring syndicate has 397 registered members and 108 substitutes. Working hours are 0800–1430, 1430–2100.
MEDICAL: Several hospitals and clinics with qualified staff.
FRESH WATER: Delivered by hoses connected to the existing standpipes. The quality of the water is good and can be delivered at the rate of approximately 20 t.p.h. The couplings are 2.5 in.
FUEL: Coal: The Lota-Schwager Coal Company can deliver coal direct to vessels or trucks from quay or lighters.

Oil: Copec, Shell Chile, or Esso Standard Oil deliver petroleum or diesel oil in any quantity needed by pipe-line at Salinas, approximately 5 miles North of the port, mooring vessel in 7 fathoms water to special buoys and embarking a Pilot at Valparaiso Port. Delivery is at a rate of 180–200 t.p.h. There is also a barge with a capacity of 180 tons for delivery in Valparaiso Bay itself. Diesel oil can be delivered from tank cars by pipe at the quay.
GANGWAY/DECK WATCHMEN: Available and are to be used by Law.
OPENING/CLOSING HATCHES: To be carried out by the stevedores by Law.
CUSTOMS ALLOWANCES: No unusual restrictions.
IDENTIFICATION CARDS: Required.
CONSULS: General Consulates:

Argentina	Germany	Panama
Bolivia	Greece	Peru
Brazil	Guatemala	Spain
Columbia	Italy	Sweden
Ecuador	Norway	Venezuela

Consulates:

Belgium	Great Britain	Paraguay
Cuba	Haiti	Santo Domingo
Denmark	Holland	Switzerland
El Salvador	Honduras	United States
Finland	Monaco	Uruguay
France	Nicaragua	

REPAIRS: Several shipyards, workshops and foundries for repairs to hull, boilers, machinery and engines. The principals are Astilleros y Maestranza Las Habas which have their own quay, tugs, lighters and working equipment afloat, and Asmar, belonging to the Navy. There are several other smaller shipyards for construction and repair of minor craft.
DRY DOCKS: Floating dock, vessels up to 4,500 tons, 365 ft. length by 56 ft. breadth and a depth of 20 ft.
REPATRIATION: Facilities available.
AIRPORT: International airport at Pudahuel, 90 km. from Valparaiso. Los Cerrillos is the nearest airport. From Pudahuel, Lan-Chile maintain daily services to Arica to the North and to Punta Arenas with stops at all the principal towns.
TIME: Local time October to March, GMT minus 5 hours. March to October, GMT minus 4 hours.
HOLIDAYS: See "General" before first port.
SERVICES: Compasses, radars, meteorological instruments and other nautical equipment can be tested and fixed. Charts and maps can be obtained from the Chilean Navy Navigation and Hydrographic Department.
SHORE LEAVE: Allowed.
WEATHER: A weather report showing the condition at various points off the coast of Chile can be obtained from the Oficina Meteorological Chile twice a day. A general rule for the next day's forecast: the weather condition at Juan Fernandez Islands will be 24 hours later than the conditions at Valparaiso.
PORT REGULATIONS: It is strictly prohibited to dismantle the main engine or effect repairs to the engines without previous notification and authorisation from the Maritime Authorities. Also, to unballast petroleum pump bilges, throw overboard waste or refuse in the artificial port.
PORT AUTHORITY: La Empresa Portuaria de Chile.

Chinese People's Republic

Up-to-date information of port entry requirements for Ports in the Chinese People's Republic are unobtainable.

We have been advised by the Head Office of the China Ocean Shipping Agency at Peking that Ship Masters of foreign vessels calling at Chinese Ports should contact the Branch Office at the Port concerned (cable address "Penavico") in order to be provided in due time with necessary information relating to port entry requirements.

We hope that in due course all necessary information will be passed to us by the Authorities and should this be the case, such information will be included in later editions.

DOCUMENTS:

First Port

1 Maritime Declaration of Health.
2 Reports of Entry for foreign ships.
6 Crew Lists.
1 List of Specified Articles (money, gold and silver).
1 Report of Articles Restricted for use in Port.
4 Passenger Lists (if carrying passengers).

Subsequent Ports

1 Report of Entry for Foreign Ships.
5 Crew Lists.
1 Report of Articles Restricted for use in Port.

The list of money, etc., is carried with the ship from the first port.

All forms used to be Chinese. Navigational charts to be put away when boarded by Pilot and examination officer and boarding party.

SHIPMASTERS REPORT:

The following information was received from a Master whose vessel was on charter to the China National Chartering Corporation, Peking.

Regulations governing the passage of non military foreign vessels through the Chiungchow Straits.

Article 1. According to "The Declaration of the Government of the People's Republic of China on China's Territorial Seas, the Chiungchow Straits (the Hainan Straits) are Chinese inland waters, where all foreign military vessels are prohibited from passing through. Any non military foreign in need of passing through the Straits must apply for permission in accordance with the present Regulations.

Article 2. For facilitating the control of the Chiungchow Straits, the Chinese Chiungchow Straits Authority of the People's Republic of China (hereinafter referred to as the Chinese Chiungchow Straits Authority) is hereby set up.

The present Regulations are to be carried out under the supervision of the Chiungchow Straits Authority.

Article 3. The water area which comes under the control of the Chiungchow Straits Authority (hereinafter referred to as the Control Area) is bounded temporarily as follows: West of the line connecting the Hainan Head Light Beacon (approx: 20° 09′ 37″ N. 110° 41′ 00″ E.) and San Kao Lung Light Beacon (approx: 20° 26′ 00″ N. 110° 30′ 22″ E.) (known as the East Line) and East of the line connecting Cape Kami Light Beacon (approx: 20° 13′ 30″ N. 109° 55′ 30″ E.) and Cape Lin Kou Light Beacon (approx: 20° 00′ 22″ N. 109° 42′ 06″ E.) (known as the West Line).

Article 4. Any non military foreign vessel passing through the Chiungchow Straits must comply with the following procedures:

1. Apply for passage permission by cable to the Chiungchow Straits Authority 48 hours before the vessel enters the control area, or before the vessel leaves the port of departure, giving detailed information on ship's name, nationality, gross tonnage, speed, hull colour, funnel marks, port of departure and destination as well as date and time of sailing.

2. After obtaining the passage permission, inform the Chiungchow Straits Authorities 24 hours before entering the control area or within 2 hours after vessel port of departure of the exact time of entering the control area.

All cables relating to the application and permission for the passage through the Straits are to be transmitted through the Haiou Branch of China Ocean Shipping Agency.

Article 5. Notification may be given by the Chiungchow Straits Authority, whenever it deems necessary, to cancel the permission already granted to those non military vessels for passing through the Straits.

Article 6. Passage through the control area by non military foreign vessels should be made in the day time only. They should enter the control area after sunrise and leave before sunset. On the basis of the ship's speed the Chiungchow Straits Authority shall fix the time for the non military foreign vessel concerned to enter or leave the Straits.

Article 7. Non military foreign vessels entering and leaving the Chiungchow Straits should pass through the middle channel, unless special permission has been granted by the Chiungchow Straits Authority.

Article 8. Non military foreign vessels passing through the control area should navigate within the following specified navigation area: North of the line connecting the point on the East line 4 nautical miles away from the Hainan Head Light Beacon to the point on the West line 4 nautical miles away from the Cape Lin Kou Light Beacon; and South of the line connecting the point on the East line 6 nautical miles away from the Hainan Head Light Beacon, the point 4 nautical miles due South of the Cape Paimi Light Beacon (approx: 20° 15′ 00″ N. 100° 17′ 00″ E.) and the point on the West line 14 nautical miles away from the Cape Lin Kou Light Beacon.

Article 9. Non military foreign vessels passing through the Chiungchow Straits must punctually observe the time as reported and comply with the stipulations on the limit of the navigation area. All vessels entering and passing through the control area should immediately answer and unconditionally comply with the signals from the shore or patrol ships. The vessels in question shall be held responsible for all consequences arising from non observance of the above stipulations.

Article 10. Non military foreign vessels passing through the Chiungchow Straits are not allowed to use radar. If the vessels are under the conditions of restricted visibility caused by dense fog, torrential rains, etc., which necessitates the use of radar, they should make an application to the Chiungchow Straits Authority, giving their reasons as well as the ship's position, speed, etc., and they may set ship's radar in operation when permission is obtained. In the case of emergency which endangers safety navigation of the ships, they may use their radar while making their application simultaneously; after that, they should submit a detailed account (report) to the Chiungchow Straits Authorities giving a full account, together with a statement of facts of the time as to when the radar set in use and when ended for the archives.

Article 11. Non military foreign vessels in passing through the Chiungchow Straits are not allowed to take photographs, soundings, or do any other things in violation of the laws and regulations of the People's Republic of China.

Article 12. Any non military foreign vessel violating the present Regulations shall be treated as follows:

1. Before entering the control area, the vessel may be ordered to stop proceeding and to round out by her original route, so as to sail around the Hainan Island; or, to wait until the necessary formalities are completed and the permission for passage granted.

2. In case the vessel has entered the control area, she may be ordered to stop and escorted to Haikou for inspections; and she shall be treated according to the findings after inspection. After that, the vessel may, as circumstances require, be allowed to pass through the control area, or ordered to return out from the control area, or even be escorted out of the Straits.

Regulations governing entry and departure of foreign vessels into and from Chinese Ports.

1. In addition to the Provisional Law Governing Customs and other relevant laws and regulations of the People's Republic of China, these Regulations shall be observed by all foreign vessels entering or leaving Chinese port(s).

The word "Port" named therein denoted Port(s) open to foreign vessels as approved by the Ministry of Communications of the People's Republic of China.

2. Masters of foreign vessels shall report to the Harbour Authorities through their port Agents a week prior to the vessel's arrival at the port of call (or if the time of run from the last port called at to the port of call is less than a week, then prior to vessel's departure from the port last called), of vessel's ETA, fore and aft draft on arrival, number of passengers and quantity of cargo on board for entry formalities. Masters are again to report 24 hours in advance to the Harbour Authorities through their port Agents, the exact time of vessel's arrival.

3. On entering or leaving port, foreign vessel's shall display the required signals and, in daytime, hoist their respective national flags.

4. On entering or leaving port, foreign vessels are subject to quarantine examination conducted by the Quarantine Authorities in accordance with the Frontier Quarantine Regulations.

5. Foreign vessels are not allowed to enter or leave port, or to navigate or to shift berths in the harbour without Pilots appointed by the Harbour Authorities.

6. On entering or leaving port, foreign vessels are subject to inspection by the local Harbour Authorities and other organizations in charge of inspection, in accordance with the provisions under the "provisional Regulations Governing Inspection of the Ship, Crew, Passengers and Baggage on Vessels Entering or Leaving Port".

7. After entering the port, Masters of foreign vessels shall submit to the Harbour Authorities a list showing description and quantity of arms and ammunitions onboard and of such articles as mentioned under item (b) of this article and shall observe the following provisions:

(a) Arms and ammunition to be sealed while in port;
(b) Radio transmitter, radio telephone, radar, radio direction finder, echo sounder, sextant, signal rocket, flare signal and signal gun shall not be used in the harbour.

In case of emergency or for despatching urgent messages, such articles as mentioned under item (b) may be used, but report shall be submitted to the local Harbour Authority immediately after using same.

8. After having berthed in port, Masters of foreign vessels shall prepare the foreign vessels Entry Report, Crew List, Passenger List and Import Manifest and submit same to the Harbour Authorities for checking up, at the same time, Masters shall submit the Certificate of Port Registry, Ship's Deck Log Book, Engineroom Log Book and other papers for examination.

Prior to the departure of foreign vessels, Masters are to prepare the foreign vessels Departure Report, List of Crew Replacement (Not required if no change made), Passenger List, and Export Manifest and submit same to the Harbour Authorities for clearance.

9. After the inspection has been conducted by authorities concerned, Crew members of foreign vessels, who wish to go ashore, may apply to the Frontier Inspection Office for landing permit.

10. No passengers and Crew members of foreign vessels are allowed to photograph and/or make sketches in the harbour.

11. While entering or leaving port or shifting berth in the harbour, foreign vessels are not allowed to take any other sounding than that

taken by means of handlead with the consent and under supervision of the Pilot.

12. In case foreign vessels are involved in marine accident along the China coast, Masters are required to submit marine Accident Report to the local Harbour Authorities within 48 hours after vessel's arrival, should the accident happen in port, such report shall be submitted immediately.

13. The Harbour Authorities may prohibit foreign vessels from leaving port under any of the following circumstances:—

1. Violation of regulations governing safety and technical requirements such as those in connection with ship's papers, seaworthiness, stowage, supply and equipment or provisions of other regulations.
2. Failure to pay for any of the following:
   (a) Port charges and expenses;
   (b) Fines imposed upon the vessel on account of violation of laws and regulation.
   (c) Compensation for damage done to harbour structures, navigation aids or to other properties in the harbour.

Foreign vessels may be released upon producing appropriate security sufficient to cover the payment of above items.

14. The Regulations, after being approved by the State Council shall become effective upon promulgation by the Ministry of Communications. The "Provisional Regulations governing the entry and departure of foreign vessels into and from ports of the People's Republic of China" promulgated by the Minister of Communications on the 20th March 1952 shall at the same time be repealed.

Guide to foreign vessels calling at Shanghai

1. Regular channel in Chusan area: Foreign vessels may navigate in the regular channel between Chusan and Raffles Island which is open to navigation, but are not allowed to navigate in other channels between these islands. (By the regular channel is meant the channel from Tongting Island, Steep Island, Elgar Island, Bonham Island, Button Island, Gutzlaff Island to Chang Kiang Kou).

2. Pilotage Area:

(a) Pilotage on vessels entering/leaving port commences from/termination at the position 31° 05′ N. 122° 10′ E. at Chang Kiang Kou.

(b) The pilot vessel, when engaged on her pilotage duty, will anchor near 1 mile east of the entrance buoy No. 54 (31° 04′ 52″ N. 122° 10′ 00″ E.) at Chang Kiang Kou.

3. Anchorage awaiting for the tide:

(a) Foreign vessels may, when the draft at the time of entry is 25 ft. or less, proceed direct to the pilot station (31° 05′ N. 122° 11′ 30″ E.).

(b) In the case of draft at time of entry is more than 25 ft. or it is impossible to arrive at the pilot station at the declared ETA or impossible to proceed direct to the pilot station for reasons of the tide, then the foreign vessels may anchor and wait for the tide near 1 mile N.E. of the Chang Kiang Kou Lightvessel. Such foreign vessels waiting there may telegraph to ask "Penavico" Shanghai for the time of arrival at pilot station and picking up the Pilot.

4. Notice to Mariners:— Chang Kiand Kuo South Channel

(a) The Chang Kiang Kuo Light vessel No. 50 is as described below:
Location 31° 03′ 06″ N. 122° 21′ 12″ E.
Characteristic Flashing every 6 seconds.

(b) Vessels entering or leaving the port should pass the following buoys by keeping them on the vessels left side:
1. Fairway Buoy No 53:
Location 31° 03′ 46″ N. 122° 13′ 51″ E.
Characteristic Group flashing (3) every 6 seconds.
Shape – can shape with red and black horizontal stripes.
2. Entrance buoy No. 54:
Location 31° 04′ 52″ N. 122° 10′ E.
Characteristic Group flashing (3) every 10 seconds.
Shape – can shape with red and black horizontal stripes.

(c) No vessel allowed to enter the dangerous areas bounded by lines connecting the following points:
1. 30° 47′ 15″ N. 123° 03′ E.
2. 30° 47′ 15″ N. 123° 05′ 54″ E.
3. 30° 44′ 45″ N. 123° 03′ E.
4. 30° 44′ 45″ N. 123° 05′ 54″ E.

5. Telegraphic Communication:

Foreign vessels at sea may despatch radiograms to "Penavico" Shanghai via Shanghai Coastal radio station, the particulars of which are as follow:

Call sign: XSG
Calling frequency: 500 kc/s
Working frequency: 458 kc/s
Working Hours: 0000-2400

Answering frequency:		Listening frequency:	
8502 kc/s	GMT 0000-2400	8364 kc/s	GMT 0000-2400
6414.5 kc/s	GMT 2200-1000	6273 kc/s	GMT 2200-1000
12871 kc/s	GMT 0000-1400	12546 kc/s	GMT 1000-1400
4349 kc/s	GMT 1000-2200	4182 kc/s	GMT 1000-2200

6. Large number of fishing vessels around areas 25-30 miles Northeast of North saddle and 20-25 miles East of East saddle, Barren Island and Lukon Island, please navigate with caution.

7. Anchorage for awaiting tide – Changkiang Kuo:

(1) The water area bounded by lines connecting the following points is the anchorage of Changkiang Kuo for vessels awaiting tide:
31° 01′ 00″ N. 122° 24′ 42″ E. 31° 01′ 00″ N. 122° 20′ 00″ E.
30° 56′ 00″ N. 122° 20′ 00″ E. 30° 56′ 00″ N. 122° 24′ 42″ E.

(2) From 25th April 1970, all vessels are strictly prohibited to anchor at any place out of the said anchorage of Changkiang Kuo for waiting tides without obtaining permission (permits) by Shanghai Harbour Authority concerned.

Regulations for Merchant Ships passing through Liau-ti-shan Channel.

For foreign merchant ships navigating through Po Hai Strait, only Laiu-ti-shan channel and Chang-shan channel are open for passage and all the rest channels are prohibited from passing.

1. The water area within a radius of ten nautical miles from Liau-ti-shan Light station and the water area within a radius of seven nautical miles from North Hwang Ching Tau Light station are closed to shipping (navigation), while the channel between these two prohibited areas is to be open to navigation.

2. Information including name of vessel, nationality, call sign, last sailing port, port of destination, speed, colour of hull and funnel and exact time of passing through the adjoining lines of Liau-ti-shan Light station and North Hwang Ching Tau Light station should be submitted to the Dairen Harbour Administration Bureau eight hours before the vessel reaches the afore said line. Foreign vessels may communicate with the Harbour Superintendent directly by addressing Harbour Master Dairen. In case there is any alteration of the expected time of passing through the line owing to bad weather, the vessel should immediately report to the Harbour Superintendent.

3. The calling sign of the Dairen Radio Station is XSZ, calling frequency 500 kc/s, working frequency 462 kc/s, 8694 kc/s, reserve frequency (working) 8678 kc/s. The station operates day and night.

4. Merchant vessels passing through the Liau-ti-shan Channel must display light signals in accordance with the Regulations for preventing collision at sea.

5. The water area within an area of ten miles around Hai Mao Tao situated at Lat. 38° 52′ N. Long. 121° 01′ E. is prohibited from navigation.

Merchant ships are prohibited from navigating in the water area within a radius of ten miles from the Reef Island.

Merchant ships violating the above regulations or navigating in the prohibited areas shall be held responsible for whatever consequences arising therefrom.

Guide to foreign vessels calling at Dairen:

1. When entering or leaving Dairen Harbour please pass through the channel between Daisansantao and Hwangpotsui. You are not allowed to navigate within area 2.5 miles radius from Daisansantao lighthouse 38° 51′ 50″ N. 121° 49′ 20″ E. and one mile radius from lighthouse Hwangpotsui 38° 54′ 14″ N. 121° 42′ 54″ E.

2. After entering joining line between Daisansantao and Hwangpotsui lighthouses, radar, radio transmitter and other forbidden articles are prohibited to use, in case of danger or necessity for transmitting emergency message you must report to Harbour Superintendency Administration immediately after you have used.

3. You are requested to wait for quarantine and Pilot within area bounded by lines connecting the following areas: 38° 57′ 02″ N. 121° 45′ 00″ E. 38° 55′ 30″ N. 121° 44′ 28″ E. 38° 57′ 02″ N. 121° 41′ 11″ E. 38° 56′ 19″ N. 121° 41′ 11″ E.

4. All merchant vessels are informed that vessels passing through the Liau-ti-shan Channel entering or leaving the port of Dairen, besides it ought to observe the regulations relating to the Liau-ti-shan Channel, must keep the way to navigate through the Southern water area beyond the tangent line joining from the Encounter Rock (38° 34′ 21″ N. 121° 38′ 12″ E.) to the outer verge of the Liau-ti-shan prohibited area and the Eastern water beyond Northward meridian line of the Encounter Rock to the continent.

5. Dairen coast radio station.
Call sign: XSZ
Calling frequency: 500 kc/s
Working frequency: 462 kc/s
Answering frequency: 8694 kc/s
Listening frequency: 8364 kc/s
Working day and night.

Guide to foreign vessels calling at Whampoa (Kwangchow).

1. Foreign vessels are prohibited to sail in the water areas of the joint lines among Vanshan, Chaieng and Tankan Islands, except the route as designated hereunder:

(a) The vessels calling at Whampoa from ports other than Hong Kong, should proceed from seaward to Lat. 21° 40′ 44″ N. Long 113° 56′ 00″ E. and set course to 318T, or to Lat 21° 37′ 30″ N. Long. 113° 37′ 45″ E. and set course to 047T; proceed to Lat. 21° 47′ 45″ N. Long. 113° 49′ 32″ E. then alter course to 013T; proceed to Lat. 22° 00′ 00″ N. Long 113° 52′ 34″ E., then alter course to 334T; to Lat. 22° 05′ 36″ N. Long 113° 49′ 36″ E., then straight to Lafsami Pilot Anchorage waiting for Pilot.

The vessels of departure should sail along the opposite course and positions above mentioned, after disembarking Pilot at Lafsami Pilot Anchorage.

(b) The vessels calling at Whampoa from Hong Kong should proceed throught West Lamma Channel to Lat. 22° 08′ 44″ N. Long 113° 55′ 30″ E. then alter course to 295T; to Lat 22° 12′ 04″ N. Long. 113° 47′ 41″ E. then alter course to 204T to Lat. 22° 10′ 36″ N. Long. 113° 47′ 00″ E. then straight to Lafsami Pilot Anchorage waiting for pilot.

The vessels departing for Hong Kong should sail along the opposite course and positions above mentioned, after Pilot disembarked at Lafsami Pilot Anchorage.

2. The position of Lafsami Pilot Anchorage:
Lat. 22° 07′ 20″ to 22° 08′ 30″ N.
Long. 113° 45′ 48″ to 113° 47′ 54″ E.

3. Kwangchow (formerly Canton) coastal radio station:
Call sign: XSQ
Calling frequency: 500 kc/s
Working frequency: 445 kc/s
Answering frequency: 8514 kc/s
Listening frequency: 8364 kc/s
Working day and night.

Guide to foreign vessels calling at Tsamkong

1. Pilot station: North Anchorage of Nau Chow Island.
Lat. 20° 58′ 21″ N.
Long. 110° 36′ 42″ E.
2. Tsamkong coastal radio station:
Call sign: XSJ
Calling frequency: 500 kc/s
Working frequency: 462 kc/s
Answering frequency: 8614 kc/s
Listening frequency: 8364 kc/s
Working day and night.

DAIREN: 38.55 N. 121.40 E.

ALL INFORMATION IS A SHIPMASTER'S REPORT.

GENERAL:

Regulations required to be observed by merchant vessels passing through the Laotiehshan Channel issued by the Harbour Master at Dairen.

1. The area with Laotiehshan lighthouse as centre and a distance of 10 miles as radius and the area with North Hwang Cheng Tao light beacon as centre and a distance of 7 miles as radius are prohibited areas. The middle channel between these two prohibited areas is the navigable channel.

Note: *(a)* Characteristics of Laotiehshan lighthouse (38° 43.7′ N., 121° 07.7′ E.): Lt. GP Fl. (2) ev. 30 sec. 25 m.

(b) Characteristics of North Hwang Cheng Tao light beacon (38° 23.7′ N., 120° 54.3′ E.): Lt. Fl. ev. 3 sec 15 m.

2. Merchant vessels intending to pass through the Laotiehshan Channel must send a wireless message to "Harbour Master, Dairen" at least 8 hours prior to the passage, reporting the following matters:

Ship's name, nationality, signal letters, port of departure, port of destination, speed, colour of ship's hull and funnel and the accurate expected time to pass the line-joining Laotiehshan lighthouse and North Hwang Cheng Tao light beacon.

Note: *(a)* Dairen Coastal Wireless Station: signal letters: XSZ, Calling frequency 500 kc/s.; Working frequency 462 kc/s., 8694 k/cs.; Reserve frequency 8678 kc/s.; Working day and night.

(b) If weather condition should cause any change in the expected time of the passage, the fact must be immediately reported to "Harbour Master, Dairen".

3. Merchant vessels passing through the Laotiehshan Channel must show the lights in accordance with the international regulations for preventing collisions at sea.

4. Vessels are prohibited from passing through the area with Hai Mao Tao (38° 52′ N., 121° 01′ E.) as centre and a distance of 10 miles as radius.

5. Any vessel violating any of the above-mentioned regulations will be held responsible for all consequences.

Rule governing the prohibited passage through the inner area of the Encounter Rock:

Vessels passing through the Laotiehshan Channel as well as entering or leaving the port of Dairen besides observing the rules relating to the Laotiehshan Channel, must keep their course within the area from Encounter Rock (38° 34.2′ N., 121° 38.12′ E.) to the South outer joining line of Laotiehshan prohibited area and the North Encounter Rock to the East of meridian line of continent. Failing which, vessels to be held fully responsible for all consequences.

With exception of Laotiehshan and Changshan Channel of Pohai Gulf, no vessel is allowed to pass through any channel of Miaotao group islands.

Harbour regulations required to be observed by merchant vessels calling at Dairen Port.

When entering or leaving Dairen Harbour vessels must pass through channel between Daisansantao and Kwangpotsue. Vessels are not allowed to navigate within area 2.5 miles radius from Daisansantao lighthouse, position 38° 51′ 50″ N., 121° 49′ 29″ E. and 1 mile radius from Kwangpotsue lighthouse position 38° 54′ 14″ N., 121° 42′ 54″ E.

After entering joining line between Daisansantao and Kwangpotsue lighthouses, radar, radio transmitter, radio-telephone, radio direction-finder, echo sounder, range-finder, sextant, firearms, flare signals and rockets of all kind are prohibited to be used.

In case danger occurs or vessel has to send any emergency message, the above-mentioned apparatus may be used, but vessels must report to Harbour Superintendency Administration immediately after using.

Vessels must wait for quarantine and Pilot within area as follows: 38° 57′ 00″ N., 121° 41′ 00″ E. – 38° 57′ 00″ N., 121° 46′ 00″ E. – 38° 56′ 18″ N., 121° 41′ 00″ E. – 38° 55′ 00″ N., 121° 46′ 00″ E. In case this area is occupied, surrounding area may be used.

DOCUMENTS:

First Port	*Subsequent Ports*
2 Maritime Declaration of Health.	0
2 Reports of Entry for foreign ships.	2
6 Crew Lists.	5
2 List of Specified Articles.	0
1 Report of Articles restricted for use in port.	1
4 Passenger Lists (if any).	0
1 Ship's Particulars for Identification.	1
2 Cargo Manifests.	1

The List of Specified Articles (money, gold and silver, but not cigarettes and spirits) is taken from port to port. All forms to be Chinese.

GENERAL INFORMATION: On Dairen (Ta-lien) – B.A. Chart No. 3694:

In the fairway the turning basin and along Pier No. 4 East-side, at least 38 ft. of water. Length of the pier about 1,500 ft. Several berths for vessels up to 34 ft.

It was not possible to obtain information on the cranes, and they were not marked with SWL, so the following figures are only estimated:

Pier No. 1 W.-side =4 cranes about 5 tons.
Pier No. 2 E.-side =3 cranes about 3 tons.
Pier No. 2 W.-side =4 cranes about 4 tons.
2 cranes about 10 tons.
Pier No. 3 E.-side =2 cranes about 3 tons.
Pier No. 3 W.-side =4 cranes about 2 tons.
6 cranes about 10 tons.
Pier No. 4 E.-side =6 cranes about 6 tons.
Pier No. 4 W.-side =3 cranes about 6 tons.
One floating crane with 100 tons capacity.
About 8 tugs, 600–1,000 h.p. tugs are also used as pilot boat and to bring information and boarding party out to vessels at the anchorage.
One fresh water barge.
Three oil-barges, about 150, 500 and 800 tons.
Medium size shipyard, building vessels up to about 25,000 tons.

HSINGKANG

SHIPMASTER'S REPORT. (End 1974.)
B.A. Chart 2653. China Sea Pilot No. 32, Vol. 111.

NAVIGATION: The lighthouse in position 38° 55′ N., 117° 59.5′ E. was visible at a distance of 10 miles, flashing every 10 secs., and is surrounded by 4 units buoys at a distance of about 180 m. from the tower. The Fairway to berth installations is being dredged, but presently appears to permit a draft of only 25 ft. LW with a draft of 27 ft. it was necessary to await HW before sailing.

PILOTAGE: Pilot and Port Authority Agent board at the anchorage. Pilot boat is large tug which may also be used as an ice-breaker, and has black hull with white superstructure. Pilots are careful and efficient, and speak some English. No VHF or HF radio facilities are available to the Pilot.

MAX. SIZE: See "Navigation". All berths are suitable for vessels of up to 9 m. draft.

BERTHING: The harbour is under considerable development, and at present has availability for about 15 or more vessels. All berths have rail connections and are approachable by trucks. There are no sheds at the berths and refrigerated stores are only available at Tientsien to where they transported by train, lighters or trucks. Berths are equipped with rubber fendering, suitable for all requirements.

TUGS: Six large tugs, and three smaller tugs.

CARGO GEAR: There are some cranes available and in operation with a lifting capacity of about 10 tons. There are also about three floating cranes with capacities of up to about 80 tons. Where no cranes are available, vessels are required to load and discharge with ship's gear.

FRESH WATER: Connections at some points have still to be made, but otherwise fresh water is available at all berths. Due to the very long waiting time for berthing and the lack of some of the connecting points, it is advisable to arrive with full F.W. tanks.

PROVISIONS: It is essential to check all provisions when delivered since they may be of poor quality. Rejected goods are accepted back without problems.

SHANGHAI

SHIPMASTER'S REPORT (End 1974).
B.A. Chart 1602. China Sea Pilot No. 32, Vol. 111.

NAVIGATION: Marine flashing light Yangtse North – the position quoted in the Nautical Light Service 11 agrees with Pilot's information. Marine flashing light North Saddle – very weak, signals KK. Marine flashing light Gutzlaff island – out of service.

The wreck shown on the chart between the entrance of the Wangpoo into the Yangtse Kiang and buoy 51 (new numbering) has been removed.

On the Yangtse Kiang there has been considerable dredging, particularly between buoys 54 and 51–3 (new numbering) in order to clear the Bar. According to the Pilot, until the present time, only vessels with less than 25 ft. draft could pass at slack water.

Following the Pilot's disembarkation, vessels proceeding North-bound should make an Easterly course to 31° 05′ N., 122° 31′ E. and then alter course Northerly, Chi-ku Chiao Lt. (Amherst Rocks) should be passed at a distance of about 6-8 miles.

Buoy No. 51-0 (Entrance) is in position at 31° 04.9′ N., 122° 10′ E. Same signal. Buoy No. 51 (Fairway) is in position at 31° 03.8′ N., 122° 14′ E. Same signal. Buoy at 31° 12.8′ N., 122° 19.1′ E. Non-existent. Buoy at 31° 07′ N., 122° 22.5′ E. Flashing green every 3 seconds. Buoy Nos. 54 (now 51-2), 57 (now 51-3), 58 (now 53), and 61 (now 54) are in process of positional alterations. Characteristics are not as on chart. Shaweishan Lt. Gp.Fl. (2 and 1) 12 seconds was observed. Numbering of the buoys on the Yangtse is now changed, and the numbers given on the chart no longer apply. The buoys are spread-out in accordance with the depth of the river. Lt. Vs. No. 60 (old number) now carries the words Jui Dan, and is in approximately the same position. Lt. Vs. Ch'ang Chiang K'ou was replaced end-1974 for repairs, by a buoy with Radar reflector.

DOCUMENTS: Clearance takes place quickly. On arrival the following documents are required:

6 Crew Lists.
Health Clearance Certificate.
List of Effects.
Declaration of Navigational Equipment. Make, type and quantity of Sextants, Binoculars, Radio Station Equipment and Emergency Signal, must be quoted.

If no pre-printed Chinese Forms are on board, the Authorities will accept the vessel's own forms, and will themselves carry out the transfer of information to their own documents.

When proceeding to another port within the People's Republic of China, only the Seamen's Books, Landing Permit and Seamen's Club Purchasing Cards are required. The Authorities will still require a list of Chinese currency remaining on board but only wish to know the total sum and not the amounts held by individual Crew members.

PILOTAGE: Pilots are requested via Shanghai Coastal Radio. Installation of a VHF service is planned within the next three years, but at present the pilot boat is not fitted with VHF, and no radio service is available for pilotage. Installation of Port Radar Service is planned within the next five years, but is presently not available.

Shanghai Harbour Control is equipped with VHF, and Pilots communicate with Harbour Control on Channel 10 concerning ship's movements. Traffic is passed in the Chinese language only and may be operated by the Pilot. A total of up to five Pilots board the vessel together with the Agent of the Harbour Authority. The Pilot boarding position is approximately 31° 05′ N., 122° 01′ E. The main pilot craft is usually at anchor in that position, and the Pilots board from small launches. The main pilot craft corresponds closely to those used in Germany and the Netherlands, and has white superstructure and a white hull. Pilots are available day and night. Pilots are efficient, speak some English, and control the vessel most carefully. After the Pilot's boarding, no further use may be made of the vessel's own charts, and the Pilot brings his own charts with him.

ANCHORAGE: The main quarantine and inward clearance zone is now on the Yangtse in the area of 31° 04′ N., 121° 06′ E. and is of sufficient area to accommodate about 15 deep-sea vessels. The anchorage is good with sufficient depth for loaded vessels. The two quarantine areas shown on B.A. Chart 1602 (October 1974) have been abolished, and a new zone has been established due East of the Lt. Vs. Ch'ang Chiang K'ou, with middle point 10 miles due East of the Lt. Vs. extending about 5 miles by 5 miles.

A Notice to Mariners issued by the Shanghai branch of the China Ocean Shipping Agency, and dated December, 1974, reads as follows: "As Woosung Quarantine Anchorage is effected by the current of Changkiang, vessels anchored there are apt to drag anchor if no proper safety measures have been taken or there is negligence in keeping watch, thus resulting in grounding or collision with other vessels. To ensure safety of vessels at anchor, we hereby draw your attention to the following:

(1) Vessels waiting for berth or for other reasons drop anchor at Quarantine Anchorage, someone must be appointed to keep watch of the anchor.
(2) To have no less than 6 (six) shackles of anchor chain in the water.
(3) On the following occasions, watch should be re-inforced and, at the same time, have the engine ready against accidents:
    (a) Bad weather.
    (b) Wind force 6 and upwards.
    (c) Foggy and misty weather.
    (d) Stormy weather.
    (e) Spring tide.
(4) If a vessel is dragging anchor or any accident has happend to a vessel anchored at anchorage, the Captain of the vessel should report to this Agency *immediately*, enabling this Agency to make arrangement for sending Pilot on board or take other effective measures.

RESTRICTIONS: Permission to swing-out lifeboats must be obtained in writing from the Port Authority, through the Agent. If the request is made 24 hours in advance stating that the vessel's own country's laws require it to be done, then permission is given the same day, for the operation to be carried out the following day. Lifeboat engine trials are not permitted in view of the very intensive traffic on the Wangpoo, and the very strong current. No filming is permitted in the port area, but is permitted in the town with the exception of military installations. Electronic navigational equipment, navigational aids, echo-sounding equipment and radio may not be used except with the Pilot's permission during the approach to port.

MOORING: Mooring to buoys takes place with assistance of tug and mooring craft. Pilots manoeuvre vessel to forward buoy with use of the anchor which remains paid-out after tying up, and is only raised prior to sailing. Approximately one to one-and-a-half shackles used. Vessel is moored to buoys with four lines fore and aft, and slip-wires. Lines are paid-out in equal lengths either side through the mooring leads and not through the Panama hawse.

TUGS: When proceeding from buoys to alongside berth, tugs provide assistance in un-mooring, but not in berthing which is conducted by Pilot without tug assistance. When leaving the berth, tugs are used to assist, and use their own lines.

BERTHING: Pier installations are partly damaged and have no fendering. If possible, vessels should have their own cork or wooden fenders.

CARGO GEAR: Loading and discharging is by means of ship's gear. There are three heavy-lift floating cranes with lifting capacities of about 130 tons, and of modern construction. A number of mobile cranes are available with lifting capacities of about up to 5 tons.

CURRENCY: For vessels tied to buoys there is an hourly boat-service to the Seaman's Club where foreign currencies may be changed into Chinese Yen, and where purchases may be made.

PROVISIONS: Stores, alcohol and cigarettes are not sealed. Fresh provisions are available depending upon time of year. Sufficient quantities are available including beer, poultry, meat and fish. Ample advance notice is required.

TELEPHONES: Telephone calls to foreign countries are possible either from the Agency or from the main Post Office in Nanking Road.

TAKU BAR: 38.56 N. 117.53 E.

ALL INFORMATION IS A SHIPMASTER'S REPORT.

GENERAL: Guide to foreign vessels calling at Taku Bar (Hsinkang, Tangku and Tientsin) issued by the Harbour Master at Tientsin.

1. Foreign vessels entering Pohai Gulf are only allowed to pass through Changshan Channel and/or Laotiehshan Channel. If the latter way is taken, the vessel must send a wireless message to "Harbour Master, Dairen" for directory 8 hours prior to passage. It should be noted that no other Channels are permitted for navigation. (Also see "Dairen").

2. Vessels passing Laotiehshan Channel for Dairen must make a detour along the East of "Encounter Rock".

3. Position of sunken dredger "Se Ho" is at 38° 31′ N., 119° 10.5′ E. Vessels should keep far away from the above-mentioned area during navigation.

4. Position of Taku light vessel is at 38° 56′ 51″ N., 117° 55′ 33″ E. Vessel may anchor N.E. of the light vessel according to different condition of vessels arrival draft, to wait for Pilot.

5. Vessel may send radiogram to "Penavico Hsinkang" (via Hsinkang Coastal Radio Station XSV, calling frequency 500 kc/s., working frequency 445 kc/s., reserve frequency calling 8630 kc/s. Listening 8364 kc/s., working hours 0000/2400), giving exact ETA also fore and aft draft, before entering Pohai Gulf.

6. The pilot station is at Tangku. Any foreign vessels, according to Harbour Regulations are required to have a Chinese Pilot, when entering or leaving the Port of Taku Bar, Hsinkang, Tangku and Tientsin. The Pilot will board the vessel at Taku Bar anchorage after receipt of exact ETA given by the Master.

The Salation light beacon in position 38° 56′ 16″ N., 118° 30′ 38″ E. shows a white flash every 3 seconds and visible at a distance of 13 miles.

Regulations issued by the Harbour Superintendent's Office.

1. All foreign vessels (hereafter referred to as vessels) entering or leaving the port of Tientsin (hereafter referred to as this port) are required to observe strictly the provisions of the Regulations Governing the Entry and Departure of Foreign Vessels into and from Ports of the People's Republic of China (hereafter referred to as Regulations Governing Foreign Vessels) and of the Port Regulations of Tientsin.

2. On arrival at this port, vessels are prohibited to use the articles enumerated in Article VII of the Regulations Governing Foreign Vessels. Should it be necessary to repair any of the articles enumerated in Item 2 of the same article, permission to do so must be obtained beforehand from the Harbour Superintendent's Office.

3. Articles placed under seal shall not be used and the seals shall not be removed without permission. Should any of the paper seals be found falling off, the fact shall be reported to the Harbour Superintendent's Office immediately.

4. Whilst in port, vessels are not allowed to dress ship or hoist flag at half mast without the permission from the Harbour Superintendent's Office.

5. Vessels in port desiring to undertake any of the following work must first apply in writing to the Harbour Superintendent's Office. After permission is obtained the work can then be carried out at the appointed place.

(a) Lifeboat practice;
(b) Overhauling boiler, main engine, steering engine or windlass;
(c) Engaging in welding work or burning anything on board;
(d) Pumping out ballast water regardless of whether the water is contaminated with oil or not.

6. After a vessel's arrival at this port, sounding, survey sketching, photo-taking, fishing and swimming are strictly prohibited.

7. After arrival at this port, vessels are strictly prohibited to dump ballast materials, coal ashes, garbage, rubbish and mud, or to discharge dirty oil or oily bilge water into the harbour. It is also prohibited to wash double bottom oil tanks or oil deep tanks inside the harbour.

8. Vessels in port must provide secure gang ladders or gang planks with rail or manropes for passengers, crew and all workers to embark or disembark. All gangways or gang planks are to be provided with lights at night.

9. Vessels lying alongside the pier should properly cover up all their exhaust valves and discharge openings on the ship's side facing the pier.

10. Garbage bins or drums with tight covers must be provided on board. The bins or drums should not be filled to overflow. When the garbage-collecting cart comes daily to the ship to collect the garbage and rings the bell on its arrival, the ship should arrange to deliver the ship's garbage into the cart.

11. If, owing to some special reasons, a vessel desires to return to this port after departure, the Master should first telegraph to the Harbour Superintendent for permission and must act according to the instructions given.

Frontier Inspection Station

1. All the officers and crew of a foreign vessel and the passengers on board should produce their passports or other certificates to the Frontier Inspection Station and submit to the inspection of the Station.

2. When the ship's crew or passengers in transit desire to go ashore, the Master is to apply to the Frontier Inspection Station and the passport endorsing authorities, respectively, for landing permits.

3. A landing permit is valid only at the port where it is issued. On the ship's departure, all landing permits for the crew should be returned to the Frontier Inspection Station for cancellation.

4. The time limit for going ashore is from sunrise to midnight. When any crew member wishes to stay overnight on shore, the Master should apply for permission on his behalf. Staying overnight ashore without permission is not allowed.

5. All laws and regulations of the People's Republic of China must be observed.

Customs

1. It is forbidden to carry the national currency of the People's Republic of China into or out of the country. Violation of this rule will render the money in question liable to confiscation.

2. The Master or crew desiring to exchange foreign currencies, gold or silver for Chinese currency should so declare to the Customs and, after the exchange, produce the bank's Exchange Slip for inspection.

3. The Master or crew desiring to carry articles ashore or aboard should report to the Customs for permission and the articles concerned are subject to Customs inspection. Sale of articles taken ashore is prohibited.

4. Exposed films or plates should be developed and submitted to the Customs for inspection before they are allowed to be carried into or out of the country.

5. Places sealed up by the Customs are not to be opened without Customs permission.

Quarantine Office

1. During a vessel's stay in port, if any person on board is found to be in high fever or to be feverish continuously for several days (or with the swelling of the lymphatic gland), or to suffer from acute rash on the skin with or without fever, or to suffer from acute diarrhoea and in a state of collapse, or to suffer from jaundice with fever, the matter should first be reported to the Quarantine Office. The patient can go ashore for medical treatment only when he has been examined and allowed to do so by the quarantine officer.

2. Effective rat-guards or other rat-preventing devices should be fixed on all mooring ropes.

3. Gangways and gangplanks are not allowed to be put on to the wharf when not required. Should they be used at night, strong electric lights should be provided.

4. Should any dead rats or mice be found or any rats or mice caught on board a vessel, the fact should be reported to the Quarantine Office for the necessary inspection to be made.

The above regulations are in force at most Chinese ports.

In the fairway and on the West side of the first pier vessels may pass on 34 ft. draft. Length of pier about 1,500 ft.

Another pier is under construction, and when ready will have berths for five vessels of about 600 ft. length. The depth alongside will be 34 ft.

On the first pier 7 cranes with a capacity of about 10 tons. It was not possible to obtain information on the older berths. Four tugs with up to 1,000 h.p.

All bunkers to be brought in from Dairen.

TSINGTAO: 36.03 N. 120.20 E.

ALL INFORMATION IS A SHIPMASTER'S REPORT.

APPROACHES: 1. Approaching from the S.W. on the authorised route in clear water, the following observations were made.

(a) Cape Yatall Lt. Range 20 n.m., not sighted at 10 n.m.
(b) Tai Kungtan Lt. Range 15 n.m., not sighted at 15 n.m.
(c) Ynui Shan Lt. Range 14 n.m., sighted at 15 n.m.
(d) Outer Harbour Fairway Buoy, sighted at 4 n.m.

2. When abeam of Tai Kungtan orders were received to proceed to inner quarantine anchorage.

3. All Inner Harbour buoy lights characteristics did not agree with the recent chart.

DOCUMENTS: Port Officials board by tug using the gangway. The following papers are required.

4 copies of the Ship's particulars.
4 copies of the Crew List.
2 copies of the Crew Manifest with all foreign currency duly noted.
1 copy of the Health Declaration.
All Identity Cards and Smallpox Certificate.
2 copies of the letter requesting a hold survey.
9 copies of the Notice of Readiness.
Usual ship's papers, including Deck and Engineroom Logs.

Delays caused by:

(a) Crew members not holding I.D. Cards.
(b) Alterations/illegible Smallpox Certificate.
(c) Insufficient copies of the necessary papers supplied at Hong Kong.

MUSTER: After the above had been inspected, all officers and ratings were required to muster in the saloon. A search of all spaces was then carried out. Each person was required to be compared with his I.D. card, those not possessing one were eventually cleared on discharge books. The Authorities will not recognise passports held by Spanish Nationals.

DETAILED INFORMATION: Required with regard to the ports at which stores and water have been obtained and a list of the ports visited in the previous six months.

Currency: Available in the form of Chinese Yen, rate 5.202/£ST.

Cargo: (a) Delivery alongside is very poor. *(b)* Condition of cargo received on board is good. Temperatures of hard frozen cargo are well down. *(c)* Damaged cartons are replaced. *(d)* Stowage, good.

OUTWARDS CLEARANCE: *(a)* After all B/Ls have been signed and five copies of the vacant space/space used handed over. *(b)* Muster of all persons takes place in the saloon. *(c)* I.D. cards produced and shore passes handed in. *(d)* Vessels searched. *(e)* All foreign currency spent ashore has to be accounted for. Totals of money drawn and returned to Agent produced to the Customs.

DEPARTURE: Vessel leaves the berth and anchors at the Inner Quarantine Anchorage. Guards and Port Officials leave after "Clearance" papers have been handed over. Pilot leaves, vessel proceeds without the aid of a Pilot along the authorised route.

NOTES

Please also advise Shipping Guides (Services) Ltd.

CHRISTMAS ISLAND, Indian Ocean: 10.25 S. 105.43 E.

PORT LIMITS: The area of sea in and adjacent to Flying Fish Cove in the Territory of Christmas Island enclosed by a line commencing at a point where a line bearing 270° True from the flagstaff at Government House intersects the coastline of Christmas Island at MHW thence bearing 270° True for a distance of 2 km. thence bearing 360° True for a distance of 2 km. thence S.E. by a straight line to Rocky Point thence generally S.W. along the coastline of Christmas Island at MHW to the point of commencement.

DOCUMENTS:
Port Clearance.
2 Crew Lists.
2 Passenger Lists.
2 Manifests.
Health Certificate.

PILOTAGE: Pilot boards 1 mile West of Smith Point.

ANCHORAGES: Nil.

RESTRICTIONS: Daylight entry only.

MAX. SIZE: Length 630 ft., breadth 90 ft., draft 35 ft.

HEALTH: Radio Pratique granted whenever possible. Information required: date of departure, last port of call, number of persons aboard, number of passengers disembarking, state of health. Contact port health before arrival in event of suspected disease. No automatic pratique.

RADIO: All cables to Christmas Island Radio, VIY.

VHF: Channel 16, 156.8 m/cs., range 35 to 45 miles. Harbour Master may also be contacted on 2182 or 2201 kc/s. by arrangement through VIY.

TUGS: None.

BERTHING: Berthing daylight hours only. In most cases port anchor to be disconnected from cable prior to arrival; mooring gangs provided.

BULK CARGO HANDLING: The bulk loading berth is served by two cantilevers each capable of delivering rock phosphate at an average rate of 1,500 t.p.h. Bottom of telescopic chutes when fully raised are 50 ft. above sea level at high water springs.

STEVEDORES: Supplied by Agents.

MEDICAL: No notice required for medical attention. Hospital facilities available throughout 24 hours. Inoculations required: smallpox, yellow fever (from endemic areas), cholera (from S.E. Asian ports). International Vaccination Certificates required.

TANKERS: Furnace and diesel oils pumped ashore simultaneously through floating pipe-lines, 8 in. and 6 in. diameter respectively.

DENSITY: 1025 constant.

FRESH WATER: Very limited quantities supplied, only in emergency.

FUEL: Very limited quantities supplied, only in emergency.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: All beams and hatches to be handled by ship's crew.

CERTIFICATES: Register of Cargo Gear and associated Test Certificates.

CARGO GEAR: To comply with requirements of the Australian Navigation Act, 1912–58.

IDENTIFICATION CARDS: Not required.

CONSULS: Administrator's Office performs some consular functions.

REPAIRS: No facilities exist.

REPATRIATION: Possible.

AIRPORT: There are 3 flights a week to Australia and flights to Singapore are presently being negotiated.

TIME: Local time GMT plus 7 hours – constant.

HOLIDAYS: New Year's Day; Australia Day (26th January); Hari Raya Haji; Chinese New Year – two days; Good Friday; Easter Monday; Queen's Birthday; Territory Day (1st October); Hari Raya Puasa; Christmas Day; Boxing Day.

No work performed on New Year's Day, Hari Raya Puasa, Good Friday, 1st day of Chinese New Year and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 90; Ambulance 99; Fire 88.

TELEPHONES: Placed aboard when required by port authorities. No charge.

GENERAL: Ships may be ordered to leave berth at short notice if weather deteriorates.

AUTHORITY: Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Colombia

GENERAL:

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the P flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports, with the exception of Buenaventura, are open 24 hours a day. Buenaventura can only be entered by day.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port official and ships officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ships crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkempt appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: Colombia GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan)

DOCUMENTS:

Clearance from last port.
Ship's Register.
Load line.
Safety radio.
Safety equipment.
Safety construction.
Cargo gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger baggages.
4 List Port Mail.
1 Sole Document.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: Cable Agent 24 hours prior arrival advising ETA. Pilot boarding position Lat. 11° 06′ 50″ N. Long. 74° 52′ W. Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kc/s. and VHF Channel 16. 2 pilot boats speeds 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a min. of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. on account of silting conditions of the river, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Smallpox Vaccination Certificates and Uro Fever Certificates, also Deratisation Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50-ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: All grades available for delivery by barge.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

DEVELOPMENTS: Increasing pier size to 1,100 ft. Two more berths under construction, completion date 1977.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:

Austria	Finland	Nicaragua
Belgium	France	Norway
Bolivia	Germany	Panama
Brazil	Gt. Britain	Peru
China	Guatemala	Portugal
Costa Rica	Greece	Sweden
Chile	Honduras	Switzerland
Denmark	Italy	Spain
Dominican Republic	Jordan	U.S.A.
Ecuador	Mexico	Venezuela
El Salvador	Netherlands	

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 kms. from city. Airport served by major airlines.

TIME: GMT – 5 hrs.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December. No work on 1st January, 12th April, 1st May and 25th December. Overtime arranged on remaining holidays. Working hours 0700–1100 and 1300–1700. No work performed after 1600 24th December and 31st December. Local holidays on 26th and 27th February (Carnival) when no work after 1600. Labour available during Carnival but generally erratic. Work performed from 2300 hrs. Saturday till 0700 hrs. on Mondays.

POLICE/FIRE/AMBULANCE: Fire, 12341 or 12345 or 62511; Ambulance, 40757; Police (radio patrol), 04; Department of Security, 16202 and 25873.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives. If explosives on board vessel not allowed berth.

BUENAVENTURA: 03.53 N. 77.05 W.

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:

Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:
3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.
Destined to the Custom House:
3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.
Destined to the Health Doctor:
Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).
Destined to Immigration Authorities:
1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).
Destined to Agents:
1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:
(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 47′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 or 20 hours before reaching port, Master must cable separately to Agents,*to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kc/s. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory.

ANCHORAGE: Marked by Buoy No. 7, located Lat. 03° 53′ 59″ N., Long. 77° 04′ 04″ W.; depth from 33 to 70 ft. and distance from wharves approximately 1,000 yards.

RESTRICTIONS: Max. draft for crossing bar is 28 ft. one hour before/after high water. Bar is located in position 03.48 N., 77.19 W.

MAX. SIZE: No restrictions on the length of vessel, depth alongside wharf approximately 24 ft. low tide, up to over 26 ft. high tide.

HEALTH:
(a) As soon as vessel anchored by Pilot within bay, port authorities including doctor, will board by means of ladder which must be lowered when port area entered.

(b) In case of sickness on board, Master must advise in order doctor may determine whether vessel will be under quarantine or not. This will apply even if vessel arriving from a port of the same country.

(c) Time-table for meeting vessel: Ordinary or regular time – ordinary time: 0800/1200-1400/1800 hrs.; overtime – 0700/0800-1200/1400-1800/2200 hrs. Sundays and holidays, overtime.

(d) After 2200 hrs. and up to 0700 hrs. of following day it is not possible to make arrangements for meeting vessels, unless in emergency.

RADIO: (Also see "Pilotage"). Port has receiving-transmitting radio station Buenaventura/Colradio HKC. For listening and transmitting there are following frequencies:

Listening	*Transmitting*
8354 to 8374 kc/s.	8574 kc/s.
12531 to 12561 kc/s.	13087.5 kc/s.
6265 to 6280 kc/s.	6386.5 kc/s.

In emergency: Listening: 500 kc/s. Transmitting: 441 kc/s. Station operates 24 hours a day.

TUGS: Normally only required for berthing. Tug operation handled by Pilot. Generally tug service consists of pushing from stern or bow as required. When necessary to use ropes, they must be supplied by vessel. 4 tugs of 1,200 h.p. each, 1 of 350 h.p. and 1 of 60 h.p.

BERTHING: Main wharf 2,126 m. long, divided into two sections, one for import cargo and one for export cargo. Facilities exist for handling container traffic.

Berthing arranged by turn according to time of anchoring in bay for each vessel. Tidal currents exist alongside berths.

STEVEDORES: (See "Pilotage"). Port has at present time 80 gangs of 16 men each. The working hours during ordinary or regular time are from 0800/1130 and from 1400/1730. Overtime from 1800/2400 and from 0000/0800, and 1200/1400 (24 hours are worked). No work from 2300 hrs. Saturday until 0700 hrs. Monday.

MEDICAL: Agent must be given advance notice of urgent medical attention. Properly equipped hospital. All members of crew and passengers must have International Certificates of vaccination against smallpox.

TANKERS: Independent oil pier with capacity to accommodate vessels of medium size. Four 8 in. hoses for discharge of petroleum products, and two 6 in. hoses for unloading chemicals. Average rate of discharge of gasoline is 5,000 b.p.h. (approx.) Fuel oil and chemicals 1,500 b.p.h.

DENSITY: 1012 (approx.) average.

FRESH WATER: Drinking water unlimited quantity. Delivered through hose from end of wharf. Rate of delivery: 6 t.p.h.

FUEL:
(a) Two kinds of fuel, marine gas oil and bunker "C" fuel. Characteristics of gas oil: gravity 33.0 to 60° F. Specific gravity: 8602. Characteristics of bunker "C" fuel: gravity, 13.2 to 60° F. Specific gravity, 9779.

(b) To take bunkers vessel must berth between warehouse 2 to 9, and for delivery of gas oil between warehouse 1 to 5.

(c) Rate of delivery (approx.), 250 b.p.h. for bunkers and 700 b.p.h. for gas oil.

(d) Deliveries depend on quantity available when order placed, consequently Agent must know well in advance vessel's requirements.

(e) Cash payment according to prevailing prices at time of delivery; otherwise, according to contracts between Shipowner and supplier.

FIRE PRECAUTIONS: Fire station within port installations with proper equipment. In city also another fire station, co-operating if necessary.

DEVELOPMENTS: Improvement in wharf installations, warenouses and equipment and dredging is scheduled to deepen the depth alongside wharf.

WATCHMEN: Service necessary both by crew members and Agents personnel. There is no established body of watchmen; the steamship agencies carry out this work with their own personnel with previous request by Master. The port has a port police body and Custom house guards which co-operate in vessels' watch.

OPENING/CLOSING HATCHES: All Agents have special gangs to handle this operation and to fix the vessel's rig for discharge and/or loading. These personnel permanently stand by on board on account of climatic conditions of port with frequent and sudden rains. No prohibition against crew carrying out such operations when charter parties are involved and which stipulate that such operation must be done by crew. It is known from experience, however, that vessel's personnel are not, on occasions, sufficient to do this work.

CUSTOMS ALLOWANCES: No regulations establishing quantities which each crew member may have outside bond, but must not be excessive order avoid problems with authorities.

CARGO GEAR: Ship's gear used. Also see "General".

IDENTIFICATION CARDS: Agent will supply special cards to crew and passengers in transit so that they may go ashore. Cards valid for entering and leaving port installations and for identification with the Immigration authorities. Must be returned before vessel departure.

CONSULS:

United States	Tel. 2501	Holland	Tel. 2631
Panama	,, 2250	Bolivia	,, 2589
Ecuador	,, 2690	Mexico	,, 3589
Sweden	,, 3270	Spain	,, 2562

REPAIRS: According to port regulations vessels must at all times be ready with engines to sail, consequently repairs of engines not allowed when ship berthed at wharf. No prohibition against minor repairs on deck. When engine or deck repairs taking a long time are necessary, vessels not being loaded and/or discharged simultaneously with repairs must go to anchoring ground, since crowding of vessels at port does not permit vessel being inactive occupying space while other vessels are anchored waiting for berth.

REPATRIATION: Authorities render co-operation for change of crew and arrangements of repatriation in co-ordination with ship's Agent.

AIRPORT: Located 18 km. from Buenaventura. Serviced by a regular airline, Aerotaxi, which has several daily flights from Buenaventura to Cali and a daily flight from Buenaventura to Bogota. Small planes which take 40 minutes from Buenaventura to

Cali and 1.5 hrs. from Buenaventura to Bogota. Airport is small and has no facilities for international flights. Agent in charge of the repatriation of a crew member must handle necessary connection in Cali or Bogota, where there are international airports.

TIME: GMT minus 5 hrs. Permanent.

POLICE/AMBULANCE/FIRE: A voluntary firemen corps in the city. Alarm, tel. 2222; Guard, tel. 2223; Firemen of the Maritime Terminal, tel. 2830; Ambulance, tel. 2830; Police, tel. 2738.

GENERAL: Provisions available. Cable service to all parts of the world. Telephone and telex service inside country and to foreign countries through Bogota. Weather conditions: generally rainy. Explosives: if the vessel is transporting dynamite and detonating caps they are placed in separate lighters, and armed guards are required on board any vessel transporting explosives. In such cases, the vessel must anchor in front of Buoy No. 9 and discharge to lighters during daylight. No vessel can berth at the wharf if transporting explosives, and only permitted with dynamite in closed hatches, which will not be opened at the wharf according to government regulations. Port is equipped with following shore cranes: 2×80,000 lb. capacity (mobile), 1×60,000 lb. capacity (mobile), 3×20,000 lb. capacity (mobile), 2×14,000 lb. capacity (mobile), and 4×10,000 capacity (3 mobile and 1 fixed). Floating cranes: 1×45 tons capacity.

Lighters available: 3 with following characteristics:

Size *Length/width*	*Capacity*	*Type*
1-24.40× 9.45 m.	200 tons	Flat surface
2-34.40× 7.60 m.	150 tons	Flat surface
3-38.80×10.60 m.	150 tons	Flat surface

No refrigeration space available.

SHORE LEAVE: Permitted (with ID cards).

DELAYS: At anchorage in Bay average delay of one day while waiting for berth. On account of the rainy condition of the port, discharge or loading is at times stopped up to 12 hrs.

CARTAGENA (Incl. Mamonal and Ecopetrol): 10.26 N. 75.33 W.

DOCUMENTS:

Sailing Permit from previous port.
1 Sole Document.
5 Crew Lists (1 bearing expiration date of vaccination against smallpox, for Health Dept.).
4 Lists Crew's Personal Effects.
4 Lists Provisions and Equipment.
5 Lists Passengers disembarking (if any), or List of Passengers (negative).
5 Lists Passengers in transit (if any) or otherwise (negative).
4 Lists Mail, if any, or negative.
5 Sets Sobordos or Manifests of each port with respective Bills of Lading.
3 Sets Sobordos of each port with 2 freighted Bills of Lading, in U.S.$.
2 Sets Sobordos of each port without Manifests.
3 Tally Books of cargo for each port.
4 Manifests in ballast (when there is no cargo for the port).
For inspection: Registration Certificate, Certificate of Health.

PILOTAGE: Name of pilot station: "Estacion de Pilotos en Bocachica." Radio: VHF Channels 16, 6 and 26 with 24 hour service weekdays; Saturdays until 2300 hrs. and Sundays from 0700 to 1500 hrs.

ETA must be given 24 hours in advance.

Pilot boats: 2 steel launches of 135 h.p.

Sound signals: merchant vessel, three blasts (whistles). Tankers, four blasts (whistles).

Pilot's area of approach: 0.5 mile from Buoy No. 1.

Anchorage area in foul weather: anchor at Zone No. 1 off Buoy No. 5.

Dimensions of entry channel: width 500 ft., depth 40 ft.

ANCHORAGE: Anchorage zones available at Castillo Grande and at Manzanillo. Depths up to 90 ft.

RESTRICTIONS: Entry day or night.

MAX. SIZE: Cartagena: length 600 ft., beam 79 ft., draft 30 ft. (for berthing).

Tankers: length 850 ft., beam 110 ft., draft 38 ft. Tankers anchor and berth in port of Mamonal, within bay, using same approach.

HEALTH: Doctor requires the Crew Lists with data of vaccination against smallpox. International regulations in cases of contagious sickness or epidemic are carried out.

RADIO: See "Pilotage".

TUGS: Escort vessel when berthing and will assist if required. Use of tugs compulsory for all vessels over 250 net tons.

No tugs required for tankers berthing at Mamonal.

BERTHING: Port has two piers: Berth No. 1, outside length 202.60 m., depth 31 ft.; inside length 184.76 m., depth 30 ft.; Berth No. 2, outside length 184.76 m., depth 28 ft.; inside length 184.76 m., depth 28 ft. 24 hours service. Berthing shifts or turns: 1st, Passenger vessels (Tourist). 2nd, Cargo vessels with live animals. 3rd, Vessels with mail. 4th, Cargo vessels according to arrival in port.

CRANE: 30-ton floating crane available.

STEVEDORES: Agents must request stevedores 24 hours in advance. Working hours during normal time: 0700 to 1100 and from 1300 to 1700 hrs. Overtime with 50% surcharge. Gangs work continuously during 23 hours, from 0700 to 0600 hrs. of the following day. Work can be started at: 0700 – 0900 – 1300 – 1500 – 1700 hrs. on weekdays and 0700 and 0900 hrs. on holidays. No work on Sundays. Work can be cancelled with 7 hours notice. Stevedores must be requested before 1030 hrs. on Saturdays for vessels starting work on Mondays at 0700 hrs. Average rate for general cargo is 10 t.p.h./gang. Terminal stevedores used. Agents can contract for own gang in order to separate parcels, cleaning, shifting of cargo, etc. Cost of this gang lower than of terminal gang.

MEDICAL: Requests for medical service through Telecom Radio Station. Three hospitals. Medicine faculty and medical personnel first class. Also dental services. Vaccinations can be given.

TANKERS:

(a) Ecopetrol: Empresa Colombiana de Petroleos. Position: within bay of Cartagena, 5 miles N.E. of bay entry (Boca Chica). Port formed by two ocean platforms, with two protections at each side, 0.5 mile distance from Mamonal Bay. Depth 54 ft. with 6 interconnecting lines. Pilotage: through "Mooring Master" of port. Anchorage: Mamonal Bay 4 miles from Bocachica; depth 54 ft. Entry restrictions, none; 24 hours service. Tankers dimensions: length 850 ft., beam 110 ft., draft 38 ft., tonnage 40,000 d.w.t. Tugs: not used. Tide: 1 ft. 6 in. fluctuation. Fresh water: can be obtained when berthed, 4 in. diameter pipe-line. Precautions against fire: fuel cannot be delivered by barges when vessel is berthed. Pipe-line delivery of bunker fuel oil available. General: requested that vessel arrive with minimum ballast (clean if possible). No dirty ballast to be pumped into the bay. Violation subject to fine. If impossible to arrive with clean ballast, dirty ballast will be discharged through cargo line. Rate of pumping: fuel oil 10,000 B/H; diesel oil 11,000 B/H.

(b) Mamonal. 7 miles (approx.) South of Cartegena Town and 5 miles East of Boca Chica entrance Channel. Approaches and Pilotage: same as for Cartagena (see above). Mooring Master boards about 0.5 mile off dock and remains aboard whilst vessel at Mamonal. Mooring Master has to be provided with own cabin and victualling. Max. Size: length 850 ft., beam 110 ft., draft 38 ft. Berth: "T" shaped platform with dolphins. Lines to buoys off both bows and from stern, 2 mooring lines should be joined together for starboard quarter line. Ballast: no dirty ballast to be pumped into bay. If possible arrive with clean ballast; dirty ballast can be discharged ashore. The shore deballasting facilities consist of 1 tank with 75,000 bls, capacity; the pipeline is 2,835 ft. long and of 16 in. diameter. Three hoses of 8 in. diameter are connected for deballasting. Fresh water: not available except at Cartagena. Fuel: available, Bunker "C" and diesel oil.

FRESH WATER: Obtained while vessel berthed. Hoses of various diameters. Pumping rate is 10 t.p.h. per hose.

DEVELOPMENTS: Draft increase; periodical cleaning of bay and basin. Enlargement of Marginal No. 1. Paving of yards and construction of new warehouses and workshops.

WATCHMEN: Watching service at the gangway and deck. Officially this service is done by port's guards. It is recommended that members of crew assist in this service.

CLOSING/OPENING HATCHES: Undertaken by port stevedores.

IDENTIFICATION CARDS: Agents supply cards signed by port Captain and Master.

CONSULATES:

Germany	tel. 20-160	Haiti	tel. 40-881
Belgium	,, 40-845	Italy	,, 41-583/41-279
Costa Rica	,, 42-912	Mexico	,, 41-447/40-670
Denmark	,, 42-286/40-855	Nicaragua	,, 40-334
Ecuador	,, 40-510	Norway	,, 40-510
Spain	,, 22-685	Panama	,, 41-501/43-058
El Salvador	,, 20-246/42-867	Netherlands	,, 43-021/40-830
France	,, 41-290	Peru	,, 42-388
Finland	,, 43-951		

DRY DOCK: Commercial Shipyard "Conastil" with slipway facilities for ships up to 1,300 d.w.t. 9 ft. max. draft. Floating dock capacity for vessels of up to 400 ft. length, 55 ft. beam, 19 ft. draft and 3,000 d.w.t.

REPATRIATION: Facilities available for crew changes.

AIRPORT: Crespo Airport very near to city (3.5 km.). Runways for small jets and is being enlarged for larger jets. Operates at present with Avianca (Cartagena-Miami per jet). A weekly round trip on Saturdays. Domestic flights are operated by Avianca, Aerocondor, Sam (from Cartagena). Barranquilla: Soledad Airport. 2 hours by road and 22 minutes by plane. This airport has international connections with Panama, Miami, Maracaibo, Curacao, Caracas. Cartagena Airport has daily connection with Bogota (El Dorado), the main Colombian airport for servicing main international air lines: Avianca, British airways, Iberia, KLM, Panam, Braniff, Air France, Lufthansa, APSA, AREA. Flight to Bogota by jet takes 55 minutes, and 2 hours by propeller aircraft. Cartagena Airport connects with main Colombian cities: Medellin, Cali, Barranquilla, Santa Marta, Cucuta, Bucaramanga. Daily service.

TIME: Colombian official time: 5 hours behind GMT. Permanent.

HOLIDAYS: Eighteen days of holidays during year, but at terminal there is no service on following dates only: New Year Day (January 1); Good Friday (Viernes Santo); Labour Day (May 1); Cartagena Independence Day (November 11); Christmas Day (December 25). During the days December 24 and 25 work is done only until 1100 hrs. During other holidays there is 24 hour service with 50% surcharges.

POLICE/AMBULANCE/FIRE: Police, Radio Patrol, tel. 04, Barracks 40173, DAS 40211: Ambulance, Terminal, tel. 40291, Naval Hospital 40248, Sta. Hospital Universitaro de Cartagena 40380; Fire, 42222.

TELEPHONES: May be placed aboard.

GENERAL: Cartagena can be entered or left at any time day or night. Vessels can also berth or unberth in dry season or rain seasons, and services are rendered during 24 hours.

There is a very tight security system with a detachment of 145 port police, watch towers, dogs, sodium vapour lighting, access control, full identification, cargo control unit. This new unit, and the administrative controls that complement it, has reduced losses to near vanishing point.

The port has international communications with telex, phone and cable. Complete marine service with VHF and can communicate with Bogota and the other Colombian ports with S.S.B. radio.

SHORE LEAVE: Crew allowed disembark. Every member of crew is given card signed by Port Captain and Master of the vessel.

DEVELOPMENTS: There is a new marginal dock under construction which will be finished in December, 1976, total length 260 m. A new Administration Centre will be finished on the same date.

REGULATIONS: To clear the wharf if required for tourist vessels or export cargo vessels.

AUTHORITY: Gerente del Terminal, Maritimo y Fluvial.

COVENAS (Gulf of Morresquillo): 09.25 N. 75.42 W.

See "General" before first port.

DOCUMENTS:

3 Crew Lists.
Passenger List.
Customs Documents.
Manifests.
Bill of Lading.
Ships Papers.
Clearance Ballast Manifest.
Crew's Personal Effects Declaration.
Vaccination Certificates.
Stores List.

PILOTAGE: Advise ETA 72, 48, 24 hours in advance. Pilot leaves dock on sighting vessel. Ship boarded approx. 1 mile N.W. of sea buoy or at anchorage. Pilot boat is 25-ton tug, 60 ft. length, 500 h.p., steel hull.

ANCHORAGE: Vessels arriving at night anchor 1 mile N.E. of lighted marker buoy. Bottom – mud.

RESTRICTIONS: Docking only during daylight 0500-1730 hrs. Undocking – any time.

MAX. SIZE: Length 800 ft., draft 42 ft. 6 in. Depth in approach Channels 42 ft. Mean tidal range 18 in. Current 3 knots (max.).

HEALTH: Quarantine officials board ship at berth or at anchor. Accommodation ladder should be rigged for Quarantine and Customs Officials. From December to March ladder should be rigged on port side due to prevailing North wind.

RADIO: Radio traffic addressed "Sagoc Tibu" via Barranquilla or Cartagena radios.

TUG: Tug-pilot-boat leaves dock on sighting vessel.

BERTHING: Vessels use stbd. anchor with approx. 5 lengths of chain, and 2 stbd. mooring buoys aft; 2 port mooring buoys aft and 2 port mooring buoys forward. All mooring lines should be 120 fathoms. Prevailing wind 310°. Terminal is a sea-berth approx. 1 mile from illuminated marker buoy. The berth has now been taken over by Ecopetrol and may be used in future for the discharge of imported crude.

MEDICAL: Doctor on call at any time. Twelve-bed hospital.

LOADING: Hoses connected on port side 2×10 in., each 2.5 tons, to be lifted by ship's boom and winch. Pipe-line 20 in. 7,300 ft. from pump station to berth. Average pumping rate: 2,000 t.p.h. Max. pressure ashore: 120 psi. 3 grades of oil handled by same pipe-line. Approx. API gravity of crudes: heavy Barco 32.5, Cicuco 45.5, Valasquez/Barco mix 24.0°.

DENSITY: 1021.

FUEL: See "General" before first port.

IDENTIFICATION CARDS: If required by Customs, issued by Sagoc.

CONSULS/REPAIRS/DRYDOCKS/FUEL/FRESH WATER: None.

REPATRIATION: Only if sick crew member left ashore after vessel sails.

AIRPORT: Barranquilla. Flights to U.S.A., Europe and other South American countries.

TIME: Eastern standard time. GMT minus 5 hours.

HOLIDAYS: Loading carried on during holidays and week-ends.

SHORE LEAVE: At discretion of Captain. Crew uses private motor vessel at own risk.

REGULATIONS: Vessels should arrive with clean ballast. No dirty ballast to be pumped into bay, violation subject to penalties. If impossible to arrive with clean ballast, dirty ballast will be discharged through cargo lines and 3,000 barrels of dirty water displaced into vessel. Capacity of slop receiving facility unlimited.

DELAYS: Only when other vessels occupying mooring.

AUTHORITY: Ecopetrol.

POZOS COLORADOS TERMINAL: 11.09 N. 74.15 W.

OPERATORS: Chevron Petroleum Co. of Colombia, Apartado Aereo 947, Cucuta, Colombia.

DOCUMENTS: See "Santa Marta".

LOCATION: North Coast of Colombia, approx. 6 miles S.W. of Santa Marta.

MAX. SIZE: Berth in approx. 55 ft. of water and can accommodate vessels of up to 69,000 d.w.t. with max. draft 45 ft.

PILOTAGE: Mooring Master will meet vessels approx. 1 mile seaward of terminal location. He will remain on board throughout the vessel's stay and should be provided with accommodation.

CLEARANCE: Port authorities board with Mooring Master to enter ship and attend all formalities.

BERTHING: Vessels lie in berth in approx. due North heading; vessel's lines run by means of mooring launch to stern, quarter, and breast buoys. Vessels up to 20,000 d.w.t. require at least 5 good manilla lines; vessels in excess of 20,000 d.w.t. require at least 7 good manilla lines. These lines must be of not less than 120 fathoms length. Synthetic lines of equivalent strength may be used. Vessels equipped with wire mooring winches may use wires in lieu of fibre lines. When mooring, required use both bower anchors, each having at least 150 fathoms of chain and be prepared handle 5-ton lift on starboard side at ship's manifold. Because of rigidity of submarine hose, a small movement of vessel out of correct position could damage submarine equipment. Extreme caution must be exercised to assure that vessel is correctly moored. During loading operation slack must be kept out of submarine hose by adjustment of vessel's anchor and lines.

HOSES: Submarine hose 16 in. with 16 to 12 in. reducer for connection to vessel's 12 in. deck hose. For vessels not equipped with 12 in. deck hose, a 12 to 10 in. reducer is available. A 25 ft. length of 10 in. deck hose is also available for vessels not having a deck hose on board. Ship's crew performs all hose connecting, disconnecting, etc.

CARGO HANDLING: Rio Zulia Crude Oil has following specifications: Gravity, approx. 41.2° API. Flash, below atmospheric temperature. Reid vapour pressure, 5 to 8 psi. Pour point, +85°F. Sulphur, wt. %, 0.3 Wax, wt. %, 16.

Rio Zulia Crude has high wax content (about 16% by weight). Above 90°F. Rio Zulia Crude will flow easily and is about same viscosity as heavy No. 2 oil. Below 90°F. it rapidly becomes more viscous until it is similar to petroleum jelly or heavy lubricating grease.

Temperatures: Loading temperature of this cargo at Pozos Colorados between 85 and 90°F. Vessel should maintain loading temperature in wing tanks or if necessary gradually raise temperature to approximately 85° to 90°F. Approx. 2 to 3 days prior arrival discharge port, vessel should start to heat cargo in centre tanks so that upon arrival discharge terminal, average cargo temperature is between 100° and 105°F. for both wing and centre tanks. This temperature should be maintained throughout discharge. When discharge is through a submarine line in cold waters or over docks, when ambient temperatures are extremely cold, it is recommended that above temperature be increased 5° to 110°F.

Tank prepararation: Cargo tanks which on previous voyage contained sour crudes (similar to those loaded in Arabian Gulf) should be machine washed with hot water at max. pressure order remove from tank bottoms all free oil remaining from previous voyage. Machines should be spotted low in tanks so as obtain max. washing over tank bottoms. Upon completion of deballasting, cargo tanks should be stripped dry and cargo pumps and lines drained so that tanks, pumps and lines free of pumpable water when cargo loaded into them.

BALLAST: The utmost care must be exercised by all tankers to avoid any contamination of the terminal bay waters, since the entire area is a developing tourist resort. This means that absolutely no deballasting or disposal of bilge water must take place in the bay. Shore deballasting facilities can handle up to 84,000 bbls. if ship provides advance warning.

FUEL: No bunkers available at terminal. See "General" before first port.

REPAIRS: Limited repair facilities available in Santa Marta, approximately 6 miles from terminal.

MEDICAL: Doctor and hospital located at Santa Marta.

CONSULS: No consular office in vincinity of terminal. Nearest Consuls, located in Barranquilla, approx. 35 miles distant.

SHORE LEAVE: Through the ship's Agent, shore leave can be arranged, but sufficient crew must remain on board to handle emergencies.

GENERAL: No petroleum inspection services. No ship's stores.

SANTA MARTA: 11.15 N. 74.14 W. (See Plan)

DOCUMENTS:

For the Port Captain:

1 Clearance from Last Port.
1 Voyage Report.
1 Crew List.
1 List of Passengers for Santa Marta.
1 List of Passengers in transit.
1 List of Provisions.

Vessel Certificates: (these only need to be shown)

Registration Certificate.
Load Line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radiotelegraphy Safety Certificate.
Construction Certificate.
Cargo Handling Equipment Safety Certificate.
Oil Pollution Certificate.

For Port Health Authority:

Derating Certificate.
Maritime Health Declaration.
Crew List with dates of vaccination.
List of Passengers for Santa Marta.
List of Passengers in Transit.

For Customs:
3 Cargo Manifests.
3 Crew Lists.
3 Lists of Passengers for Santa Marta.
3 Lists of Passengers in Transit.
3 Lists of Crew Personal Effects.
3 Lists of Provisions.
3 Mail Lists.
1 Single Document.
For Agencies:
1 Voyage Report.
6 Crew Lists.
6 Lists of Passengers for Santa Marta.
6 Lists of Passengers in Transit.
6 Crew Personal Effects Lists.
2 Lists of Mail for the port.
4 Cargo Manifests.
4 Bills of Lading.
2 Cargo Stowage Plans.

PILOTAGE: Locate Morro Grande Islet and lighthouse, proceed then to location 0.7 miles South of Westernmost point this islet where Pilot will join ship. Information regarding ETA should be relayed to Agent, who will advise port authority.

ANCHORAGES: When it is not possible for the vessel to come alongside a berth immediately, the Captain may anchor within the area included within the following coordinates.

Lat. 11° 14′ 45″ N. Long. 74° 13′ 15″ W.
Lat. 11° 14′ 45″ N. Long. 74° 14′ 00″ W.
Lat. 11° 14′ 15″ N. Long. 74° 13′ 25″ W.
Lat. 11° 14′ 15″ N. Long. 74° 14′ 00″ W.

Seabed is rocky and sandy, with depths about 120 ft.

Vessels should anchor in the lee of the Morro Grande and Morro Paqueno (Large and small headlands), particularly during the months of December to March, when there is a strong N.E. wind.

RESTRICTIONS: None. Good visibility throughout year. Difference in tides negligible.

MAX. SIZE: 730 ft. length, 40 ft. draft. No limit to beam. Oil carriers: refer to Pozos Colorados.

PRATIQUE: Pratique granted by Port Captain who visits vessel immediately on arrival. Doctor also attends on this visit.

RADIO: Barranquilla Radio or Cartagena Radio; radio stations messages relayed by telex to Sta. Marta. Ship's Agents use same system. Terminal Office may be contacted on radiotelephone, 2738 kHz.

TUGS: Join vessels just before entrance to inner harbour; they may use own lines or vessels lines.

BERTHING:

Quays	*Length*	*Minimum Depth*
No. 1	540 ft.	42 ft.
No. 2	540 ft.	47 ft.
No. 3	760 ft.	37 ft.
No. 4	465 ft.	28 ft.
No. 5	465 ft.	35 ft.

Facilities exist for container traffic. 30,000 tons silo for grain storage and discharge facilities for up to 5,000 tons per day.

STEVEDORES: ETA to be given 72 and 24 hours before arrival, indicating number of gangs required. Unloading rate of general merchandise 10 t.p.h., and homogeneous cargoes around 15/20 tons.

No work from 2300 hrs. Saturday until 0700 hrs. Monday.

MEDICAL: Advance notice required whenever special medical attention needed on arrival; hospital available.

TANKERS: See "Pozos Colorados".

DENSITY: Tropical sea salt water density.

FRESH WATER: Available alongside docks: delivery (approx.) 10 t.p.h.

FUEL: Not available. Nearest supplies at Barranquilla.

GANGWAY/DECK WATCHMEN: Deck watchmen supplied by Agent.

OPENING/CLOSING HATCHES: By special gang ordered by Agent.

SHIP CERTIFICATES: Load Line, Cargo Gear, Classification, Lifeboat, Main Engines, Radio Equipment, Fire Fighting Equipment, Ship's Register, Officers' Certificates (licences).

CUSTOMS ALLOWANCES: (Tobacco), 2 cartons of cigarettes per man. All other tobacco will be sealed by Customs. (Wine and/or Spirits), 1 open bottle of liquor permitted per crew member. All other spirits will be sealed by Customs.

IDENTIFICATION CARDS: Given by Port Captain once quarantine is cleared.

CONSULS: The following countries have consulates in Santa Marta.

		Phone
Belgium	Cra. 1a. No. 22-80	2404
Spain	Calle 19 No. 3-26	3559
Guatemala	Calle 11 No. 1C-23 P.8	4048
Italy	Iroka el Rodadero Building.	
Norway	Calle 11 No. 1-C-23 Dpto. 306	3501
Ecuador	Calle 12 No. 16-E-93	2643
Costa Rica	Avda. Libertador No. 33-47	2199
Netherlands and Sweden	Calle 15 No. 3-94	3403
Panama	Calle 25 No. 18A-105	
Peru	Calle 16 No. 1-92	3420
Dominican Republic	Cra. 21 No. 15-99	
Finland	Edificio de los Bancos Oficina No. 605	5317

REPAIRS: Only minor welding.

REPATRIATION: Facilities available.

AIRPORT: 19 miles from town.

TIME: 75th Meridian time, Eastern standard time. GMT minus 5 hours.

HOLIDAYS: New Year (January 1st); Church Holiday (April 12th); Labour Day (May 1st); Local Holiday (July 29th); Church Holiday (December 24th); Christmas Day (December 25th); Church Holiday (December 31st). No work on New Year's Day, Labour Day, Local Holidays, Christmas Day. Work until 1600 on other holidays.

POLICE/AMBULANCE/FIRE: Police, tel. 6079; Ambulance, tel. 3116 – 5555; Fire, tel. 6091 – 4545 – 6055.

SHORE LEAVE: Granted after quarantine cleared.

DELAYS: Up to 12/14 hours because of shortage of docking space.

AUTHORITY: Port Captain.

TUMACO: 01.49 N. 78.45 W.

DOCUMENTS:
5 Crew Lists.
5 Stores Lists.
5 Passenger Lists (local, in transit, or negative).
1 Sanitation Declaration.
12 Complete sets Manifests.
3 Mail Certificates (when not included in Manifest).

PILOTAGE: Compulsory.

ANCHORAGE: Sufficient area available in depths of 25 to 35 ft.

RESTRICTIONS: Entrance channel depth 20 ft. Height of tide varies from 8 to 12 ft.

HEALTH: On arrival, port doctor boards vessel to inspect crew Smallpox Vaccination Certificates and Yellow Fever Certificates, also Deratisation Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port Doctor visits vessel even if previous port was in Colombia.

BERTHING: Wharf is 310 m. long. Depth alongside averages 30 ft. Berthing for two vessels of 4,000–5,000 tons.

FRESH WATER: Available from wharf.

FUEL: Supplied by Esso Colombia, by barge.

CARGO GEAR: Terminal owns 3 cranes of 5 to 15 tons capacity.

AIRPORT: Suitable for DC.4 type aircraft, situated 4 km. from port.

DEVELOPMENTS: Programme for deepening the port to 33 ft. at high water.

AUTHORITY: Empresa Puertos de Colombia.

TURBO: 08.06 N. 76.43 W.

ANCHORAGES: Anchorage 2.5 to 3 miles off mouth of Leon River, used for loading bananas from barges.

CLEARANCE: Vessel must first proceed to Punta las Vacas for official visit of Port Authorities to obtain clearance.

MOORING: With sea and wind from the North, loading operations are not possible unless vessel employs the "Baltic Moor".

On arrival at the Leon River Anchorage, vessels should let go a couple of shackles. After that, a 3 to 3.5 in. wire (or mooring line) is passed from the after leads on the poop, along the ship's side, outside and clear of everything. This wire is to be shackled to a number three chain shackle.

By heaving in the wire and slacking the chain as required (about a 60° angle) vessel will give the necessary shelter to banana barges, for normal cargo operations.

SHIPMASTERS REPORT: *Chart used No. 24515 (American).*

Vessels ordered to Turbo first proceed for clearance off Turbo town and anchor in position about one mile West of Pta Las Vacas Lighthouse (08° 04′ N. 76° 45′ W.). The lighthouse, which is situated on the Southern end of Pta Las Vacas is not readily identifiable from the N.W. until within about 2 miles and the light is reported to be poor. The chart in the area of Pta Turbo, about 4 miles Northward of Pta Las Vacas, does not correspond to the radar picture presented, and therefore a berth of at least 2 miles is recommended.

After clearance by Port Authorities at Turbo vessels should proceed to Pinchindi, about 7 miles W.S.W. of Pta Las Vacas, for loading during the period December to May. It is reported that during the season May to December vessels load off the mouth of the Rio Leon, about 7.5 miles S.S.E. of Pta Las Vacas. Approaches to this berth apparently pose no problems and the loading position is reported to be close to a buoy off the river mouth, the position of which could not be confirmed.

There is no Pilot available at Turbo.

Vessels loading at Pinchindi should steer to pass about 1.5 to 2 miles S.E. of Boca Pinchindi. When the black buoy, fl. 3 sec. (marked on chart No. 24515) bears about 335° true, but not less than 315° true course should be altered to bring the buoy right ahead and anchorage should be taken up as convenient on this bearing. The black buoy referred to above is very difficult to pick up against the land, and in February 1976 was extinguished. There are two mooring buoys to the Eastward of the black flashing buoy. These are unlighted and not marked on the chart. Positions of these mooring buoys are as follows, bearings and distances from the black fl. 3 sec. buoy: BWVS 83.5° true×380 m. R 99.5° true×760 m. These mooring buoys are more readily indentifiable from the offing than the fl. 3 sec. buoy, particularly the red one, which is painted in "International Orange". However it should be borne in mind that this buoy may have just received a new coat of paint at the time this report was written. The red buoy may be seen over the land which

lies on the Eastern side of the anchorage before course is altered for the final approach. Vessels of draft up to 25 ft. may anchor up to within about 300 m. of the fl. 3 sec. buoy in about 22 m. of water.

As the wind strengthens during the afternoon to about force 5/6 from between N. & N.E., and due to the proximity of other vessels in the anchorage, it was considered advisable to use two anchors; the vessel in fact used port anchor with 4 shackles on deck and starboard anchor underfoot. This prevented the vessel from yawing more than a maximum of about 15°, while other vessels moored with only one anchor were observed to be yawing considerably more during the afternoon breeze.

Winds, during the period while the vessel was at Turbo (February 2-4) were predominately from North to N.E. and no significant currents were observed in the anchorage described above.

Caution is advised while navigating in this anchorage at night, as vessels loading logs often have large unlighted timber rafts alongside. It should also be borne in mind that tugs, lighters and launches are often unlighted, and radar echoes from these might easily be mistaken for those of the buoys. While the radar echoes of the land in this anchorage are quite clear, they do not in any way correspond with the chart.

No opportunity presented itself for checking soundings, however, on the vessel's track arriving and sailing soundings on the whole agreed with charted depths.

Loading of bananas is carried out in the anchorage using mechanical conveyors from lighters through vessels sideports, and on the whole was found to be quick and efficient.

No freshwater or provisions are available at Turbo. Indeed no facilities whatever are available from ashore. There is no radio station, although banana shippers "Uniban" have VHF 16 in their office during office hours, Spanish language only. Agents for United Brands Company have VHF Channel 16, call sign is "Casanova".

Caution should be exercised when taking any navigational advice from Officials in Turbo as this may at times be misleading and it is questionable whether persons proffering advice regarding best anchorage position etc. are in possession of all facts necessary for safe navigation in the area.

Documents Required for Inward Clearance at Turbo:

1 Clearance from last port.
6 Crew Lists.
5 Passenger Lists (Nil passengers to be declared).
5 Disembarking Passengers.
5 Mail Lists (No mail to be declared).
1 Maritime Declaration of Health.
1 Vaccination List.
6 Manifests.

Ships Certificates for Inspection:

Register.
Safety Equipment Certificate.
Safety Radio Certificate.
Radio Station Certificate.
Cargo Gear Certificate.
Derat Certificate.
Ships Capacity Plan.

In addition to above list of documents required, the following are also to be presented to Authorities on arrival:

2 Store Lists.
2 Crews Personal Effects.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Congo (People's Republic of)

DJENO TERMINAL: 04.55 S. 11.56 E.

PILOTAGE: Pilot boards in position 04° 54′ S., 11° 49′ E. which is 076° – 6.5 miles from Djeno Lighthouse.
RESTRICTIONS: Mooring possible day and night.
MAX. SIZE: 120,000 d.w.t.
BERTHING: Vessel must have port side derrick rigged on arrival. Ballast must be clean. Loading is from SBM. Connection: 2 flexible pipe-lines 12 in. diameter. Vessel to standby on VHF during loading operations.
SHIPMASTERS REPORT: (MAY 1976):
Documents: Papers required on arrival;
Last port clearance.
2 copies Crew lists.
2 copies Vaccination Certificates dates.
2 copies Stores list and bond.
1 copy Crew Personnel effects lists.
Pilot and Agent do all paper work.
Approaches: Pointe Noire shows up well on radar at 25/30 miles, but Djeno and the S.P.M. are poor. The phosphate wharf shows up well and projects out from the land about 2 miles S.E. of Pointe Noire breakwater.
Also see Shipmaster's Report of approaches to Pointe Noire.
Pilotage: Pointe Noire has 4 working pilots, one of whom, on the rota system serves Djeno when a tanker arrives.
Both Pilot and Loading Master board from a fast pilot launch off Pointe Noire and an assortment of mooring ropes and chains and messengers are taken aboard from a work boat which is also met 3 miles West of the breakwater. After that is completed, vessel proceeds the 9.05 miles to the S.P.M. at Djeno.
Max. Size: Depth of water at S.P.M. is 22 m. and the max. draft is 53 ft. (16.5 m.).
Berthing: Mooring to the buoy consists of:
Port and starboard mooring ropes, 42 m. of 13 in. circumference nylon and 5 m. of chain, polyprop messengers 10 in. circumference are attached to each rope for the initial haul-in. Port line first. Derrick to be rigged on the port side and manifolds to be ready port side to receive two 12 in. hose connections.
No dirty ballast reception facilities ashore, vessel must arrive with clean ballast. Crew moor vessel with assistance of 3 shore crew and advice of Loading Master who is on focsle head and liaises with Pilot on bridge.
Crew bring on board cargo hoses and connect same. Pilot and Loading Master remain on board throughout with Pilot changing every 24 hours.

POINTE NOIRE: 04.47 S. 11.49 E. (See Plan)

DOCUMENTS: On arrival, the Captain must hand over to:
The Agents:
4 Crew Lists.
4 Lists of Crew Boys.
4 Passenger Lists or negative.
4 Lists of Ports of Call.
2 Lists of Crew Personal Effects.
2 Stores Lists.
5 copies of Cargo Manifest.
Captain's copy of B/L.
Harbour Authorities:
1 Arrival Form issued by Port of Pointe Noire.
1 Departure Form issued by Port of Pointe Noire.
Health Authorities:
1 Vaccination List for crew members.
1 Declaration of Health (form issued by the port of Pointe Noire).
Vaccination cards for the whole crew.
PILOTAGE: Compulsory. Telegraphic address: Harbour Master's Office of the Port of Pointe Noire. Pilot station can be contacted by VHF Channel 16; 24 hour service.
APPROACHES: *Shipmaster's Report:*
The approach to Pointe Noire from the West using Chart 4105 Freetown to Luanda is clear of dangers as far as our experience goes. After crossing the 200 m. (100 fathom) line the soundings are consistent with a gently shelving coast until there is 30/40 m., 3 miles West of Pointe Noire breakwater, where the Pilot boards.
Approaching Pointe Noire from the West the radar picture of the coast about 20 miles North of Pointe Noire is very similar to Pointe Noire itself. This could confuse and lead one to think that the ship is further South than she really is, but the cluster of oil rigs should be a good guide.
There is a cluster of oil rigs with flares S.S.W. by 13 miles from Pointe Noire main lighthouse, with another cluster about due South by 17 miles, both good radar targets. Do not go in between these clusters. The Pilot told me that there is another set of oil rigs about 10 miles N.W. of Pointe Noire light under construction. Watch out for numerous small dugouts, etc. fishing.
RESTRICTIONS: Minimum draft allowed for ore-carrying vessels of more than 130 m. drawing alongside at Quay G: 20 ft. aft and 15 ft. forward. Max. draft allowed for all vessels: 31 ft. at any hour. Max. draft allowed for ore carriers leaving Quay G is 34 ft. 04 in. 1 hour before high tide. Tying to mooring buoy can be done only between sunrise and sunset.
Shipmaster's Report: Max. draft for tankers 31 ft. Entering possible day and night at all states of the tide.
HEALTH: Port Health Officer boards immediately on berthing. Compulsory vaccinations: smallpox, yellow fever and cholera.
RADIO: Pointe Noire Radio, call sign TNA. Continuous service on 500 and 2182 kc/s from 0600 to 1800 hrs. GMT. Transmission on 8722 kc/s TNA from 0930 to 0945, 1030 to 1045, 1330 to 1445, 1530 to 1545, 1730 to 1800 hrs. GMT; on 13101 kc/s TNA from 0630 to 0645, 0730 to 0745, 0830 to 0900, 1700 to 1715 hrs.
Shipmaster's Report: If vessel is coming from the South it is advisable to pass messages through Luanda.
RADAR/VHF: The Harbourmaster's office has a VHF set (call Channel 16) but no radar.
TUGS: 3 tugs 1800 h.p., 1185 h.p., and 600 h.p., normally join the vessel as soon as it crosses the passage. The vessel's own lines are usually used.
BERTHING:

	Length	Draft Permitted
Quay D: Berth 1,	720 m.	24 ft.
,, 2,	720 m.	29 ft.
,, 3,	720 m.	29 ft.
,, 4,	720 m.	30 ft.
,, 5,	20 m.	30 ft.
Quay G: Ore Berth,	25 m.	31 ft. 04 in.
Tanker Berth,	10 m.	31 ft.
Mole 1: Timber Berths,	50 m.	31 ft.
Lighter Berth,	—	12 ft.

STEVEDORES: The Agent requires the following information 48 hours in advance, in order to arrange gangs: precise ETA; number of gangs required for unloading/loading; distribution per hold unloading/loading; draft, fore and aft – before 0600 hrs. in the morning on weekdays counting as overtime; before 0600 hrs. Saturday mornings for the weekend or day before holiday also counted as overtime.
MEDICAL: Notice for medical attention not needed. There are 2 private clinics.
TANKERS: Diameter of loading/unloading lines: 6 in.=aircraft fuel. 10 in.="white product". 12 in.=1500 fuel. Hoses=8 in. 1 tanker berth – 31 ft. acceptable draft.
Also see "Djeno Terminal".
DENSITY: 1025 on average. Only slight variations according to tides.
FRESH WATER: 2 hoses can be connected at each berth. Rate: 5 t.p.h. per hose.
FUEL: Ordered from suppliers: Hydrocongo. Pipe-line supply to tanker berth and berths Nos. 1 and 8.
FIRE PRECAUTIONS: The port must be informed of ETA of tanker 24 hours in advance.
GANGWAY/DECK WATCHMEN: There are none at Pointe Noire, as it is unnecessary.
OPENING/CLOSING HATCHES: Usually the crew's responsibility. Can be carried out by the stevedore for payment.
CUSTOMS ALLOWANCE: No limit – must be stated on crew declaration, and quantities must be accurately stated.
CARGO GEAR: Derricks to be in good condition. There are 2 cranes at the new jetty.
IDENTIFICATION CARDS: Sailors' cards or passport needed.
CONSULS: France, Great Britain and West Germany.
REPAIRS: Most repairs for the deck and engines are possible. Also facilities for electronic repairs. Floating crane, capacity 65 tons. (Not in service.)
DRY DOCKS: One slipway for vessels up to 800 tons.
REPATRIATION: Every facility for crews equipped with a crew card and passport.
AIRPORT: 6 km. from the port. 1 to 2 flights per day to Brazzaville. 1 to 2 flights per day from Brazzaville to Europe.
SHIPMASTER'S REPORT: Mail takes between 3 and 7 days from Pointe Noire to Paris, and Pilot assures that it is reliable.
TIME: Local time is GMT plus 1 hour.
HOLIDAYS: 1st January (1 day's holiday); 1st May (2 days' holiday); 31st July (1 to 2 days' holiday); 15th August (2 to 3 days' holiday); 1st November; 25th December (1 day's holiday).
POLICE/AMBULANCE/FIRE: Police 17; Fire 94.00.09; Ambulance 94.00.49, 94.21.98.
TELEPHONE: Cannot be connected on board ship but there is one in the middle of Quay D for the use of vessels.
GENERAL: As the Congolese Customs are very strict, the drawing up of the store list and crew declaration should be carried out very carefully, as the slightest error is penalised and a fine imposed.
Stores are expensive and not easily obtainable. Fish available also fruit and vegetables but not in the Rainy Season.
SHORE LEAVE: No restrictions.
PORT REGULATIONS: In the event of congestion, vessels are obliged to work at night and on Sundays, and if they refuse to do this, they may be relegated to the roadsteads and thereby lose their turn to draw alongside.
DELAYS: *Shipmaster's Report:* Occasionally tankers are delayed for long periods as the shore tanks may be full.
AGENT: Socopao-Congo, BP 714, Pointe Noire, Peoples Republic of Congo. Cable address "Freight". Telex: 8201. Tel. 28.78-29. 10-29.11. Director of agency 35.53. Agent 28.32.

Cook Islands

AVARUA, Rarotonga 21.12 S. 159.47 W.

DOCUMENTS:
Health: International Maritime Declaration of Health.
Customs: (Immigration)
2 Manifests of Cargo showing weight or measurement (basis on which freight calculated).
2 Crew Lists.
2 Passenger Lists (landing and transit). Each disembarking passenger to complete a landing card and baggage declaration.
Clearance from Last Port.
Agent: 5 Manifests of Cargo.
1 Crew List.
1 Passenger List.

PILOTAGE: No Pilot available.

ANCHORAGES: As shown on Admiralty Chart No. 1264. Prevailing wind is S.E. and the anchorage is safe except in some instances when wind and/or sea are fresh from N.W. through N.E. 4.5 to 5 shackles of cable in the water has been found the most satisfactory in normal circumstances.

RESTRICTIONS: None. Anchorage, in 25 fathoms, is well defined with cross leads and a vessel may anchor at any time.

MAX. SIZE: No restriction.

HEALTH: Vessel should radio Porthealth Rarotonga not more than 24 hours, or less than 12 hours, before arrival giving ports of call for preceding three weeks, number of crew, number of passengers, state of health and requesting free radio pratique.

RADIO: Radiorarotonga ZKR, 500 kHz., single operator watch; 2182 kc/s., and 6204 kHz. continuously.

Continuous speaker watch is also kept on Channel 16 of the VHF Maritime mobile band. Weather forecasts are broadcast daily by radio-telephone on 2206 kHz and 8732.1 kHz at 0615 GMT and 1815 GMT after a preliminary call on 2182 kHz.

VHF: Waterfront Commission have VHF radiotelephone for communication between vessel and office when working cargo. Base station Channels 6, 8, 12, 13, 14, 16. Three portable sets, Channels 6, 12, 16. Channel 16, 24 hour watch. Channel 12 on request. Radiorarotonga.

TUGS: Not available.

STEVEDORES: Cargo is lightered ashore by Waterfront Commission plant. Consisting of 6 double-ended lighters, 35 ft. in length of 5 tons deadweight capacity. Heavy lifts up to 10 tons can be accommodated by building a platform over 2 lighters but prior advice should be given: in particular if the lift is on wheels or skids or of exceptional height. Two launches provide towing power. Hours of work: 0700–1200, 1300–1700, 1800–2200 hrs. Average discharge rate 200 tons per day. Agents should have full particulars of tonnage to be discharged and number hatches to be worked.

MEDICAL: Medical and hospital facilities available. Usual international vaccinations/inoculations required depending on prior ports of call.

TANKERS: Petroleum products landed from small coastal tanker from Fiji.

DENSITY: 1025.

FRESH WATER: Available in limited quantities. Lightered 1,000 gallons per load. Cost: as current rate for lightering cargo. If a lighter is diverted from handling cargo to carry water the cargo handling rate will be affected.

FUEL: Not available.

DEVELOPMENTS: Harbour development at Avatiu (1 mile from Avarua) although not completed, is currently in use and accommodating vessels of about 1,000 tons (250 ft. length; 16 ft. draft).

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: By crew or stevedores to vessel's convenience.

TOBACCO ALLOWANCE: 200 cigarettes, or half pound tobacco or 50 cigars.

WINE AND/OR SPIRIT ALLOWANCE: Allowance is 1 broached bottle of either wine or spirits, or a reasonable quantity of beer per man, for consumption on board. Under no circumstances may any wines, spirits or beer be brought ashore.

CARGO GEAR: International standards acceptable. It is customary to work cargo from starboard side and a guest-warp should be rigged to starboard.

IDENTIFICATION CARDS: Not required.

CONSULS: New Zealand only is represented by a High Commissioner.

REPAIRS: Not available.

REPATRIATION: Confined to repatriation of crew landed for hospitalisation.

AIRPORT: Rarotonga International Airport is 2 miles away.

TIME: GMT plus 10.5 hours. No alteration during year.

HOLIDAYS: Cargo cannot be worked on any Sunday or on Good Friday and Christmas Day. Other Holidays: Boxing Day (26 December); New Year's Day; Easter Monday; ANZAC Day (25th April); Queen's Birthday (1st Monday in June); Constitution Celebrations (1st Friday and Monday in August).

POLICE/AMBULANCE/FIRE: Fire service available although Waterfront Commission have portable fire pump and approximately 600 ft. hose. Police and Ambulance: contact Waterfront Commission on VHF radio telephone.

TELEPHONES: VHF radio telephone only.

GENERAL: Green vegetables are always difficult to get. Tomatoes available May to November. Oranges, lemons, grapefruit, mandarins, tangerines, available March to August. Pineapples available November to February.

Limited quantities meat and fish available but these must be imported from New Zealand and a large order could not be met.

AUTHORITY: The Collector of Customs, Rarotonga.

AGENT: Waterfront Commission is the only one who stevedore vessels at the anchorage. They must be requested to accept the Agency for a particular vessel. Cable address "Waterfront", PO Box 61, Ships Agents and Stevedores. Union Citco Travel Ltd. – Subsidiary of Union Steam Ship Co. of New Zealand Ltd. and Cook Islands Trading Corporation Ltd. – ships Agents. They must be requested to accept the Agency for a particular vessel. Cable address Union P.O. Box. 54. Ships Agents and Travel Agents.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Costa Rica

GOLFITO: 08.37 N. 83.10 W.

DOCUMENTS:
2 certified copies of Clearance from Last Port.
6 certified copies of Crew List and 6 copies for distribution.
6 certified copies of Passenger List and 6 copies for distribution.
2 certified copies of Cargo Manifest and 25 copies for distribution.
4 certified copies of Stores Provisions List and 6 copies for distribution.
3 sets of Bills of Lading.

NOTICE OF ARRIVAL: Radio Agent at least 24 hours before arrival advising date and time of arrival, number passengers disembarking, if any, amount of cargo to discharge in metric tons, number of gangs required to work on board. This information is required by Port and Customs Authorities.

PILOTAGE: No Pilot in port. Bananera Company sends a launch to pilot vessel to quay if requested. Arrival has to be notified at least 24 hours in advance.

ANCHORAGES: Anchorage area to S.E., diagonal towards end of quay. Depth: 35 ft. – 50 ft. Area 1,000 m. by 300 m. approx. Quay distance: approx. 500 m. Sufficient space for 4 vessels.

RESTRICTIONS: Vessel allowed to enter at any time, day or night.

MAX. SIZE: Length of quay is 1,040 ft., enough for two steamers to berth, one in banana berth and the other in cargo berth, each one of 450 ft. Depth 35 ft. alongside.

HEALTH: Any vessel that enters this port has to be in possession of a Sanitary Manifest (Sanitary Maritime Declaration) signed by Captain of vessel. In case of any suspected disease or fever aboard, Captain to notify by radio to Port Authorities and vessel to wait outside the limit of territorial waters until clearance is given.

RADIO: Station call sign TIM, frequencies 8478 and 500 kc/s. Working hours 0400–1300 GMT.

TUGS: No tugs. A launch from the Cia. Bananera takes lines from vessel to quay.

BERTHING: Vessels berth starboard side to. Vessels of Compania Bananera have preference.

STEVEDORES: Bananera Company controls gangs. Advance notice required. Work possible 24 hours a day.

MEDICAL: Bananera Company has a hospital for its employees. They can give assistance if a request through the Agency has been made 24 hours in advance. On arrival of vessel a valid vaccination certificate of each member of crew has to be shown.

TANKERS: Can berth in cargo area if length is less than 450 ft., depth is 35 ft. Diameter of pipe-lines 8 in. and 6 in.

FRESH WATER: Bananera Company supplies any quantity at a rate of 50 t.p.h. through shore hoses.

FUEL: Diesel and fuel oil available from time to time.

GANGWAY/DECK WATCHMEN: Available but not compulsory. Customs guard on gangway.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: No limit on board but only one packet cigarettes when going ashore. No alcohol may be taken ashore.

IDENTIFICATION CARDS: Required.

CONSULS: Nicaragua, Honduras and Panama represented locally.

REPAIRS: Company Bananera of Costa Rica has a workshop that can do small repairs such as soldering or small winch repairs.

REPATRIATION: Can be arranged.

AIRPORT: One airport one mile from port. Serviced by two airlines "Lacsa Airlines" with two daily flights, one at 0700 hrs. and the other at 1030 hrs. "Ave Airlines" offer only one daily flight, Sundays included, at 0700 hrs. "Lacsa" has no Sunday flights.

TIME: GMT minus 6 hours.

HOLIDAYS: 1st January, no work can be arranged; 19th March, work at double time; Easter Thursday, no work can be arranged; Easter Friday, no work can be arranged; 11th April, work at double time; 1st May, no work can be arranged; Corpus Christi, work at double time; 29th June, work at double time; 2nd August, work at double time; 15th August, work at double time; 15th September, no work can be arranged; 12th October, work at double time; 8th December, work at double time; 25th December, no work can be arranged. Stevedores are not obliged to work Sundays and holidays if not voluntary.

POLICE/AMBULANCE/FIRE: It is sufficient to ask operator for connection with the desired department.

TELEPHONES: No facilities on board vessels.

SHORE LEAVE: Crew are allowed on shore.

DELAYS: Only when quay is occupied by vessels of Compania Bananera de Costa Rica, which have preference.

AUTHORITY: Comandante de Puerto.

AGENT: Felipe J. Alvarado e Cia. Apartado 474, San Jose, Costa Rica. Tel. 21.41.11 and 21.25.50.

PUERTO LIMON: 10.00 N. 83.01 W.

DOCUMENTS: Required by Port Authorities at Port Limon:
2 certified copies of Clearance (Zarpe) (original and dup.)
6 certified copies of Crew List (original and dup.)
6 certified copies of Passenger List (original and dup.)
2 certified copies of Manifest (Sobordo) (original and dup.)
4 certified copies of Stores List (original and dup.)
to Agents for distribution
6 Copies of Crew List.
6 Copies of Store List.
6 Copies of Passenger List.
3 Copies of Bills of Lading (if vessel loaded/brings cargo).
25 Copies of Manifest or Sobordo (Cargo).

NOTICE OF ARRIVAL: Radio Agent at least 24 hours before arrival, advising date and time of arrival, number passengers disembarking (if any), amount of cargo to discharge in metric tons, number of gangs required to work on board. This information is required by Port and Customs Authorities.

PILOTAGE: Pilot boards ship with Port Authorities about one mile from pier.

ANCHORAGES: One mile off piers.

MAX. SIZE: Max. 500 ft. long, 28 ft. draft. Tankers up to 30 ft. draft.

HEALTH: In the event of suspected disease or fever on board, agency should be advised in advance.

RADIO: Call letters TIM, frequency 500 kc/s. and 8478 kc/s. – working hours 0400 to 1300 GMT.

TUGS: None available and not required.

BERTHING: *Muelle Metallico:*
Berth No. 1 33 ft. depth. Max. length 550 ft. draft 28 ft.
Berth No. 2 30 ft. depth. Max. length 550 ft. draft 26 ft.
Berth No. 3 29 ft. depth. Max. length 400 ft. draft 22 ft.
Muelle Nacional: One berth: 18 ft. depth.
Muelle 70. Two berths, depth 27 ft.; one berth, depth 14 ft. Roll-on/roll-off berth, depth 25 ft.

STEVEDORES: ETA should be sent to Agent in due time.

MEDICAL: Medical attention and hospital facilities available.

TANKERS: Mooring outside port (Moin Bay) vessels up to 30 ft. draft.

FRESH WATER: Available and obtained alongside pier delivered by hose, 1.5 to 2 t.p.h.

FUEL: Can be had only in small quantities.

DEVELOPMENTS: Constructing new pier with capacity of four berths and a possibility to extend the National Pier in the form "L". Depths to be increased to 30 ft.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCE: One package cigarettes to take ashore. Not allowed to take alcohol ashore.

IDENTIFICATION CARDS: They are needed and supplied by the Agent.

CONSULS: Colombia tel. 580091; Ecuador; Nicaragua; Honduras tel. 580313 and Norway 580183.

REPAIRS: Minor repairs only.

REPATRIATION: Facilities available.

AIRPORT: Five miles from city. Three daily flights to San Jose International airport.

TIME: Local time minus 6 hours.

HOLIDAYS: 1st January, no work can be arranged; 19th March, work at double time; Easter Thursday, no work can be arranged; Easter Friday, no work can be arranged; 11th April, work at double time; 1st May, no work can be arranged; Corpus Christi, work at double time; 29th June, work at double time; 2nd August, work at double time; 15th August, work at double time; 15th September, no work can be arranged; 12th October, work at double time; 8th December, work at double time; 25th December, no work can be arranged; Stevedores are not obliged to work Sundays and holidays if not voluntary.

POLICE/AMBULANCE/FIRE: Police tel. 117; Red Cross tel. 580125; Fire tel. 118.

TELEPHONES: No arrangements for placing on board.

SHORE LEAVE: Crew members are allowed to go ashore.

DELAYS: Port congestion, shortage of railroad cars, etc.

AUTHORITY: Comandante de Puerto.

AGENT: Felipe J. Alvarado e Cia, Sucs., SA, PO Box 112, Puerto Limon. Tel. 58.02.21. Cables "Alvarado", San Jose.

PUNTARENAS (including Caldera Bay): **(See Plan)** 09.58 N. 84.49 W.

DOCUMENTS:
2 certified copies of Clearance from Last Port.
6 certified copies of Crew List and 6 copies for distribution.
6 certified copies of Passenger List and 6 copies for distribution.
2 copies of Cargo Manifest and 25 copies for distribution.
4 certified copies of Stores/Provisions List and 6 copies for distribution.
3 sets of Bills of Lading.

NOTICE OF ARRIVAL: Radio Agent at least 24 hours before arrival advising date and time of arrival, number passengers disembarking, if any, amount of cargo to discharge in metric tons, number of gangs to work on board. This information is required by Port and Customs Authorities.

PILOTAGE: Pilots are available and compulsory, arranged by Agent. Signal for Port Captain and other officials is two long blasts.

MAX. SIZE: Length 500 ft., max. draft 26 ft.

RESTRICTIONS: Vessels bound for Caldera must first call at Puntarenas for clearance. Recommended that vessels not equipped with radar enter in daylight only.

ANCHORAGE: Vessels should keep Eastward of four submarine cables originating at Puntarenas where suitable anchorage may be found in 6-7 fathoms depth. Vessels should anchor as near the pier as safety permits to facilitate boarding by port officials.

HEALTH: Any vessel that enters this port has to be in possession of a Sanitary Manifest (Sanitary Maritime Declaration) signed by Captain of vessel. In case of any suspected disease or fever aboard, Captain to notify by radio to Port Authorities and vessel to wait outside the limit of territorial waters until clearance is given.
RADIO: Station call sign TIM, frequencies 8478 and 500 kc/s. Working hours 0400-1300 GMT.
TUGS: None available.
BERTHING: Vessels usually moor in daylight only. Unmooring night and day.

Muelle Nuevo: Pierhead runs East/West, connected to shore by 350 ft. gangway. One special heavy mooring line supplied from pier in addition to ship's ropes. Heavy surge experienced at the berth. Inner berth, length 107 m., max. depth 24 ft. Outside berth, length 147 m., max. depth 28 ft.

There are lighters available for hire for vessel working cargo at the anchorage.

Caldera Bay: Buoy mooring for tankers about 1,000 ft. offshore. Vessels moor using starboard anchor and lines to 3 buoys astern. Hoses connected on port side by ship's crew.
STEVEDORES: Available for work 24 hours a day.
MEDICAL: Facilities available at Puntarenas.
FRESH WATER: Available only from pier at Puntarenas.
FUEL: Not available.
IDENTIFICATION CARDS: Required.
TIME: GMT minus 6 hours.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed at Puntarenas, not allowed at Caldera Bay.
AUTHORITY: Comandante del Puerto.

AGENT: Felipe J. Alvarado e Cia, Sucs. SA, Apartado 25, Puntarenas. Telex. Fejalco-54, Cables "Alvarado Puntarenas". Tel. 610235 and 610529.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Cuba

ANTILLA (and sub-ports of Felton, Nicaro and Preston): 20.50 N. 75.44 W.

Port situated on North side of Nipe Bay, on North Coast of Cuba.
APPROACHES: Safe approach without sharp turns. Width of approach about 0.75 miles with mud bottom. Depth of water between entrance and Saetia anchorage about 150 ft.
PILOTAGE: Pilots board vessels proceeding to Antilla Port or to sub-ports of Preston, Nicaro and Felton, 1 mile N.E. of Punta Mayari Lighthouse.

All vessels proceeding to Antilla or to sub-ports must proceed to a position no more than 1 mile North of the Line East-West with Punta Mayari.

Lighthouse position: 20° 47′ 45″ N., 75° 32′ 00″ W.

Pilot station is at Saetia. There is a telephonic communication between Antilla and Saetia, though rather deficient. On many occasions it is impossible to communicate with Pilots when there is any sudden change in vessel's ETA. Therefore advise Antilla Agency soonest of any change in ETA.

Distance from position where Pilots board vessels to Antilla Piers is about 15 miles.
ANCHORAGES: Corojal, 14 miles. Can accommodate vessels drawing up to 20 ft. with a length up to 557 ft. Sufficient swinging area.

Punta Salinas, 10 miles. Can accommodate vessels drawing up to 31 ft. without length limitation.

Preston, 7 miles. Can accommodate vessels drawing up to 30 ft. without length limitation. Swinging area unlimited.

Saetia, 3 miles. Can accommodate vessels of any length and draft.

Cajimaya, 6 miles. Can accommodate vessels drawing up to 32 ft. with length up to 600/700 ft.

La Chiva, 5 miles. Can accommodate vessels of any length and draft.
RESTRICTIONS: Vessels can enter/sail only during daylight hours.
MAX. SIZE: Vessel of any length and draft can enter Antilla but only up to Saetia anchorage, where the mouth is about 0.75 miles wide with a depth of 150 ft.

Vessels must not enter or sail from this port with a draft more than 20 ft. forward, 23 ft. aft, as depth at piers limit draft either entering or sailing.

Length is limited by length of piers to 450 ft., otherwise one hatch would remain outside pier, which would result in delay loading or discharging.

There is an average of 3 ft. between high and low tides.
CLEARANCE: All Port Authorities, Port Doctor, Customs, Immigration and Captain of the Port have their offices at Antilla. Vessels may proceed directly to sub-ports without entering Antilla for clearance. Port Authorities clear ships at sub-port when necessary.

Launch service is the preferable means of transportation used by the Port Authorities to the various sub-ports under Antilla jurisdiction.

There are Custom House Delegations at sub-ports of Preston, Nicaro, but no Immigration. The Custom House Delegate at the sub-port of Nicaro also acts as Delegate for the Captain of the Port.

Although there is no Port Doctor Delegate at the sub-ports, the General Hospital Doctors may act as such, if requested, in order to give a quick entry to the ship.

Notwithstanding the above, in those cases when a ship is coming from a Cuban or foreign port, destined to Nicaro, and happens to lose the slack water tide, it will be necessary for the ship to anchor at Saetia (Antilla) and to wait the next tide. In these particular cases the Port Authorities give entry to the ship at Saetia anchorage, and it is not necessary for another Port Authority visit at the sub-port of Nicaro.
RADIO: When vessels proceed to Antilla, or to any sub-ports, Preston, Nicaro or Felton, or to the port of Banes, ETA messages should be sent to "Mambisas Antilla", simultaneously advising the main office, "Mambisas", Havana.

Ships can communicate with Mambisas Antilla's Agency by wireless via CLA.
TUGS: No tug is required for entry to Antilla. There is a tug available 24 hours of the day, but service must be requested at least 24 hours in advance. Name, *Macabi;* length, 81 ft. 1 in.; width, 24 ft. 0 in.; gross tonnage, 183.53; net tonnage, 86.00; motor, one diesel; h.p., 750; speed, 8.5 knots.
BERTHING: Pier No. 4 (North side). Length 458 ft. Can accommodate vessels drawing up to 17 ft. forward, 23 ft. aft, with a length up to 557 ft.

Pier No. 4 (South side). Length 458 ft. Can accommodate vessels drawing up to 20 ft. forward, 23 ft. aft, with a length up to 557 ft.

Coast Pier: Can accommodate vessels drawing up to 20 ft. even keel.

At these piers, operations of loading sugar and discharge of jute bags. Shipment of molasses can only be performed at No. 4 pier (North and South side) where there is a pipe-line of 16 in. diameter.

The three piers have railroad tracks of standard gauge. Each pier is connected with one railway which is independent of the others, but has no separate outlet at the end of the piers; consequently to perform any movement it is necessary to take out the remaining cars.

Operations at anchor in the bay cannot be performed, as there are no lighters or tugboats available.
STEVEDORES: Working periods – loading sugar; Monday to Friday – 0700/1100–1300/1700 hrs. Saturday – 0700/1100–1300/1700 hrs. Sunday – no work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Capacity: Three ships can be performing sugar loading operations simultaneously, although the labour force available is for a total of 12 gangs.

1. Raw Sugar: *(a)* Loading rate: 1,330 bags of raw sugar (of the 220-pound type) per 4 hours per gang. *(b)* Bags per sling: 6 bags of raw sugar (of the 220-pound type).

2. Refined Sugar: *(a)* Loading rate: 2,100 bags of refined sugar (of the 100-pound type) per 4 hours per gang. *(b)* Bags per sling: 12 bags of refined sugar (of the 100-pound type).

No shore crane available at this port, but there are 6 machine throwers for bulk sugar operations, grates and canvas funnel, etc. These machines function with diesel motors.

Sugar bags are opened in the square of the hatch.
TANKERS: Molasses pumping rate is at an average of 35,000 gallons per hour.

Coast dock has been equipped by ECP for vessels to discharge gasoline and gas oil and where vessels can berth with draft 20 ft. even keel. Fidelity tanks, presently operated by ECP, one for storing gasoline and the other for gas oil.

Capacity of each tank about 53,000 barrels. Average discharging rate, each product about 300 t.p.h.

Due to the fact that there is only one pipe-line, when vessels carry both products gasoline is discharged first, after which the pipe-line is cleaned by pumping water. The gas oil is then discharged.
MEDICAL: There is a hospital where crew members may be hospitalised.
FRESH WATER: Can be obtained. The water is brought from outside in railroad tank cars and pumped to the ship by means of a portable turbine. Any amount of water can be delivered but only in partial quantities of not more than two tank cars daily. Average delivery: 30 t.p.h.
FUEL: Not available.
REPAIRS: Minor repairs only.
AGENTS: Attending the port of Antilla, and the sub-ports of Preston, Nicaro and Felton, also the port of Banes.

Agency Address: Empresa Consignatarias Mambisas, 55 Avenue de Cuba, PO Box 62, Antilla, Oriente, Cuba. Cables: "Mambisas" – Antilla. Tel. 39. Night No. 247.

Crew mail should be sent to Antilla Agency address, even when ships are operating in sub-ports, and sent by "Registered Mail" for quick delivery. Letters of instructions or cables from owners should be sent to the main office: "Mambisas", Havana.
SUB-PORTS:
Distance from Antilla to:
Preston (Guatemala), 7 miles.
Felton, 11 miles.
Nicaro, 14 miles.

To the port of Banes, which is attended by Antilla Agency, 50 km. From Antilla to Banes highway transportation is used.
Time from Antilla to:

Sub-port	*Launch*	*Highway*
Preston	1 Hour	1 hour 45 minutes
Felton	1 hour 30 minutes	2 hours 15 minutes
Nicaro	2 hours	3 hours

There is only a regular launch service from Antilla to Nicaro, leaving daily from Coastwise pier Antilla at 0930 hrs., arriving Nicaro at 1130 hrs.

(a) **SUB-PORT OF PRESTON (GUATEMALA):**
LOCATION: On North coast of Cuba, 20° 46′ N. 75° 40′ W.

This sub-port situated Eastern side of Nipe Bay on a peninsula called Punta de Tabaco, S.E. of Antilla. Sugar and molasses produced by the sugar mill Preston (Guatemala) are shipped through this sub-port.
APPROACHES: Same as for Antilla – (Nipe Bay) where Preston is located. The depth from the entrance to anchorage at Preston of about 150 ft., gradually decreases to 60 ft.
PILOTAGE: See "Antilla". Distance from the point where Pilots board the vessels and Preston Pier: 8 miles; to Preston anchorage: 7 miles.
ANCHORAGE/RESTRICTIONS: See "Antilla".
MAX. SIZE: It is not necessary for ships to wait for slack or favourable tide. At sub-port of Preston, ships cannot enter or sail with a draft exceeding 11 ft. forward, 20 ft. aft, as pier is continuously losing depth due to the quantity of mud that Mayari river deposits.
CLEARANCE: See "Antilla". Port Doctor, Immigration and Port Captain travel from Antilla to Preston to give ships entry. Custom Delegation at this sub-port, only occasionally, and in order to avoid delay Preston Hospital Doctor clears the ship.

Vessel can proceed directly to this sub-port, since Port Authorities come from Antilla to give ship's entry.
RADIO: See "Antilla".
TUGS: See "Antilla". No tug required for ships to enter this sub-port. No tug available, but can be obtained from Antilla.
BERTHING: Wooden Pier (West side only) where vessels can be accommodated drawing up to 11 ft. forward and 20 ft. aft. This dock has about 1,100 ft. length, but the first 600 ft. (starting from shore to the head) is only about 12 ft. depth; from there on, draft for loading is 11 ft. forward and 20 ft. aft.

Only one vessel can be berthed at this pier on West side. It is usually used only in loading sugar and molasses, and occasionally for discharging coastwise fuel oil for sugar mill consumption.

The pier has double railroad track of standard gauge which reaches to its end, but for performing any movement it is necessary to take out the remaining cars as there is no outlet at the pier's end.

No dry cargo discharging is carried out, and no cargo operations are conducted in the bay.

STEVEDORES: Loading sugar – working period (max. 4 gangs). Monday to Friday: 0700/1100–1300/1700 hrs. Saturday: 0700/1100–1300/1700 hrs. Sunday: No work is performed.

General cargo: No discharging operation is performed at this port.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Raw sugar-loading rate. About 1,330 bags of raw sugar (of the 220-pound type) per 4 hours per gang.

Bags per sling: 6 bags of raw sugar (of the 220-pound type).

Operational capacity. At this sub-port only one vessel at a time can be operated.

Refined sugar. No refined sugar has been shipped by this sub-port.

Equipment. There is one movable shore crane available with lifting capacity of about 60 tons with 75° boom inclination. Boom length 50 ft. Crane is mounted on a railroad flat car which is acted by means of steam supplied by an adapted boiler. As the greater part of the year this crane remains idle, it is possible that its lifting capacity might have decreased. Five grates, but no thrower machines.

TANKERS: Molasses pumping rate average of 75,000 gallons per hour.

MEDICAL: There is a hospital at Preston which offers very good service to ship's crew. In cases requiring special attention, patients can be taken to Holguin, where there are reliable specialists.

FRESH WATER: Can be supplied to vessels. Pier has a 2 in. diameter pipe-line, through which water is delivered directly to ship, at an average of about 30 t.p.h. Any quantity of water can be supplied.

FUEL: Not available.

REPAIRS: A good repair shop operated by the sugar mill "Central Guatemala".

AGENTS: See "Antilla".

(b) **SUB-PORT OF NICARO (LENGUA DE PAJARO) LEVISA BAY:**

LOCATION: North Coast of Cuba in province of Oriente, 19° 43′ N. 75° 33′ W.

APPROACHES: Entrance Channel for sub-port of Nicaro is risky for vessels over 350 ft. length, due to its narrowness and because of having sharp turns, some of them forming angles of almost 90°. Bottom and banks are rock and coral.

Depths – 170 and 78 ft. max./min. respectively. Vessels exceeding 350 ft. length require tug for entering and sailing; all vessels over 450 ft. must be extremely careful. Entering or sailing must be effected during slack water, high or low. Simultaneous entry or sailing of two or more vessels is not permitted.

PILOTAGE: See "Antilla". Distance from the point where Pilot boards vessel and Nicaro anchorage, about 10.50 miles; to Nicaro Pier, about 11 miles.

ANCHORAGE: Can accommodate vessels with length up to 475 ft. and max. draft up to 30 ft. The swinging area is limited to 800 ft. to permit access through the Channel.

RESTRICTIONS: At sub-port of Nicaro, vessels not permitted enter or sail during night time. From beginning May until end August vessels can enter Nicaro from 0515 hrs. to 1800 hrs. and sail from 0550 hrs. to 1840 hrs. From end August to beginning May, vessels can enter from 0615 hrs. to 1720 hrs. For sailing from 0620 hrs. to 1810 hrs.

In the above information, the time taken (1 hour, 20 minutes) to undock from pier and manoeuvre to entrance of Channel, and vice versa, has been included.

MAX. SIZE: Permissible draft at North side of Nicaro pier at low tide must not exceed 27 ft. 6 in. forward and 29 ft. aft, with max. length not over 476 ft.

South side of Nicaro Pier, at low tide, has depth of 25 ft. towards shore and 28 ft. at its end, showing the marks for 26 ft. at a distance of 450 ft. from head of pier up to its end.

Both sides have muddy bottom about 3 ft. deep. Nicaro was dredged up to 32 ft., not having been dredged since that time. As a consequence of unloading of mineral (anthracite) which is carried out in this sub-port, anthracite can be discharged only at South side of pier, where crane is situated; a great quantity of mineral is deposited on the bottom, mainly close to piling which supports the pier plate. Owing to this, it is believed that there is an elevation of mud and coal which extends alongside of pier from the 50 ft. mark to 380 ft.

Because of this elevation, which forms an incline from stack pile of the pier, up to approximately 1.5 m. out, vessels which submerge more than 26 ft. forward and 27 ft. aft tend to list to port.

Between months of August and December, variation of tide is from 3 ft. to 3.5 ft. During remaining months it is from 2.5 ft. up to 3 ft.

Also see "Approaches" and "Anchorage".

CLEARANCE: Vessels are cleared by a doctor of the Nicaro General Hospital. Immigration officials come from Antilla together with the Agent and Customs Inspectors.

Vessels proceeding to Nicaro can do so directly without having to call Antilla for Port Authorities' Clearance.

Vessels unable to proceed direct owing to unfavourable tide or night arrival are required to anchor at Saetia or Salinas. In such cases, and when ordered by the Chief Inspector, clearance on entry is carried out at these anchorages.

RADIO: Nicaro has following means of communication: telephone, post office, telegraph and radiograms via R.C.A. Ships can communicate with Nicaro using C.L.A., but it is suggested that ETA messages be sent simultaneously to Mambisas, Antilla, and Mambisas, Havana.

Also see "Antilla".

TUGS: Obtained from port of Antilla. Therefore it is recommended that when vessels are assigned to this sub-port, advice of their ETA be given with sufficient time prior to vessels' arrival. Particulars of tugboats are shown under "Antilla" information.

BERTHING: Nicaro Pier operated by Empresa Consolidada Nickel Industria Minera "Commandante Rene Ramos Latour", where following operations carried out: Sugar loading from mills Guatemala and Nicaragua; shipment of nickel; and also discharging general cargo, fuel, oil, ammonia and coal.

At North side of pier are two intakes for fuel, oil, one for ammonia and one for gas oil.

Liquid fuel can be discharged at South side of pier, but this operation prohibits any other operation being carried out at opposite side of pier, as hoses have to cross over pier from the vessel to connections situated at North side.

Pier has a railroad track of standard gauge. Truck transportation can also be used. Interruptions are experienced (mainly sugar loading) since there is only one railroad track. Operation of change and movement of flat cars takes approximately 10 minutes.

In discharging mineral coal, no interruptions occur and time is not lost.

Electric shore crane is installed at South side of pier and mounted on rails which run from one end to the other. The top end of this crane consists of a rotary structure from which is projected a boom about 50 ft. long. This boom can be suspended up to an angle of about 60°. In a horizontal position, it can lift weights of about 10 tons each and the loading capacity is gradually increased to 20 tons while raising the boom up to an angle of 45°.

Crane can also perform discharging operations on vessels which are docked on the North side, but operations are slower than when vessels are docked at South side.

Crane's accessories consist of two grabs for mineral coal of 1.5 and 3 tons capacity each, steel slings, special slings for loading nickel,etc. This equipment (excluding ship's tackle) is the only gear available for loading or discharging at this sub-port.

Only two vessels can be loaded simultaneously, and operations of working two vessels simultaneously delays both operations owing to characteristics of this pier, which was constructed specifically for receiving mineral coal, general cargo, fuel, oil, ammonia, and to ship nickel or other type of heavy material. Pier lacks necessary railroad tracks to ship sugar as are found in other ports which have been assigned to this purpose.

No cargo operations are carried out in the bay.

STEVEDORES: Loading or unloading of general cargo, nickel, mineral coal, etc., is performed by port workmen of sub-port of Nicaro.

Raw sugar-loading rate. At present, average loading rate in a period of 4 hours per gang, is about 1,330 bags.

Bags per sling (Guatemala sugar): 6 bags of raw sugar (of 220 pound type) per sling. Nicaragua sugar: 6 bags of raw sugar (of 220 pound type) per sling. Sugar bags from sugar mills Guatemala and Nicaragua are transported from respective mills to Nicaro in railroad flat cars, already slinged.

Refined sugar. No refined sugar is exported.

General cargo discharging rate. General cargo of a fragile nature and careful handling: about 5 tons per gang hour. General cargo of sturdy nature and easy handling about 20 tons per gang hour.

Bagged cargo: about 30 tons per gang hour.

Mineral coal: at present the shore crane is averaging 110 t.p.h.

Nickel: at an average of 800 bags (26 tons) per gang hour.

Bulk sugar: no bulk sugar equipment available. In those cases when bulk sugar operations are performed, the necessary equipment is obtained from sub-port of Preston.

Working periods in loading sugar: Monday to Friday, 0700 to 1100 and 1300 to 1700 hrs.; Saturday 0700 to 1100 hrs. only; Sunday, no work is performed.

Labour legislation presently in force provides that the numbers of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

TANKERS: No molasses or alcohol re loaded. Only fuel oil, liquid ammonia and gas oil are discharged. Average discharging of fuel oil at present is about 400 t.p.h. Liquid ammonia discharge averages about 27 metric t.p.h.

MEDICAL: Hospital at Nicaro offers good service to ships' crew members. In case of special attention, the patient can be taken to Holguin, where there are reliable specialists.

FRESH WATER: Delivered at North side of pier through pipe-line at average 30 t.p.h. Delivered only during night time.

FUEL: Not available.

REPAIRS: Very minor repairs only.

DISTANCES: The nautical distance between Nicaro and Antilla for vessels drawing over 6 ft. draft is 24 miles. For small craft drawing less than 6 ft. the distance is 14 miles. By highway, 130 kms. from Nicaro to Antilla.

Sea transportation takes 1 hour 45 minutes, and highway 2 hours 30 minutes. There is a daily launch service between Nicaro and Antilla. Launch leaves Antilla 0930 hrs. arriving at Nicaro at 1130 hrs. and a launch leaves Nicaro at 0930 hrs. arriving at Antilla at 1130 hrs.

AUTHORITY: Sub-port of Nicaro is under Antilla Custom House

jurisdicton. There is a Custom House Delegate at this sub-port, who acts as a Delegate of the Captain of the Port.

Vessels at Nicaro are handled by personnel of Antilla offices who visit Nicaro, and are located at Oficina de la Marina, Tel. 216. In case this office is closed, these personnel could also be contacted through Customs House telephone of Nicaro.

AGENT: See "Antilla".

(c) **SUB-PORTOF FELTON:**

LOCATION: This sub-port lies about 3 miles to East of Preston, and about 1 mile to East of mouth of Mayari River.

APPROACHES: See "Antilla".

PILOTAGE: See "Antilla". Distance from point where Pilot boards to Felton Pier, 6 miles; to Cagimaya anchorage, 5 miles.

CLEARANCE: Vessels can proceed directly to Felton, as Port Authorities from Antilla are taken by launch to visit vessel at Felton pier, or at sea in Cagimaya Anchorage.

RESTRICTIONS: No entry or sailing at night.

MAX. SIZE: Vessels of any length and draft can enter, but due to depth at pier they are limited to max. 25 ft. forward and 26 ft. aft. It is recommended that ships not exceed 480 ft.

It is not necessary for ships entering Felton to wait for slack water.

There is a variation of 3 ft. between high and low tides.

RADIO: Ships can communicate with Felton by wireless via CLA, but it is recommended that ETA messages be given to Mambisas Antilla and simultaneously Mambisas Havana.

The means of communication between Felton and Antilla are telephone and telegraph.

BERTHING: No wharf. Vessel is secured to 3 dolphins about 40 ft. from shore. Distance between end dolphins, about 350 ft. Loading of manganese is by crane grab, and loading rate about 200 metric t.p.h.

There is one electric shore crane mounted on rails with a loading capacity of about 10 tons. This crane is movable and has wide field of operation. The booms have a length of 60 ft. If the grab is removed, the crane can lift up to a max. of 15 tons.

Loading manganese continues throughout 24 hours and 7 days a week.

Discharging operations consist of bulk fertilisers and fuel oil.

No cargo operations conducted in bay.

MEDICAL: No hospital available at Felton. Sick crew members are sent to Nicaro Hospital or to Hoguin.

FRESH WATER: Can be supplied, but it is recommended that requisition be made sufficiently in advance in order to store required amount in aqueduct tank. Any quantity can be supplied depending on time vessel remains in port. Average pumping rate about 20 t.p.h.

Delivered by pipe-line.

FUEL: Not available.

REPAIRS: Mechanic shop operated by mining industries, in which light work can be performed.

DISTANCES: Distance between Felton and Antilla is about 11 miles. Usual transportation is launch service. It takes about 1 hour 30 minutes from Felton to Antilla. No daily transportation between Felton and Antilla.

AUTHORITY: The Port Authorities are located at Antilla and visit Felton as necessary.

AGENTS: See "Antilla". Mail should be sent through Antilla's main office by registered mail. Spares by railway express to Antilla.

BANES: 20.54 N. 75.41 W.

PILOTAGE: Vessels should pick up Pilot at 20° 53′ N., 75° 29′ W., 1 mile N.E. of Banes Canyon Lighthouse. Pilot station located at Embarcadero (Banes). Agent informs Pilot of ship's arrival by means of local telephone. Distance from point where Pilot boards vessel to pier is about 6 miles.

RESTRICTIONS: Entrance is through narrow channel with sharp turns where there is a strong current. For this reason vessels can only enter on slack water tide and during daylight. Assistance of tug necessary for entering and sailing. Bottom and banks are rock and coral. Depth about 60 ft.

MAX. SIZE: Max. length due to characteristic of channel is of 360 ft. Due to insufficient water at pier, and in bay, ships are limited to draft 19 ft. forward and 23 ft. aft.

Average of about 2 ft. 4 in. between high and low tides.

TUGS: At present no tug available, but when needed same is requested from Antilla. Particulars of tug shown under Antilla information.

RADIO: Ships can communicate with port by wireless via CLA, but recommended that ETA message be sent to Antilla Agency, simultaneously advising Mambisas Havana.

MEDICAL: There is a hospital where sick crew members may be hospitalised.

BERTHING: Nicaragua Pier is only one for shipping sugar. Through same pier molasses are exported by 16-in. pipe-line with 2 connections. Fuel oil also discharged at this pier through 22-in. pipe-line. Vessels always dock portside to pier.

Pier has 7 railroad tracks which reach end of pier, but no outlets at other end and when performing any movement, remaining flat cars must be taken out. 5 tracks used for loading sugar in forward hatches; remaining 2 supply sugar to after hatches. This work performed by means of overhead electrical crane which can move along pier with max. 5 slings. Slings are laid on pier and hoisted by ship's tackles.

No cargo operations performed at anchorage.

STEVEDORES: General cargo: No discharging operations performed at this port.

Raw sugar — Loading rate: 980 bags of sugar (of the 250-pound type) per 4 hours, per gang.

Bags per sling: 6 bags of raw sugar (of the 250-pound type) per sling.

Operation capacity: Only one ship can operate at one time.

Refined sugar: No refined sugar shipped by this port.

Bulk loading equipment: No thrower machines for bulk sugar, only 4 grates which are placed on square of hatch.

Working periods — loading sugar: Monday to Friday, 0700 to 1100 – 1300 to 1700 hrs., Saturday, 0700 to 1100 – 1300 to 1700 hrs.: No work performed on Sunday.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday; and 4 hours on Saturday, for a total of 44 hours weekly.

FUEL: Not available.

FRESH WATER: Fresh water supplied, delivered by 3-in. diameter pipe-line, with average delivery 4 t.p.h.

REPAIRS: Sugar mill Nicaragua has machine shop which can carry out light repairs.

AUTHORITY: All port authorities located at this port.

AGENT: See "Antilla".

For information regarding ship's operations, Antilla Agency should be contacted. Antilla office personnel travel to Banes to attend vessels operating there. Any mail should be addressed to Antilla Agency. Spare parts by railway express.

BARACOA: 20.21 N. 74.30 W.
(Sub-ports: Moa and Punta Gorda)

LOCATION: Situated on North coast and extreme East of Cuba in Oriente province.

PILOTAGE: Pilots board vessels 2 miles off port. Pilot station located in Baracoa City. Distance from point where Pilots board vessels to operation place (anchorage) is about 2 miles.

RESTRICTIONS: Vessels can enter port only during daylight.

MAX. SIZE: Entrance channel straight – without turns. Vessels up to 400 ft. length and 28 ft. draft can enter through Channel Two to 3 ft. rise of tide.

TUGS: Not available.

RADIO: Vessels can communicate with Baracoa by radio through Havana and Santiago de Cuba.

STEVEDORES: No pier at this port. Vessels anchor in bay for operations. Several barges, capacity 100 tons.

Working periods: Monday to Friday 0700/1100–1300/1700 hrs.; Saturday 0700/1100–1300/1700 hrs.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Discharge rate: about 80 tons daily per gang.

MEDICAL: There is a general hospital for sick crew.

FUEL/FRESH WATER/REPAIRS: Not available.

AUTHORITY: Port Authorities located at Baracoa. They have Delegation at Sub-port of Moa.

AGENTS (Sub-agency): Empresa Nacional de Cabotaje, Calle 1ro. de Abril No. 14, PO Box No. 27, Baracoa, Oriente, Cuba. Cable: "Simon Baracoa".

When needed to obtain information regarding ships operating at Moa or Punta Gordo, sub-agency at Baracoa should be contacted. When office closed, telephone number 81 should be called.

SUB-PORT OF MOA (Moa Bay): 20.41.15 N. 74.52.30 W.

Vessels can proceed directly to sub-ports of Moa and Punta Gorda where they are visited by Customs Authorities.

APPROACHES: Entrance Channel is straight and bottom is sandy. At both sides of entrance there are reefs and shoals.

PILOTAGE: Pilots board vessels at Moa Port mouth which is distant about 2 miles from entrance. Pilot station located at Punta Gorda at distance of about 5 miles from port entrance. Distance from point where Pilot boards vessel to Darsena de Moa (pier) is about 4 miles; to Moa Anchorage about 2 miles.

RESTRICTIONS: Vessels can enter and sail from this sub-port only during daylight.

MAX. SIZE: Vessels can enter through Channel up to Moa anchorage drawing up to 40 ft. and with length of 600 ft., but for docking at Moa pier, cannot enter with a draft over 28 ft. 6 in., and length of over 500 ft. At high tide vessels can enter drawing up to 30 ft.

Tidal variation: about 3 ft.

TUGS: Tug used at Moa for docking. Tug operated by Mining Enterprises.

RADIO: Government Radio Station at Moa with communication to Baracoa. At Baracoa there are long-distance telephone communications as well as Inalambrica service.

BERTHING: Only one pier (La Darsena) where vessels drawing up to 28 ft. 6 in. and with a length of about 500 ft. can be accommodated. This pier is used for discharge of raw material for the nickel plant and fuel oil, also for loading nickel.

No cargo operations in the bay.

STEVEDORES: Generally work is performed from 0700 to 2300 hrs.

Cranes: Several types of cranes: Bucyrious, Eric and Manitowk which have lifting capacity of about 75 tons.

Loading/discharging operations: Raw material for the nickel plant is imported as well as fuel oil. Nickel concentrate is exported.

Loading/discharging rate – Nickel (in containers): loaded at a rate of approximately 30 tons per hour-gang.

Sulphur: Discharging about 1,200 tons in the period from 0700 to 2300 hrs.

Fuel oil: Discharged at an average of about 3,200 b.p.h.

MEDICAL: Industrial Hospital where crew members can be hospitalised. General Hospital at Baracoa.

FUEL: Not available.

FRESH WATER: Delivery at rate of about 15 t.p.h.

REPAIRS: There are machine shops at nickel plant where small emergency repairs can be performed.

AUTHORITY: Port Doctor, Customs and Port Captain Delegations at this sub-port. Immigration Delegate is the same one who attends vessels at Baracoa and other sub-ports. Vessels can proceed directly to Moa where they are cleared, by Port Authorities. Means of transportation from Baracoa to Moa or other sub-ports are: air, launch and overland (jeep). Customs House inspectors travel from Moa to Baracoa.

Baracoa to Moa about 32 miles distant. Following services used: by plane, 20 minutes; by launch, 6 hours; by jeep, 5 hours. No regular services.

AGENT: See "Baracoa".

When vessel at sub-port of Moa, instructions should be given through Baracoa Sub-agency (cable address: "Simon" Baracoa).

SUB-PORT OF PUNTA GORDA: 20.38.30 N. 74.51.15 W.

APPROACHES: Entrance Channel for Punta Gorda same as for Moa Channel, continuing to Punta Gorda, but following a winding course.

RESTRICTIONS: Vessels can enter only during daylight.

PILOTAGE: Pilots board vessels at Moa port mouth. Pilot station located at Punta Gorda at a distance of about 5 miles from port mouth.

Distance from point where Pilot boards vessels to the anchorage (loading place) is about 4.5 miles.

MAX. SIZE: Max. draft permitted, 28 ft. and length not exceeding 440 ft. Tidal variation, 3 ft. max.

TUGS: One tug which tows 1 or 2 barges as necessary. Work performed day and night.

RADIO: Through Simon – Baracoa by Inalambrica (cable).

LOADING: Anchorage where vessels can load up to a max. length of 440 ft.

STEVEDORES: Chrome, at average loading rate of 1,000 tons (approx.) per day of 24 hours. Loading operations carried out at anchorage. There are 4 barges which have total capacity 600 tons.

MEDICAL: No hospital at Punta Gorda. Crew members can be attended to at Moa or Baracoa Hospital.

FUEL/REPAIRS: Not available.

FRESH WATER: No water available but can be supplied at Moa pier (Darsena).

AUTHORITY: Customs Delegation at this sub-port. Vessels can proceed directly to Punta Gorda. Port Authorities from Baracoa travel to Punta Gorda for clearance. Moa Port Doctor clears vessels at Punta Gorda. From Baracoa to Punta Gorda, following ways of transportation used: air, launch and overland, which takes 20 minutes, 5 hours and 4.5 hours respectively. No regular transportation.

AGENT: Baracoa Sub-agency personnel attend vessels operating at Punta Gorda.

Instructions from Havana should be given through Baracoa Sub-agency (cable address: "Simon" Baracoa).

CAIBARIEN: 22.32 N. 79.28 W.

Operations carried out at Cay Frances anchorage by lighters, at distance of 16 miles from City of Caibarien.

PILOTAGE: Pilots board vessels 0.5 mile from Catalina buoy (entrance) of Cay Frances anchorage. Pilot station located at Cay Frances at place known as Punta del Asta. Usual means of communication is radio-telephone, which is available at Port Captain's Office in Cay Frances, close to pilot station. Advice also given by motor-launch.

Distance from point where Pilots board vessels to:

Inner anchorage (La Caldera) – 2 miles
Outer anchorage (La Poza) – 0.5 mile
Outer anchorage (Port Buoy) – at same place where Pilots board vessels.

ANCHORAGES: Cay Frances anchorage easily accessible, free of shoals and reefs. Bottoms at anchorage "Caldera" and "Poza" are mud and sand. Bottom at third anchorage (port buoy anchorage) is stone, but free of reefs.

Vessels can enter or sail Cay Frances anchorage with any length and with max. draft up to 35 ft. When vessels draw less than 20 ft. they proceed to inner anchorage (La Caldera): over 20 ft. and up to 26 ft. to the outer anchorage (La Poza); and those over 26 ft. proceed to third anchorage (port buoy).

Following regulations must be observed during vessels stay at Cay Frances road:

(1) Vessels arriving with draft of 19 ft. 6 in. or less:
(a) All ships arriving with draft of 19 ft. 6in. or less must proceed to inner anchorage and remain in this anchorage until reaching draft of 20 ft. even keel.
(b) Any Master refusing proceed to inner anchorage with draft of 19 ft. 6 in. or less, incurs penalty of extra charge of about 7 cents on each bag of sugar delivered in port (payable to crew of sugar barges employed in transportation of cargo from shore warehouse to anchorage at Cay Frances).

(2) Shifting or changes of anchorages:
(a) Vessels must remain at place where official Pilot orders anchoring.
(b) Not permitted to shift or change from place indicated by official Pilot of the port without authorisation from Custom House Officer-in-charge on board the vessel. All shifts and changes to be done only under supervision and command of local Pilot.
(c) Master will notify Custom House Officer on board when shiftings or changes of anchorages places required.

In event aforementioned orders not followed or observed by Ship's Master and/or ship's officers, a penalty or fine min. $500 (five hundred dollars) will be charged to the vessel, and will have to be paid by Master prior to departure from this port. Besides penalty, no cargo will be delivered to ship anchored in any other place, other than indicated by local Pilot.

Vessels can enter during day and night-time.

TUGS/BARGES: It is not necessary to use tug for entering/sailing, but following tugboats which used for towing barges.

Tug Name	*Length*	*Speed*	*H.P.*
Gonzalez Lines	75 ft.	8/9 kn.	250
Cmdte. Fajordo	55 ft.	8/9 kn.	300
Jose Marti	60 ft.	8/9 kn.	180

BARGES: Following barges available:

Name	*Capacity Bags*	*Capacity Approx. Long Tons*
Transporte No. 1	2,860	328
Transporte No. 4	2,860	328
Transporte No. 3	2,860	328
Transporte No. 8	2,860	328
Transporte No. 10	2,860	328
Transporte No. 11	2,860	328
Patana Punta Alegre No. 1	2,860	328
Patana Cadagua	2,860	328
Patana Victoria	2,860	328
Patana Americana No. 2	3,640	417
Patana Miriam Lourdes	2,080	240
Lanchon Antonio	2,080	240
Lanchon Marcelo	2,080	240
Lanchon Emilio	2,080	240
Lanchon Armando	2,080	240
Lanchon Dolores	1,040	120
Lanchon Juanita	1,040	120
Lanchon Laura	845	97
Lanchon Marianela	845	97
Lanchon Gloria	715	82
Lanchon Elvira	680	78
	45,945	5,163

STEVEDORES: Sugar working periods: Monday to Friday 0700 to 1100 hrs. (presently labourers continue working from 1200 to 1600 hrs. but the official periods are from 0700 to 1100 hrs.). Sunday, no work is performed unless urgent.

Loading rate: About 1,000 bags of raw sugar per gang-period. For each gang, not less than 1,950 bags are placed alongside vessel for each 8 hours working period.

For vessel able to make faster reception, it is possible some days for about 3,000 bags to be loaded.

Bags per sling: 5 bags per sling loaded.

Work capacity: 2 vessels can be operated simultaneously.

General cargo: Only empty jute bags imported and discharging rate approx. 20 tons per gang hour.

TANKERS: Only blackstrap molasses exported by this port. When tankers arrive drawing less than 20 ft. or in ballast, they dock at Ponton or Hulk *San Pascual*, proceeding generally to complete at another port.

On other occasions they are shifted from Ponton (Hulk) *San Pascual*, to outer anchorage "La Poza" where they complete cargo which is delivered by barges.

Average pumping rate 55,000 gallons per hour.

RADIO: Vessels can communicate with Caibarien through government Wireless Telegraphy Station but it is surer and quicker for any communication from vessel to be given through radio-telephone.

For use of wireless telegraphy, service of Inalambrica is preferable.

Means of communication between Caibarien and Cay Frances: radio telephone.

Following tugs equipped with radio telephone: Comandante Gonzalez Lines, Comandante Fajardo and the motor launch *Yolanda*. Also radio telephone at Ponton (Hulk) *San Pascual* and at Port Captain's Office.

All tugs and motor-boats equipped with radio-telephone and communicate with Port Captain's Office are Caibarien and Empresa Consolidada de Terminales Mambisas. Official hours of communications are 0800, 0900, 1100, 1400, 1530 and 1600 hrs. After these hours, other communications can be made when needed, upon request.

At Caibarien are following means of communication: National Wireless Telegraphy, Inalambrica, long-distance telephone and Post Office. Services are from 0800 to 2000 hrs. Telephone service is permanent.

MEDICAL: There is a hospital at Caibarien for sick crew members.

FRESH WATER: Any amount of fresh water can be supplied by means of barges which are towed from Caibarien docks to Cay Frances anchorage. Barges are equipped for this purpose. Average rate of delivery is about 5 t.p.h.

REPAIRS: Minor repairs only. Repair shops at Caibarien, but due to distance from Caibarien to Cay Frances, it is difficult and expensive to perform repairs.
AUTHORITY: All port authorities located at Caibarien 16 miles from Cay Frances anchorage, where they travel by launch or motor-boat to clear vessels.

AGENT: Empresa Consignatarias Mambisas, Street 4 No. 305 (2nd floor), PO Box 72, Caibarien, L.V. Tel.: 3-1805 from 0700 to 1900 hrs. (night: 3-4785).

CARDENAS: 23.03 N. 81.12 W.

PILOTAGE: Pilots board vessels in vicinity of Cayo Piedras.
Pilot station at Cardenas. Distance from where Pilot boards to the pier is 16 miles, and to Cayo Diana 6 miles.
APPROACHES: Cardenas Channel in bay has muddy bottom. Exterior Channel has rocky and sandy bottom, is artificial Channel, no dangerous narrows.
MAX. SIZE: Official draft for port 20 ft. 6 in., but due to quantity of mud deposited in Channel, Pilots have advised that vessels are only permitted enter and sail with draft not over 19 ft. and length approximately 560 ft. Variation of approximately 2 ft. between high and low tides.
RESTRICTIONS: Vessels only permitted enter or sail from port during daylight. Channel entrance to berth, 3 hours steaming, therefore vessels must enter or sail at least 3 hours before sunset.
ANCHORAGES: *Cayo Piedra de Afuera Anchorage:* Outer anchorage. Max. draft 38 ft. Swinging area over 500 ft. Open to winds of 1st and 4th quadrants.
Cayo Piedra de Adentro Anchorage: Inner anchorage. Min. depth 29 ft. Swinging area 500 m. Max. draft 26 ft. Open to Northern winds.
Los Meritos Anchorage: Inner anchorage. Min. depth 30 ft. Swinging area 400 m. Draft limited to 20 ft. at low tide.
At "La Poza de Cayo Diana" there are 3 official anchorages:
Explosivo Anchorage: 23° 10′ 22″ and 81° 08′ 56″ W. Min. depth 27 ft. Swinging area 300 m.
Cuarentena Anchorage: For vessels drawing over 15 ft. 23° 11′ 5″ N. 81° 08′ 17″ W. Min. depth 23 ft. Swinging area 350 m.
La Poza Anchorage: Min. depth 29 ft. Swinging area 750 m. Max. draft limited to the Port Official draft. Well sheltered.
Anchorages in Bay:
Cuarentena Anchorage: For vessels drawing 15 ft. or less. 23° 06′ 58″ N. 81° 10′ 48″ W. close to Port inner anchorage. Min. depth 16 ft. Swinging area 33 m.
Official de Bahia Anchorage: Min. depth 15 ft. Max. draft at high tide 15 ft. Swinging area 900 m.
TUGS: Normally tug not required to assist berthing, but when vessels have to berth head to shore, assistance of tug is necessary.
BERTHING: Loading/Discharging Place – Pier: Max. drafts: N.W. side (fore): 19 ft., (aft) 17 ft. 6 in. S.W. side (fore): 18 ft. Aft end not used for large vessels. Pier has double railroad tracks of standard gauge.
Operations in Bay: At present, no cargo operations in the bay are performed, although there is a fleet of nine lighters numbered from one to nine, with a loading capacity of 150 tons each (1,300 bags of the 250-pound type).
STEVEDORES: Export of refined sugar and alcohol. No general cargo operation performed at present. No shore crane available.
Working periods: loading sugar from Monday to Friday 0700/1100–1300/1700 hrs.; Saturday 0700/1100 hrs.; Sunday: no work performed.
When vessel does not achieve daily rate during regular hours, work is carried out from 1900 to 2300 hrs.
Raw sugar loading rate: about 1,138 bags (of the 220-pound type) loaded per 4 hours per gang. This is not a fixed rate but when exceeded stevedores to be paid extra. Bags per sling: 4 bags of raw sugar (of the 220-pound type) loaded per sling.
Capacity: Normally three vessels can be operated simultaneously.
Refined sugar: about 2,500 bags (of the 100-pound type) or 2,272 bags of 50 kilos, loaded per 4 hours per gang period. This is not a fixed rate, but when it is exceeded an additional payment must be made. Bags per sling: 8 bags (of the 50-kilo type and 100–pound type) loaded per sling. For those weighing 100 kilos, 4 bags loaded per sling.
Bulk: Only grates are available for loading bulk sugar.
RADIO: Ships can communicate with port by R.C.A. radio.
TANKERS: Average pumping rate of alcohol about 50,000 gallons per hour.
MEDICAL: Cardenas General Hospital and a clinic.
FRESH WATER: Pier has tank which receives water direct from aqueduct, but not sufficient to supply large quantity to ships. When necessary to deliver more than 80 tons, tank cars must be used to deliver additional quantities at the pier. Any quantity of water can be delivered using tank cars, but order must be placed 48 hours in advance.
Average delivery rate about 20 to 30 t.p.h.
FUEL: Not available.
REPAIRS: Repair shop named "Jose Valdes Reyes" where light repairs can be perfomed.
AUTHORITY: All port authorities located at Custom House building.
AGENT: Empresa Consignatarias Mambisas, Agencia Cardenas, 1ra. Avenida y Calle 4, Cardenas, Matanzas. Tel. 2847 (night: 4830).

CIENFUEGOS: 22.09 N. 80.27 W.

Including sub-port of Casilda (Port Trinidad), and sub-port of Tunas de Zaza:

PILOTAGE: Pilots board vessels 1 mile to South of Faro de los Colorados. Pilot station situated at Castillo de Jagua, at entrance of port. Distance from point where Pilots board vessels to the piers about 7 to 8 miles.
At entrance channel there are two sharp turns at Pasa Caballos and West part of Cayo Carenas.
Vessels permitted enter and sail from port day or night.
ANCHORAGES: General Anchorage and North Anchorage: min. depth at both anchorages 40 ft.
At N.E. part of General Anchorage (narrowest portion), vessels with a length of 560 ft. normally anchor with 3 shackles of chain in water, swinging easily with over 30 ft. draft aft.
Larger vessels can be accommodated at S.W. part of General Anchorage, where swinging area larger, and depth deeper. Min. depth 48 ft.
When piers are occupied, loading or discharging operations can be performed at anchorage. There are 9 barges available, capacity 150 tons each, 3 tugs, *Julia, Ramona* and *Granie*. Each tug can tow 2 barges.
MAX. SIZE: Max. length with which vessels can enter port is 700 ft. with draft up to 37 ft., making use of the best conditions, such as slack water, and daylight. Tidal variation about 1 ft. 6 in.
BERTHING: *Cacicedo Pier:* Drafts: 24 ft. fore, 25 ft. aft. Pier length: 385 ft.
Mooring Berth Standard: Min. depth in all area of 45 ft.
Naticorp: For vessels up to 613 ft. length, drafts up to 29 ft. fore and 30 ft. aft. For vessels up to 550 ft. length, drafts up to 29 ft. 6 in. fore, and 30 ft. aft. Vessels secure to 4 mooring dolphins.
Ferrocarril Pier (West Side): For tankers (discharge) length up to 620 ft., drafts: 27 ft. fore, 29 ft. aft. Pier length: 300 ft. For vessels (dry cargo) loading, up to 560 ft. length, draft: 27 ft. fore and 29 ft. aft.
(East Side) – Max. length for vessels loading/discharging 560 ft. with a draft up to 27 ft. fore and 29 ft. aft. Pier length: 240 ft.
Terminal Maritima Pier (installation of mechanical equipment for bulk sugar shipments): Length 558 ft. Draft fore 32 ft., aft 33 ft.
Wharves have railroad tracks. Transportation by trucks can also be effected. No double tracks.
Operation capacity: 4 vessels can operate simultaneously, 2 at Ferrocarril Pier, 1 at Terminal Maritima, and 1 at Cacicedo Pier.
TANKERS: Molasses pumping rate:
Plant N.A. 60/100,000 gallons per hour.
O.T. 25/35,000 gallons per hour.
C.D. 25,000 gallons per hour.
STEVEDORES: Working Periods – Sugar:
From Monday to Friday: 0700/1100 – 1300/1700 hrs.; Saturday: 0700/1100 – 1300/1700 hrs.; Sunday: Subject to Agreement.
General Cargo: 0700/1100 – 1300/1700 hrs. at night time subject to agreement.
Sugar Loading Rate: About 1,350 raw sugar bags (of the 250 pound type) per 4 hours gang period. Presently no bagged sugar is being shipped, but only sugar in bulk through mechanical equipment.
Bulk Sugar Shipments: Through new mechanical installation located at Terminal Maritima.
Sugar Bags per sling: 6 sugar bags (of the 250 pound type) loaded per sling.
Cargo discharging Rate: General cargo about 110 tons per gang/per day. Fertilisers, about 110 tons per gang per day.
Shore Crane: Not available.
RADIO: Vessels communicate with Cienfuegos by radio through Havana-Santiago, and when close to port, through local Custom House communication.
Suggested that ETA messages be given sufficient time in advance to Mambisas – Cienfuegos and to Mambisas – Havana – simultaneously.
To communicate with Casilda only, long distance telephone and telegraph can be used. With Tunas de Zaza, by telegraph only. Cienfuegos has airport, railroad, sea radio, telephone and telegraph.
R.C.A., Western Union and Inalambrica operate at Cienfuegos.
MEDICAL: Two hospitals, General Hospital and Mutualist Clinic (formerly Sanatorio de la Colonia Espanola), where sick crew members can be hospitalised.
FUEL: Barge capacity for delivering fuel oil is 250 tons. Fuel can also be delivered at former Standard Dock. For delivering regular diesel oil, Ferrocarril dock is to be used, as the barge is out of service.
FRESH WATER: Vessels can be supplied with fresh water delivered by barges. Water barge capacity 250 tons. When delivered during overtime hours or on Sundays, 50% increase.
REPAIRS: Repair shop available, but can only carry out winch repairs and other light work.
AUTHORITIES: All port authorities are located at port of Cienfuegos.
From Cienfuegos to Casilda and Tunas de Zaza, following transportation can be used: railroad, trucks, barges.
It takes from 2 to 5 hours, according to transport conditions, to travel from Cienfuegos to Casilda or Tuna de Zaza.
Distance, by sea, from Cienfuegos to Casilda 45 miles; to Tunas de Zaza 80 miles. Suggested that railroad or highway be used to travel from Cienfuegos to Casilda or Tunas de Zaza. There is daily omnibus and auto service from Cienfuegos to Casilda and Tunas de Zaza.

AGENTS: Empresa Consignatarias Mambisas, Agencia Cienfuegos, Avenida 50 2712, POB 420. Tel. 5718 – 6422 (Night: 6715).

Recommended that all correspondence or instructions be sent through Havana main office. Cienfuegos Agency attends ships that operate at Casilda and Tunas de Zaza. For any information concerning vessels operating at these sub-ports, Cienfuegos Agency should be contacted.

SUB-PORT OF CASILDA: 21.45 N. 79.59 W.
(This is loading port for Trinidad, three miles from Casilda).
PILOTAGE: Vessels should pick up Pilots at Cayo Blanco. Distance from point where Pilot boards vessels to pier is 9 miles.

Entrance channel to Casilda has muddy bottom, with dangerous "S" shaped turn.
ANCHORAGE: Draft 25 ft., swinging area 2.5 miles.
RESTRICTIONS: Vessels can enter and sail during day-time only.
MAX. SIZE: Vessels can enter and sail with max. draft of 25 ft. and length of 512 ft. (Pilot advises it is possible to operate vessels with length up to 565 ft.) Tidal variation about 2 ft.
TUGS: None.
BERTHING: (Dry cargo) Pier length 520 ft., depth 25 ft. (Tankers) Berth length 390 ft.
STEVEDORES: Working periods:

Monday to Friday 0600/1000 – 1200/1600 hrs.; Saturday 0600/1000 – 1200/1600 hrs.; Sunday when necessary, same periods.

Raw sugar loading rate: 1,200 sugar bags, loaded per gang per day. Bags per sling: 6 sugar bags per sling. Operation capacity: only one vessel can operate.

Refined sugar loading rate: 1,500 bags per gang per day. Bags per sling: 12 bags loaded per sling.

General cargo: No regular general cargo operations performed at this port.

Shore crane: No shore crane available.

Bulk sugar equipment: no bulk sugar equipment available.

Warehouses: 2 warehouses with capacity for storage of 70,000 bags of sugar. No. 1 (at the pier) 40,000 bags (250 L). No. 2 (at the Real Street) 30,000 bags.
TANKERS: Discharging pumping rate of fuel oil about 20,000 barrels. Alcohol and molasses not shipped.
MEDICAL: Sick crew members can be sent to General Hospital.
RADIO: Vessels can communicate with port through Havana Radio.
FUEL/REPAIRS: Not available.
FRESH WATER: Vessels can be supplied with fresh water, delivered by means of electric turbine at the pier. Delivered at average of 30 t.p.h.
AUTHORITIES: Port Captain, Custom Authorities and port Doctor travel from Trinidad to Casilda.

AGENT: If any information required regarding ships operating at Casilda, Cienfuegos Agency should be contacted.

Crew mail or any other mail should be sent to Havana main office, from where it is sent to Cienfuegos.

SUB-PORT OF TUNAS DE ZAZA: 21.37 N. 79.32 W.
Seaport of Sancti Spiritus. Port lies about 1.25 miles North of Point Ladrillo.
PILOTAGE: Pilot may board vessels either at Breton Channel or Tunas Channel.

Distance from point where Pilot boards vessel entering through Breton Channel to Tunas de Zaza anchorage is 8 miles. From place where Pilot boards vessel entering through Tunas Channel is 1.5 miles. Pilot station for Tunas Channel, located at Cayo Zaza de Fuera. For Breton Channel, entrance of Breton, that is, 8 miles from anchorage.
MAX. SIZE: Two channel entrances for this port; one through Breton Channel, which is with turns, but not dangerous. Vessels can enter or sail through this channel drawing up to 29 ft. The other one through Tunas Channel, has no turns. Vessels can enter and sail through this channel, drawing up to 22 ft. No length restrictions.

Tidal variation 1 ft. 6 in. Vessels can enter day and night.
TUGS: 3 tugs: *Arturo, Don Juan,* and *Tuinicu,* which tow up to 6 barges.
BERTHING: At this port there are no piers. All operations are performed at anchorage with barges. Depth at (In) anchorage 24 ft. and 27 ft. (Out) 30 ft. For sailing with 22 ft. 6 in./24 ft. 8 in. and 29 ft. respectively.

There are 9 barges available for loading sugar with total loading capacity of 7,500 bags. Sugar loading rate: 1,500 bags per gang daily. Bags per sling: 6 sugar bags loaded per sling.

General cargo: No general cargo operations are performed.

Shore crane: No shore crane available.

Bulk sugar equipment: None.
STEVEDORES: Working periods – loading sugar: Monday to Friday 0600/1000 – 1200/1600 hrs.; Saturday 0600/1100 – 1200/1600 hrs.; Sunday: when necessary.
MEDICAL: For sick crew members, there is a general hospital at Sancti Spiritus.
RADIO: Via Radio Havana, for relay through Cienfuegos Agency.
FUEL/REPAIRS: None.
FRESH WATER: Vessels can be supplied by tugboat which carries 30 tons. Delivery average 30 tons per day.
AUTHORITIES: There are Custom House and Captain of the Port Delegations at this sub-port. Customs also acts for Immigration. Port Doctor located at Zaza del Medio.

Vessels can proceed directly to this sub-port where they are visited by port authorities. Means of transportation used by port authorities to give entry is by launch service.

At this sub-port Custom House and Captain of the Port have delegations, but not port Doctor.

AGENT: Vessels operating at this sub-port are attended by personnel from Cienfuegos Agency.

GUANTANAMO: 19.59 N. 75.10 W.

PILOTAGE: Pilots board vessels at distance of 1 mile from Buoy No. 1 at port entrance.

Distance from where Pilots board vessels to: General anchorage: 7.5 miles. "Boqueron" Pier: 7 miles.
APPROACHES: Wide entrance channel with mud bottom and free from navigational hazards.
ANCHORAGE: Max. draft 25 to 27 ft. Swinging area 400 m.
MAX. SIZE: Vessels can enter with max. draft up to 19 ft. and length 500 ft. Tidal variation about 11 in.
TUGS: Not available.
BERTHING: Boqueron Pier: length 550 ft., depth at both sides 23 ft. Pier has 4 railroad tracks of standard gauge. Work not interrupted when shifting sugar railroad cars.

Distance from Caimanera to Boqueron Pier: 1.25 miles. From Caimanera to Boqueron there is daily transportation.
STEVEDORES: Sugar and molasses loading operations are carried out at this port.

Working periods loading raw sugar: From Monday to Friday 0700/1100 – 1300/1700 hrs.; at night time whenever necessary. Saturday 0700/1100 – 1300/1700 hrs.; at night time whenever necessary. Sunday: above-mentioned periods, whenever necessary.

Bagged sugar loading: 780 bags loaded per gang-period. Sugar bags per sling: 4 sugar bags per sling.

Capacity: Two vessels can load simultaneously at Boqueron Pier.

Raw sugar in bulk: Four complete sets of machines and 10 grates.
TANKERS: Molasses pumping rate average of about 35,000 gallons per hour.
MEDICAL: Clinic where sick crew members may receive attention.
FRESH WATER: Can only be supplied by Boqueron Pier but delivery is difficult as brought in railroad tankers from Guantanamo, which is distant about 30 kms. Tank cars capacity up to 20 metric tons. Max. 150 tons can be delivered, but recommended that vessels be supplied with water at another port, delivery about 10 t.p.h. During harvesting of sugar, no water can be supplied.
FUEL/REPAIRS: Not available.
AUTHORITY: Port doctor located at Guantanamo. Other port authorities Custom House, Port Captain, Immigration, located at Caimanera.

AGENT: Consignatarias Mambisas, Carril entre Marine y Correo, POB 5, Caimanera, Oriente. Tel. 23 (night: 36).

HAVANA: 23.09 N. 82.21 W.

PILOTAGE: For requesting Pilot, in daytime or at night, ships shall use signals established in International Signal Code, also they can direct light signal to Morro semaphore and make sound signals at intervals.

Pilot service is compulsory for all foreign ships more than 40 gross tons.

Master must inform Pilot: port of origin, illness of any person on board, or if ship is carrying explosive or easily inflammable materials, in which case the ship shall be anchored in special berths and shall be under control of port authorities.

Any ship in port requiring immediate Pilot services should either call telephone numbers: 62–3602 or 62–2896; or hoist "G" Flag, sound 2 prolonged blasts.

Pilots board vessels approximately 1 mile from port mouth, although in some cases, especially at night-time, they will go out about 3 miles to meet incoming vessels.

Pilot station located at San Pedro St. No. 2. Telephones: 62–3602 and 62–2896.

Distance from where Pilots board vessels up to port anchorage or wharves is about 1 mile.
APPROACHES: Vessels can enter during day and night. At entrance there is a strong current.
MAX. SIZE: Max. draft jn channel at low tide is 42 ft. Max. draft in main anchorage is 33 ft., although on many occasions vessels cannot dock with this draft. Tankers can enter drawing up to 37 ft., as they take special course once they are inside bay. Tidal variation about 18 in.
RADIO: Vessels can communicate through CLA radio.
TUGS: Following tugs available:

Name	*Length*	*Speed*	*H.P.*
Pinzon	20 m	5 knots	540
Raquel	14.95 m	6 knots	145
Chucho	12.40 m	6 knots	145
Antonio Briones	28.46 m	12 knots	860
Bick-C	—	—	179
Manuela	17.18 m	—	325
Mariel	12.40 m	—	165
Mayari	12.00 m	—	165
Sara	14.80 m	—	150
Triunfo	12.40 m	—	147

BERTHING: *(a)* Andres Gonalez Lines Dock (former name: Havana Coal): Dock used in discharge of bulk fertiliser and coal. Length

1,090 ft., depths (from South to North): 22, 26, 26, 29, 30, 24, 23, 19, 17, 19 ft. Max. draft: 28/30 ft. dependent berth. Railroad tracks and overhead bulk discharge crane.

(b) Sierra Maestra Terminal (former name: Havana Dock Corp.): Terminal used in discharge and loading of general cargo, consists of 3 piers:

Pier No. 1 – North side (former name San Francisco): length 662 ft., width 210 ft., depths (from West to East): 19, 29, 30 ft. Max. draft, 30 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

Pier No. 1 – South side: length 662 ft., width 210 ft., depths (from West to East): 21, 30, 38 ft. Max. draft 30 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

Pier No. 2 – North side (former name: La Machina): length 661.5 ft., width 210 ft., depths (from West to East): 24, 30, 39 ft. Max. draft 32 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

Pier No. 2 – South side: length 602 ft., width 210 ft., depths (from West to East): 21, 30, 36 ft. Max. draft 32 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

Pier No. 3 – North side (former name: Santa Clara): length 625 ft., width: 210 ft., depths (from West to East): 20, 30, 39 ft. Max. draft 30 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

Pier No. 3 – South side: length 562 ft., width 210 ft., depths (from West to East): 21, 30, 34 ft. Max. draft 30 ft. Vessels can berth without danger on 33 ft., but with part of vessel away from pier.

All 3 piers have railroad sidings connecting with main tracks; are also suitable for truck operations.

(c) Margatiro Iglesias Terminal (former name: Paula Piers): Terminal is used in discharge and loading of general cargo, consists of 3 piers:

Pier No. 1 – North side: length 443 ft., width 118 ft., depth (from East to West): 27 ft. at bay end or East side of pier; 17 ft. at centre and 12 ft. at West or shore end. For some years no operations have been performed at this pier. Max. draft 20 ft. Vessels can dock without danger on 23 ft., but with part of vessel away from pier.

Pier No. 1 – South side: length 443 ft., width 118 ft., depths (from East to West): 26 ft. at bay end or East side of pier; 24 ft. at the centre and 8 ft. at West or shore end. Max. draft 20 ft. Vessels can dock without danger on 23 ft., but with part of vessel away from pier.

Pier No. 2 – North side: length 443 ft., width 118 ft., depth (from East to West): 27 ft. at bay end or East side of pier; 20 ft. at centre and 10 ft. at West or shore end. Max. draft 20 ft. Vessels can dock without danger on 23 ft., but with part of vessel away from pier.

Pier No. 2 – South side: length 443 ft., width 118 ft., depth (from East to West): 27 ft. at bay end or East side of pier; 22 ft. at centre and 13 ft. at West shore end. Max. draft 20 ft. Vessels can dock without danger on 23 ft., but with part of vessel away from pier.

Pier No. 3 – North side: length 443 ft., width 118 ft., depth (from East to West): 26 ft. at bay end or East side of Pier; 24 ft. at centre and 11 ft. at West or shore end. Max. draft 18 ft. Vessels can dock without danger on 20 ft., but with part of vessel away from the pier.

Pier No. 3 – South side: length 443 ft., width 118 ft. depth (from East to West): 25 ft. at bay end or East side of pier; 17 ft. at centre and 10 ft. at West or shore end. Max. draft 18 ft. Vessels can dock without danger on 20 ft., but with part of vessel away from the pier.

All 3 piers have railroad sidings connecting with the main tracks; are also suitable for trucking operations.

Breadth between piers: 123 ft.

(d) Havana Central Pier: Pier used in discharge and loading of general cargo. North side: length 434 ft., width 200 ft., depth (from East to West): First 400 ft. of pier has draft of 31 ft. at bay end or East side; 29 ft. at centre and 26 ft. at West shore end. Remaining length must be disregarded due to shallowness of water. Max. draft 28 ft. Vessels can dock without danger on 30 ft., but with part of vessel away from the pier.

South side: length 480 ft., width 200 ft., depth (from East to West): 28 ft. at bay end or East side: 26 ft. at centre and 19 ft. at West or shore end. Max. draft 27 ft. Vessels can dock without danger on 28 ft., but with part of vessel away from pier.

(e) Aracelio Iglesias Terminal (former name: Norguly Terminal): Terminal used in discharge and loading general cargo, consists of a dock and a pier. Dock (Warehouse): length 573 ft., width 44 ft., depth (from N.E. to S.W.): 26 ft. at N.E. end, 23 ft. at centre and 20 ft. at S.W. end. Max. draft 27 ft. if vessels berth starboard side to dock.

Pier – North side: length 518 ft., width 104 ft., depth (from East to West): first 500 ft. of dock 37 ft. at East or bay end, 30 ft. at centre and 24 ft. at shore or West end. Max. draft 30 ft.

Pier – South side: length 449 ft., width 104 ft., depth (from East to West): 34 ft. at East or bay end, 34 ft. at centre and 27 ft. at West or shore end. Max. draft. 32 ft.

Dock and pier hame railroad sidings connecting with main track; also suitable for trucking operations.

(f) Juan Manuel Diaz Terminal (former name: Ward Line Terminal): Terminal used in discharge and loading general cargo, consists of 2 docks and 1 pier. Dock (Warehouse) No. 3: length 521 ft., width 56 ft., depth (from N.E. to S.W.): 21 ft. at N.E. end, 22 ft. at centre and 20 ft. at S.W. end. Max. draft 24 ft. if vessels berth starboard side to dock.

Pier – North side: length 500 ft., width 125 ft., depth (from East to West): first 450 ft. of pier: 35 ft. at bay end or East side, 30 ft. at centre and 20 ft. at West or shore end. Max. draft 28 ft.

Pier – South side: length 530 ft., width 125 ft., depth (from East to West): first 480 ft. of pier: 33 ft. at bay end or East side, 30 ft at centre and 24 ft. at shore or West end. Max. draft 33 ft.

Dock (Warehouse) No. 2: length 481 ft., width 31 ft., depth (from N.E. to S.W.): 21 ft. at N.E. end, 22 ft. at centre and 26 ft. at S.W. end. Max. draft 24 ft. if vessel berths port side to dock.

Both dock and pier have railroad sidings connecting with main track; also suitable for trucking operations.

(g) La Coubre Dock (former name: Pan American Dock): Dock used in discharge and loading general cargo, consists of dock and pier. La Coubre Pier: length 390 ft., width 49 ft. North side of pier was customary berth of ferries, depth of narrowest part (emboque) being 22 ft., and depth along pier, from shore to bay, being 19, 25, and 28 ft. Depth at South side of pier; 20, 27, 22 ft., but at present no operations performed on this side.

La Coubre Dock: In front of warehouse No. 1, depth from North to South, of 20/23 ft. In front of warehouse No. 2, depth of 22/27 ft. from North to South. Max. draft 25 ft. in front of warehouse No. 1, and in the centre, 23 ft. in front of warehouse No. 2.

No railroad sidings, but suitable for trucking operations.

(h) Tallapiedra Dock (former name: Tallapiedra): Dock used in discharge of lighters. Dock Tallapiedra (Corrido): length 453 ft., depth (from N.E. to S.W.): 14 ft. at N.E. end, 19 ft. at centre and 15 ft. at S.W. end.

No warehouses nor railroad sidings and only suitable for trucking operations.

(i) Antonio Guiteras Dock (former name: Havana Electric Dock): Dock used in discharge of heavy lifts from lighters discharged by vessels performing operations in the bay. Length 847 ft., depth (starting from Tallapiedra Pier No. 2): 26, 21, 21, 18, 11 ft. Dock was formerly used by tankers discharging fuel for Electric Plant. A lighter, 40 ft. wide, was used to breast off the ship, which was berthed starboard side to dock, drawing up to 28 ft. bow laying in the mud. If no lighter used, vessels drawing up to 23 ft. only can berth.

(j) Osvaldo Sanchez Dock (former name: Atares-Vaccaro Docks): Docks used mainly in discharge of lumber.

Dock No. 1 (formerly Atares): length 428 ft., width 30 ft., depth (from N.E. to S.W.): 22 ft. at N.E. end, 23 ft. at centre and 24 ft. at S.W. end. Max. draft 24 ft. (berthing port side to dock).

Dock No. 2 (formerly Vaccaro): length 511 ft., width 30 ft., depths (from N.E. to S.W.): 26, 21, 21, 17 ft. Max. draft 25 ft. Berthing starboard side to dock, bow touching bottom. No railroad sidings but suitable for trucking operations.

(k) Melones Dock: Dock has installation for discharge of fuel oil, as well as overhead crane for discharge of fertilisers and coal. Length 718 ft., width 35 ft., depth (from N.E. to S.W.): 18 ft. at N.E. end, 13 ft. at centre, and 10 ft. at S.W. end.

Dock does not have railroad siding or warehouses, although is suitable for trucking operations. Not at present in operation, due to shallow draft.

(l) Puerto Pesquero de la Habana (Havana Fishery Port): Pote Dock, Hacendados Pier and Hacendados Dock have been completely rebuilt forming as a whole "El Puerto Pesquero de la Habana" (Havana Fishery Port). Present depths 23 ft. When completed, drafts should be 26 ft., with exception of that portion which was Hacendados Dock where draft will be 24 ft. Presently vessels are operating at this terminal, but no definite data can be given regarding forms of operation until work officially completed.

Dock No. 1 – Length 738 ft.
Dock No. 1 – Length 853 ft.
Dock No. 2 – Length 505 ft.
Dock No. 3 – Length 738 ft.
Dock No. 4 – Length 450 ft. (not yet completed).

(m) Terminal Maritima Pesquera Dock: North side: length 714 ft., depth 32.5 ft., S.E. side: length 685 ft., depth 28/26 ft.

Terminal Maritima: Dock in N.E./S.W. direction, is of very recent construction and used in discharge and loading of general cargo. Length 1,747 ft., width 72 ft. Depths from 33/35 ft. Max. draft 31 ft. 5 in., but vessels can dock without danger on 33 ft.

(n) Manuel Porto Pena Terminal (formerly Burrus Docks, Begueristain Dock, Auxiliar Maritima Dock and Regla Coal Dock): Terminal consists of following docks:

Manuel Porto Pena (Burrus): Dock used in discharge of bulk grains. Equipped with elevator and silos, having storage capacity of approximately 20,000 tons which permits discharging rate, under normal circumstance, of about 1,200 tons per day. Length 500 ft., width 26 ft., depths (from S.E. to N.W.) 26, 30, 29, 27 ft. Max. draft 30 ft. 6 in. vessels remaining 2 m. off the dock, but vessels dock without danger on 31 ft. remaining 3 m. off the dock.

(o) Manuel Porto Pena No. 1 (formerly Begueristain): Dock used in discharge and loading of general cargo and sugar. Length 315 ft., width 35 ft., depths (from S.E. to N.W.): 23, 23, 25, 27 ft., max. draft 26 ft., ship remaining separated from the pier. Dock has railroad sidings and is also suitable for trucking operations.

(p) Manuel Porto Pena No. 2 (formerly Auxiliar Maritima): Dock used in loading of sugar and discharge of general cargo. Length 447 ft., width 35.7 ft., depths (from S.E. to N.W.): 26 ft. at S.E. end, 25 ft. at centre and 27 ft. at N.W. end. Max. draft 28 ft., ship remaining separated from pier, but vessels can dock without danger on 29 ft., by loosening moorings and slipping away from dock during loading.

Dock has no warehouse, although equipped with railroad sidings, is suitable for trucking operations, and has installations for discharge of fuel oil.

(q) Manuel Porto Pena No. 3 (formerly Regla Coal): Dock used in discharge and loading of general cargo: length 779 ft., width 30 ft. depths (from S.E. to N.W.): 25 ft. at S.E., 26 ft. at centre and 23 ft. at N.W. end. Max. draft 26 ft., but vessels can perform operations without danger on 29 ft., vessel remaining separated from dock, and bow touching bottom.

Dock has railroad sidings and also suitable for trucking operations. It has installations for discharge of fuel oil and gasoline.

(r) Quinto de Regla Pier: Pier used mainly in sugar loading. Pier – South side: length 622 ft., width 54 ft., depths (from S.W. to S.E.): 27 ft. at S.W. or bay end, 25 ft. at centre and 17 ft. at S.E. end. Max. draft 30 ft.

Pier – North side: length 343 ft., width 54 ft., depth (from N.W. to N.E.): 28 ft. at N.W. or bay end, 26 ft. at centre and 22 ft. at N.E. end. Max. draft 28 ft. (moving vessels along pier as they are being loaded).

Pier has railroad sidings and also suitable for trucking operations.

(s) Fesser Pier: Pier has installations for loading molasses: Pier – South side: length 465 ft., width 30 ft., depth (from S.W. to S.E.): 27 ft. at S.W. or bay end, 25 ft. at centre, and 23 ft. at S.E. end. Max. draft 25 ft.

Pier – North side: length 407 ft., width 30 ft., depth (from N.W. to N.E.): 22 ft. at N.W. or bay end, 26 ft. at centre, and 25 ft. at N.E. end.

(t) Edificios Nos. 1 & 2 Docks (former name: American Agricultural and Chemical). Docks used in discharge of fertilisers, also installations for loading and discharging molasses.

Edificio No. 1 Dock (formerly American Agricultural and Chemical): length 516 ft., width 25 ft., depths (from N.E. to N.W.): 21/22 ft. of water throughout whole extension of dock. In loading molasses vessels are breasted off dock by means of a lighter, and can then load up to 29 ft. draft.

Edificio No. 2 Dock (formerly American Agricultural and Chemical): length 380 ft., width 108 ft., depths (from N.E. to S.W.): 19 ft., at N.E. end, 14 ft. at centre and 14 ft. at S.W. end. No operations performed at this dock due to shallow draft.

Docks do not have railroad sidings but are suitable for trucking operations.

(u) Facilidades Maritimas Dock (formerly: Cuban Distilling Dock): Dock used mainly in loading of molasses, and discharging tallow and chemical products. Length 814 ft., width 26 ft., depths (from N.W. to S.E.): 25 ft. at N.W. or bay end, 26 ft. at centre and 23 ft. at S.E. end.

Dock has railroad sidings and also suitable for trucking operations. Max. draft 26 ft.

(v) Nico Lopez Piers Nos. 1 and 2 (formerly Standard Oil Pier and Shell Oil Pier): Piers are used exclusively in discharge of fuel oil, gasoline, etc., and are operated by the Oil Refinery: Pier No. 1 – North side (formerly Standard Oil): length 1,027 ft., depth (from East to West): 36 ft. at Eastern or shore end, 35 ft. at centre and 34 ft. at West or bay end. Max. draft 36 ft. 6 in.

Pier No. 1 – South side: length 1,027 ft., depths (from East to West): 36 ft. at Eastern or shore end, 35 ft. at centre and 34 ft. at West or bay end. Max. draft 36 ft. 6 in.

Pier No. 2 – North side (formerly Shell Oil): length 990 ft., depths (from East to West): 35 ft. at East or shore end, 35 ft. at centre and 38 ft. at West or bay end. Max. draft. 38 ft.

Pier No. 2 – South side: length 990 ft., depths (from East to West): 34 ft. at East or shore end, 36 ft. at centre and 38 ft. at bay or West end. Max. draft 36 ft., but vessels can dock without danger on 37 ft. A deeper draft than 37 ft. is not acceptable without running the risk of touching bottom.

Discharging or loading operations are also performed at anchorage. There are 20 barges available.

STEVEDORES: Monday to Friday: working periods 0700–1300 and 1300–1900 hrs., although if necessary, two additional periods of 6 hours each may be worked. Saturday: Same as above. Sundays: No work performed.

Raw Sugar: Approximately 1,400 bags of raw sugar loaded per gang period. Six raw sugar bags loaded per sling. Loading raw sugar on 3 vessels simultaneously.

Refined Sugar: Approximately 3,800 bags of refined sugar (of 50 kg) loaded per gang period. 12–15 bags loaded per sling.

General cargo: Approximate average discharging rate per gang hour:

General cargo about	10 tons	
Bagged merchandise	up to 51 kg.	16 tons
Bagged merchandise	up to 92 kg.	17 tons
Bagged merchandise	more than 92 kg.	19 tons
Wood		8.4 tons
Fertilizers:		
Superphosphate		9.9 tons
Simple superphosphate		8.1 tons
Ammonium		9.0 tons
Potash		9.9 tons
Muraite		10.5 tons
Sulphur		10.3 tons
Phosphoric Rock		11.9 tons
Triple Phosphate		8.0 tons
Sodium Silicate		9.0 tons
Ferromanganese		9.0 tons

Floating Cranes:

Pablo Sandoval	100 tons—boom 51 m.
Frank Pais	25 tons—boom 10 m.
Matilde	6 tons—boom 9 m.

TANKERS: Average pumping rate of molasses is about 60,000 gallons per hour. Average pumping rate of fuel variable, from 3,000 up to 15,000 barrels per hour.

TELEPHONES: May be installed on board at Master's request.

DRY DOCK: Operated by Talleres Mambisas an operating unit of Empresa Navegacion Mambisas. Berthing capacity of dry dock: 440 ft. length, 91 ft. breadth, and can handle vessels up to 23 ft. draft. Door has 2 laterals, 1 East and 1 West.

East lateral: Length 638 ft., width 38 ft., depth 33 ft. at bay end, 29 ft. at centre and 18 ft. at shore end.

West lateral: Length 740 ft., width 38 ft., depth 23 ft. at bay end, 25 ft. at centre and 20 ft. at shore end.

MEDICAL: Hospitals where crew members can receive attention: Antonetti (Dental Services). Clinica "El Sagrado Corazon" (Medical Services). Hospital Naval de la Havana del Este.

FUEL: Vessels can be supplied with fuel oil or diesel oil/gas oil. Supplied by barges in the bay. There are 3 barges: 1 has capacity about 5,000 barrels and the other two 3,200. Average delivery rate about 1,000 b.p.h.

FRESH WATER: Vessels can be supplied with fresh water by barge in the bay. Six barges available with capacities of 350, 200, 320, 350, 200 and 60 tons. Average rate of delivery about 100 t.p.h.

REPAIRS: Reliable repair shop.

FIRE PRECAUTIONS: Port of Havana has a fire extinguishing ship, kept on permanent watch duty by Safety Corp. who can be reached through telephone number 6–0777.

GENERAL: (1) The port of Havana is approachable 24 hours a day, and dock Pilots keep permanent watch duty on their stations located in surroundings of harbour channel, very close to beacon marker of Pila de Neptuno.

(2) Any ship approaching port in daytime shall hoist national flag, merchant flag, and quarantine flag, not lowering the latter until granted "pratique" by doctors in charge of sanitary inspection. At night she shall show only quarantine lights as prescribed by International Sanitary Regulation.

(3) In case of emergency, ships at anchor shall immediately contact land through Official Radiophone Station CLT, available 24 hours a day, through 2260 kc/s. In very urgent cases, CLT can be contacted through 2182 kc/s. CLT services are free of charge.

(4) Ships moored to piers standing off pier heads at night must keep visible red light at the ship's extremity facing the sea.

(5) Every moored ship must strengthen its lines on first warning from Port Authorities when deemed necessary due to bad weather.

(6) Small boats belonging to ships are not authorised to be used for crew or passengers' service within port limits unless otherwise duly authorised by Harbour Master.

(7) When berthing, ratguards must be placed on all mooring ropes.

(8) Port provides boats to dispose of ship's wastes. Services provided free of charge and can be requested through ship's Agent.

AUTHORITIES: All port authorities located at Custom House building. Means of transportation used by authorities to clear vessel is launch. Each authority has its own launch for these services.

AGENT: Empresa Consignatarias Mambisas, Oficios y Lamparilla, Lonja del Comercio POB 1785, Habana. Tel. 6–8311 (switchboard) 61–1159 (direct), 79–2682 (night).

ISABELA DE SAGUA: 22.52 N. 80.00 W.

PILOTAGE: Pilots board vessels about 1 or 2 miles out from Nos. 1 and 2 buoys. Pilot station located at Custom House building, Isabela de Sagua. Distance from place where Pilots board vessels to anchorage is 7 miles.

From seaward by stages, the bottom is sandy, coral reef and hard rock, mud and rock under mud, mud and clay.

Turns in channel are not dangerous but there are narrows with dangerous currents.

ANCHORAGES: Inner Anchorage: Can accommodate vessels not exceeding 15 ft. draft. Swinging area unlimited. Several vessels can be accommodated. Operations can be performed at this anchorage.

Outer Anchorage (Buoy Anchorage): Can accommodate vessels drawing over 25 ft. Swinging area unlimited. Operations can be performed at this anchorage when there are good weather conditions.

RESTRICTIONS: Entry and sailing only during daylight due to lack of lights in channel.

MAX. SIZE: Max. draft 23 ft. Max. length 500 ft. Tidal variation about 2.5 ft.

TUGS: Available and necessary.

Name	*Length*	*Speed*	*H.P.*
Silvia	17.85 m.	9 knots	120
Moraima	18.30 m.	9 knots	140
Magdalena	19.78 m.	7 knots	140

BERTHING: Max. drafts with which vessels can always load afloat:

Beguirstain Dock (No. 10) – length 540 ft., draft 15 ft. Dock has pipe-line 8 in. diameter for loading alcohol. Also pipe-line 3 in. diameter for discharge of sulphuric acid and 3 in. diameter pipe-line for fresh water supply.

Garcia Dock (No. 9) – length 560 ft., draft 21 ft. Dock has pipe-line 12 in. diameter with 2 hose connectors for loading alcohol. Also pipe-line 1.5 in. diameter for fresh water.

Amezaga Dock – length 324 ft., draft 20 ft. 6 in. For discharge into trucks.

Alfer Dock – length 450 ft., draft 18 ft. 6 in. East side of dock has pipe-line for 16 in. diameter for loading molasses with 2 hose connectors for vessels, and a branch 8 in. diameter for discharge from lighters.

All docks have railroad trucks of standard gauge.

STEVEDORES: Raw Sugar loading rate: 1,300 bags of raw sugar (of 250-pound type) loaded per 4 hour-gang period, or 1,490 (of 220-pound type). From 4 to 5 bags loaded per sling. From lighters, 5 bags.

Refined Sugar: 2,360 bags of refined sugar (50 kg.) are loaded per 4 hour-gang period. 12 bags loaded per sling.

Operational capacity: Three vessels can be operated simultaneously.

Shore Crane: No shore crane available.

Equipment for bulk sugar: Twelve grates available but trimming performed with shovellers.

Loading Raw Sugar – Working periods: From Monday to Friday 0700–1100, 1300–1700 hrs. Saturday 0700–1100 hrs.

General cargo operations occasionally performed at this port, for which above periods apply.

TANKERS: Molasses average pumping rate 40,000 g.p.h.; alcohol average pumping rate 70/77,000 g.p.h. No fuel oil or ammonium discharging operations performed.

FUEL: Not available.

FRESH WATER: Fresh water supplied by barge water-tug up to max. 40–60 tons daily depending on efficiency of aqueduct. Capacity of barge 30 tons. Delivery rate 60 tons per day. Water can be supplied at any pier or inner anchorage.

REPAIRS: Minor repairs can be effected at Isabela de Sagua, larger repairs to be effected at Sagua la Grande, where two repair shops available: Fundicion Marfarlane Nacionalizada and Talleres Esponda Nacionalizado.

MEDICAL: No hospital at Isabela de Sagua. Sick crew members attended at Sagua la Grande Hospital.

AUTHORITY: All port authorities located at port of Isabela de Sagua.

When vessels at anchorage awaiting berthing, authorities transported by tug-boat for cleaning purposes.

AGENT: Empresa Consignatarias Mambisas, Independencia s/n, P.O.B. 18, Isabela de Sagua. Tel. 32–27.

Cables, messages should be addressed "Mambisas Sagua la Grande", but recommended be sent through main office "Mambisas Habana". ETAs should be sent simultaneously to both.

JUCARO: 21.37' N. 78.51 W.
(Including the sub-ports of: Boca Grande; Palo Alto and Santa Maria)

APPROACHES: Vessels proceeding to Jucaro sub-ports must call first at Jucaro for Port Authority's clearance.

Tidal variation 1 ft. 6 in. It is not necessary to await slack-water before entering. Recommended that *(a)* vessels arriving from Cuban ports situated to the East of Jucaro, such as Caibarien, Puerto Padre, Manati, Vita, Banes, Antilla, Sagua de Tanamo, Moa, Baracoa, etc., or from foreign ports, should enter Jucaro Port through Breton Channel, and *(b)* all vessels not exceeding 22 ft. draft proceeding from those Cuban ports situated to the West of Jucaro, such as Havana, Mariel, Matanzas, Cardenas, Isabela de Sagua and Cienfuegos, should enter Jucaro port through Tunas Channel.

PILOTAGE: Pilots board vessels which enter through Breton Channel at Buoy No. 2, which is situated to East of channel entrance, 21° 08′ 18″ N. 79° 30′ 24″ W. with water depth 33 ft. Through this channel vessels can enter drawing up to 29 ft. with max. length 800 ft. Bottom is coral reef. There are dangerous turns at "pasa" of Baandra until Ana Maria Cays have been passed.

For vessels which enter through Tunas Channel, Pilots board at No. 2 Buoy which is situated to East of Channel entrance, 21° 31′ N. 79° 41′ 21″ W. Through this channel vessels can enter drawing up to 22 ft.

No Pilot station. Pilots are to be notified of vessel's arrival 24 hrs. in advance. Distance from place where Pilots board vessels to Jucaro anchorage is 50 miles.

From Jucaro Anchorage to:

Boca Grande Sub-port	– 14 miles
Palo Alto Sub-port	– 5 miles
Santa Maria Sub-port	– 24 miles

RESTRICTIONS: Vessels can enter and sail only during daylight.

ANCHORAGES: Loading places, ex-lighters. Three anchorages, namely, No. 1 Anchorage – 6 miles from the port at South of Obispo Cay, depth 24 ft. No. 2 Anchorage – 7 miles from the port at South-east of Obsipo Cay, depth 27 ft. No. 3 Anchorage: Anchorage 8 miles from the port and 1 mile to Eastward of No. 2 anchorage, depth 30 ft. Is used mainly by tankers loading molasses.

LOADING (Understood to have been closed for sugar shipments since 1964): Raw sugar.

Working periods: Monday to Friday 0600/1000–1200/1600 hrs.; Saturday 0600/1000–1200/1600 hrs.; Sunday no work is performed.

Work carried out on a piece-work basis, and at an average of 2,000 bags per gang-period. 6 sugar bags loaded per sling.

Refined sugar: Work is carried out on a piece-work basis and loading rate averaged about 4,000 bags of the 50 kilo type and 2,000 of the 100 kilo type per gang-period.

Sugar in bulk: Venezuela and Ecuador sugar mills have 5 thrower machines each for distributing sugar in vessels' hatches. Loading carried out by cutting sugar bags through grates placed on vessels' hatches.

Shore cranes: None.

TANKERS: Average pumping rate of molasses 20,000 g.p.h.

FUEL/FRESH WATER/REPAIRS: None.

TRANSPORTATION: Distance between Jucaro Port and its sub-ports:

To Santa Maria	– 31 miles
To Boca Grande	– 15 miles
To Palo Alto	– 9 miles

Motor launches are used between port and sub-ports, and take 4.5 hrs, 2.5 hrs. and 1.25 hrs. between Jucaro and Santa Maria, Boca Grande, and Palo Alto respectively.

By automobile, 3.5 hrs. to Santa Maria and 2 hrs. to Boca Grande. No highway from Jucaro to Palo Alto.

COMMUNICATIONS: Radio-telephone is used between port and sub-ports through Port Captain's Office.

MEDICAL: There are two hospitals at Diego de Avila where sick crew members can receive attention. Distance between Jucaro and Diego de Avila is 27 km.

AUTHORITY: Custom House, Captain of the Port and Immigration, located at Jucaro. No port authority delegations at the sub-ports.

AGENT: Empresa Consignatarias Mambisas, POB 350, Nuevitas, Camaguey. Cable: "Mambisas–Nuevitas". Tel. 31435; night: 36025.

(a) SUB-PORT OF BOCA GRANDE:

LOCATION: About 15 miles East of Jucaro.

APPROACHES: See "Jucaro".

PILOTAGE: See "Jucaro". Distance from place where Pilots board vessels to Boca Grande is 64 miles. Entrance channel: same as for Jucaro. Tidal variation 1 ft. 6 in.

ANCHORAGES: There are two anchorages for loading operations: No. 1 Anchorage with 24 ft. draft. No. 2 Anchorage with 29 ft. draft. Both anchorages are located at a distance of about 5–7 miles from the dock.

LOADING: At present only refined sugar is exported. All sugar-loading operations are carried out at anchorage by means of lighters. Following lighters available:

Barges	*Capacity* (50 kg bags)	*Capacity* 100 kg bags)
Ana	4,900	2,500
Loretto	4,400	2,100
Mascot	4,400	2,100
F 55	4,400	2,100
Trusco 89	5,100	2,980
Angel	3,440	1,700

Working Periods: Monday to Friday 0600/1000 – 1200/1600 hrs.; Saturday 0600/1000 – 1200/1600 hrs. When working is performed on Sundays, same periods apply.

Work is performed on a piece-work basis, and average loading rate is about 2,000 bags, basis 6 bags per sling, and 100 kilo bags. Only one vessel can be worked at a time.

TUGS: Three tugs available.

TANKERS: Discharging operations at No. 1 or No. 2 anchorages. Discharging rate approximately 20,000 g.p.h.

There are also steel barges for transportation of molasses and/or sugar:

Guanales: 100 ft.×30 ft.×7 ft. Sugar capacity: 1,600 bags Molasses capacity: 65,000 gal.

Loreto: 100 ft.×30 ft.×7 ft. Sugar capacity: 1,600 bags Molasses capacity: 65,000 gal.

Each of these barges has 4 tanks measuring 15 ft.×36 ft.×7 ft. Capacity: 3,780 cubic feet or 28,274 gallons each tank. Total capacity: 113,100 gallons. Each barge can load a max. of 400 tons of molasses and each is equipped with steam pump.

COMMUNICATIONS: Launch transportation. It takes 2.5 hrs. for travelling from Boca Grande to Jucaro or Santa Maria. Captain of the Port's radio-telephone is used as means of communication.

All communication and instructions for vessels operating at this sub-port must be given to Nuevitas Agency.

(b) SUB-PORT OF SANTA MARIA:

APPROACHES: See "Jucaro".

PILOTAGE: Distance from place where Pilots board vessels to Santa Maria is 81 miles. Tidal variation is 1 ft. 6 in.

ANCHORAGES: Two anchorages for loading operations, No. 1 Anchorage for draft of 24 ft., No. 2 Anchorage for draft of 29 ft.

LOADING: All loading operations are carried out at anchorages by means of barges. Following barges available:

Barges	*Capacity* (50 kg bags)	*Capacity* (100 kg bags)
America	3,700	1,700
Albania	4,100	1,800
Will	3,800	1,800
Francia	4,100	1,700
S. J. Nieva	3,800	1,700
Santa Cruz	3,800	1,700
Macareno No. 1	4,300	2,100
Macareno No. 2	4,300	2,100
Josefa	4,200	2,000

At present only refined sugar is exported through this sub-port. 3,500 bags of 50 kilo type are loaded per gang-period, 1,600 of the 100 kilo type.

Working periods: from Monday to Friday 0600/1000 – 1200/1600; Saturday 0600/1000 – 1200/1600; Sunday 0600/1000 – 1200/1600.

COMMUNICATIONS: Captain of the Port's office radio-telephone is used. All communications and instructions for vessels operating at this sub-port must be given to Nuevitas Agency.

Distance from Santa Maria to:

Sub-port of Boca Grande	– 17 miles
Port of Jucaro	– 31 miles
Sub-port of Palo Alto	– 40 miles

From Jucaro to Santa Maria takes 4.5 hrs. by launch.

MANZANILLO: 20.20 N. 77.12 W.
(and sub-ports of Ceiba Hueca, Media Luna, Niquero and Ensenada de Mora.)

PILOTAGE: Pilots board vessels at Cabo Cruz. Pilot station located at Cabo Cruz and Pilots communicate with Manzanillo by means of radio-telephone. Distance from place where Pilots board vessels up to Manzanillo through Madrona Channel is 68 miles. Through Palomino Channel (Coloradas de Fuera) is 55 miles.

APPROACHES: *(a)* Madrona Channel: this channel has sharp and narrow turns. Bottom is of soft mud. Max. draft with which vessels can enter through this channel is 33 ft. 3 in. Channel has depth not less than 35 ft. Vessels must wait for slack or favourable tide to proceed through this channel. No tug is necessary.

(b) Palomino Channel: this channel has turns, but they are less sharp and less narrow than those of Madrona Channel. Bottom is of soft mud. Max. draft with which vessels can enter through this channel is 20 ft. No tug is necessary.

RESTRICTIONS: Due to present conditions of channel lights and distance, it is suggested that vessels enter and sail only during daylight.

ANCHORAGES: Inside harbour: No. 1, draft 24 ft. Distance from shore 1 mile. Use: sugar/general cargo.

Outside harbour: No. 2, draft 29–30 ft. No. 3, draft 33 ft. Distance from shore 1.5 miles to 2 miles. Use: sugar/general cargo. Although about 40 ft. depth at this anchorage, it is limited to 33 ft. which is official draft of the entrance channel. Vessels have been loaded at this anchorage up to 33 ft. 6 in. draft.

LOADING: Sugar-loading operations performed at anchorage by lighters.

Following 12 barges available, each with capacity of 2,000/2,200 bags (250 tons): *Juan Manuel Marquez, Sergio Gonzalez, Jimmy Mirtsel, Pedro Soto Alva, Clodomira, Antonio Lopez, Santiago Lopez, Andres Lijan, Josue Pais Garcia, Adalberto Pesant, Mario Munoz, Elias Zaldivar.*

Also available is barge named *Abel Santamaria,* with capacity of 1,000 bags (250 tons), and provided with derrick and winch for handling lifts up to 2 tons.

At Manzanillo there are three docks: Beattie, Arcos and Terraplen with drafts 8, 7 and 8 ft. respectively. Terraplen Dock is the only one which presently carries out operations, through which sugar is loaded by means of lighters and taken alongside vessels at anchorages.

Docks are suitable for reception and handling of import and export cargo (bulk cargo excepted). They have railroad tracks of non-standard gauge, which connect with warehouses. No shore crane available.

Sugar and general cargo: Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 raw-sugar bags loaded per gang per day of 8 hours. Only one vessel can operate at this port, order comply with this loading rate.

DISCHARGING: Rates:

Bagged cargo (of 100 lb.)	app. 25 tons per hour
Bagged cargo (of 200 lb.)	app. 35 tons per hour
Iron	app. 7 tons per hour
Wood	app. 8 tons per hour
Jute bags	app. 15 tons per hour

TUGS: Following tugs available: *Aracelio Iglesias* – tows 3 barges; *Donatilo Lopez* – tows 3 barges; *Raimundo Arias* – tows 3 barges; *Edesio Perez* – tows 3 barges.

TANKERS: No facilities.

FUEL/FRESH WATER: Not available.

REPAIRS: Mechanic and foundry shop under control of Industry Ministry, where light repairs of machine parts can be performed.

COMMUNICATIONS: Distance from Manzanillo to:

Ceiva Hueca:	15 miles by sea, 72 km. by highway
Media Luna:	23 miles by sea, 45 km. by highway
Niquero:	45 miles by sea, 79 km. by highway
Pilon:	90 miles by sea, 130 km. by paved highway, which reaches up to 15 km. from Niquero whereafter a dirt road must be used to reach Pilon. Dirt road distance of 40 km. During rain season a jeep is used to travel by this road.

Automobile is used to travel from Manzanillo to above sub-ports, and takes: to Ceiba Hueca 1 hour; to Media Luna 1 hour; to Niquero 2 hours and to Pilon 3 hours (in rainy season about 5 hours).

Daily automobile services from Manzanillo to Niquero; to Pilon there are trucks specially prepared for this service.

No direct communication between Manzanillo and sub-ports, except Niquero, where there is a long-distance telephone at the telephone centre.

At Pilon and Niquero there are Inalambrica Radio Stations, but radiograms have to be sent to Havana first, from where they are relayed to Manzanillo.

At Manzanillo proper there are long-distance telephones, Inalambrica Radiogram Services and telegraphic and post services. Vessels can communicate with Manzanillo by radio. Vessels messages are received by Government Telegraph (CLT Havana Station).

MEDICAL: There is a hospital at Manzanillo where sick crew members can receive attention.

AUTHORITIES: All Port Authorities, Custom House, Immigration Port Doctor, Port Captain are located at Manzanillo.

Vessels can proceed directly to any of the sub-ports, where Manzanillo Port Authorities travel to give clearance, but advance information must be given to these Authorities for the corresponding permit, as Manzanillo regulations provide that vessels must enter Manzanillo as Custom Official Port.

AGENT: Empresa Consignatarias Mambisas, POB 22, Manzanillo, Oriente. Cable: "Mambisas Manzanillo". Tel. 2533; night: 2369.

(a) SUB-PORT OF CEIBA HUECA:

Vessels may proceed direct to sub-ports (see Manzanillo under "Authorities").

PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels up to Ceiba Hueca pier is about 42 miles.

APPROACHES: See Manzanillo information. For operations at Ceiba Hueca it should be noted that the pier has a depth of only 19 ft. towards the sea end, for loading. Tidal variation about 1 ft. 6 in.

BERTHING: A motor-boat is required to assist in handling lines to pier and buoys. Boat is brought from Manzanillo.

LOADING: Ceiba Hueca Dock (Enidio Diaz Machado): At this pier, sugar from Ceiba Hueca mill is shipped as well as molasses. Vessels should be in ballast, drawing 8 ft. fore and up to a maximum of 16 ft. aft. Work can only be performed by two gangs on account of length of platform, which is about 130 ft. Depths along pier at shore end 8 ft.; at platform, shore end 16 ft. – sea end 19 ft. Vessels permitted load up to 19 ft.

There is railroad of non-standard gauge from the sugar mill warehouse to the dock platforms.

Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags are loaded per gang-period. 6 bags per sling.

TANKERS: Vessels are loaded with molasses at Ceiba Hueca pier and average pumping rate is 25,000/30,000 g.p.h. Tankers with fuel oil are also operated.

FUEL/REPAIRS: Not available.

FRESH WATER: Vessels can be supplied. Delivery made through pipe-line alongside vessel. Average delivery rate is about 1 t.p.h. (due to low pressure).

COMMUNICATIONS: Government telegraph communication between Manzanillo and Ceiba Hueca up to 1800 hrs. however, there is a telephone line which communicates by means of relay with "La Demajagua" sugar mill, which has direct telephone communication with Manzanillo. This communication is only during sugar-mill office hours, and it is very poor due to above relay.

AGENT: Vessels operating at this sub-port attended by Manzanillo Agency Personnel.

(b) SUB-PORT OF MEDIA LUNA:

Vessels may proceed direct. (See Manzanillo under "Authorities".

PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels to Media Luna is about 38 miles.

APPROACHES: See "Manzanillo".

MAX. SIZE: Max. draft for vessels to enter and carry out loading operations at this sub-port is 33 ft. Tidal variation 1 ft. 6 in.

LOADING: Loading operations are carried out at anchorage where vessels can load up to 33 ft. Barges and tug-boats are used from Manzanillo.

Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags are loaded per gang-period. Vessels can only work with 3 or 4 gangs. Only one vessel can work at a time.

TANKERS: No facilities.

FUEL/FRESH WATER/REPAIRS: Not available.

COMMUNICATIONS: Between Manzanillo and Media Luna, the only means of communication is Government telegraph, which is available up to 1800 hrs. Manzanillo personnel attend vessels operating at this sub-port.

AUTHORITIES: See "Manzanillo".

(c) SUB-PORT OF NIQUERO:

Vessels may proceed direct. (See Manzanillo under "Authorities".)

PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels to Niquero Pier is 15 miles. Tidal variation 1 ft. 6 in.

LOADING: Pier length 400–450 ft., depth up to 23 ft. (North and South sides). There are railroad tracks of different gauges and sidings for shifting of flat cars.

Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags loaded per gang-period. 6 bags loaded per sling.

Although Niquero pier has two sides for docking, sugar mill can only supply sugar for working 1 vessel at a time unless overtime be worked at both sugar mill warehouse, and pier.

FRESH WATER: Can be delivered at pier by means of tank cars, capacity 8 tons. About 10 tank cars can be delivered daily but operation has to be performed outside loading hours.

FUEL/REPAIRS: Not available.

TANKERS: No facilities.

COMMUNICATIONS: Long-distance telephone communication between Manzanillo and Niquero sugar-mill office. Distance from sugar-mill office to pier is about 5 km.

AGENT/AUTHORITIES: See "Manzanillo".

(d) SUB-PORT OF PILON (ENSENADA DE MORA):

Vessels may proceed direct to sub-ports (see Manzanillo under "Authorities").

PILOTAGE: Pilot boards vessel at Cabo Cruz.

APPROACHES: From Cabo Cruz to Pilon mouth entrance is open sea. From Pilon mouth to the pier is through channel, with rocky bottom and turns.

ANCHORAGE: Permitted draft up to 23 ft.
MAX. SIZE: Max. draft permitted for vessels entering and sailing harbour is 20 ft. Tidal variation 1 ft. 6 in.
LOADING: Berth length 150 m., depth 20 ft. (presently in bad condition). Sugar loading and molasses are performed at this berth. There is a railroad track of non-standard gauge between the sugar mill and the berth.

Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags of sugar loaded per gang/per day of 8 hours. 6 bags loaded per sling. In cases when winches are slow, the number of bags per sling is increased. Only one vessel can operate at this berth at a time.
TANKERS: Molasses average pumping rate is 25,000–30,000 g.p.h.
FUEL: Not available.
FRESH WATER: Can be delivered at berth by pipe-line. Average delivery rate about 1 t.p.h.
COMMUNICATIONS: Government telegraph at Pilon. Also local telephone between sugar-mill office and Niquero, where there is Inalambrica system.
AGENT/AUTHORITY: See "Manzanillo".

MARIEL: 23.01 N. 82.46 W.
(and sub-ports of Cabanas, Bahia Honda and Santa Lucia)

PILOTAGE: Pilots board vessels about 1 mile from entrance of port: Vessels proceeding to sub-ports of Cabanas and Bahia Honda must pick up Pilot at same place. Pilot station located at 84 street, 5/a and 7/a, Barrio Boca. No telephone communication.

Distance from position where Pilots board vessels to:

Pier of Unit No. 1	– 1.25 miles
Anchorage	– 2.50 miles
Pier of Unit No. 2	– 2.75 miles

APPROACHES: Entrance channel where buoy No. 1 is situated is over a sand bank with 50–55–60 ft. depth. No. 3 buoy situated in 32 ft. of water on rocky bottom, but having close by a depth of 95 ft. No. 5 buoy situated in 30 ft. of water on sand having close by a depth of 33 ft. max. This channel is 328 ft. wide (approx.).
ANCHORAGES: General anchorage – swing area 450 m., depth 29 ft.

Punta Gorda anchorage – swing area 340 m., depth 36 ft.

Cargo operations do not take place at anchorages.
RESTRICTIONS: Vessels can enter and sail during day and night hours, but this should be checked in each case prior to vessel's arrival as on occasions the buoys are missing.
MAX. SIZE: Max. draft with which vessels can enter and sail through channel is 30 ft. and max. length of 574 ft. Tidal variation 1 ft. 4 in. Also see "Berthing".
BERTHING: Unit No. 1 (formerly Marante Pier):

Berth No. 1 (N.W.)	length 509 ft., depth 25 ft. (this berth is out of operation).
Berth No. 2 (N.W.)	length 250 ft., depth 16–24–30 ft. (max. draft permitted 16 ft.). Presently this berth is occupied by Terminal Electric and is not available for use.

Unit No. 2 (formerly Maritima Mariel Pier): length 607 ft., width 267 ft.

Berth No. 5 (N.E.)	Depth 20 ft., length 607 ft.
Berth No. 6 (N.W.)	Depth 26 ft., length 267 ft.
Berth No. 7 (N.E.)	Depth 29 ft., length 607 ft.

Cement Pier Plant:

Berth No. 3	Depth 29 ft., length 544 ft. Used for tanker vessels (fuel oil discharge). Vessels with length less than 492 ft. can dock with draft of 29 ft. Over 492 ft. and up to 580 ft. can enter with draft up to 27 ft. fore, and 29 ft. aft. with assistance of one tug (850 h.p.).
Berth No. 4	Depth 15 ft.

The Unit No. 2 piers are used for discharging general cargo and fertiliser. Up to 1962 sugar was shipped through this pier; at present this type of operation is not performed.

For each pier the main transportation used in reception and delivery of cargo is by trucks.

Unit No. 2 pier has railroad tracks of non-standard gauge, for communication with sugar mill Orlando Nodarse.
STEVEDORES: Working periods: Monday to Friday 0700/1300 – 1300/1900 – 1900/0100 hrs.; Saturday 0700/1300 – 1300/1900 – 1900/0100 hrs.

Raw sugar: 845 bags loaded per gang-period. 6 bags per sling. Only one sugar vessel can operate at a time.

General cargo: discharging rate: from 6 to 9 tons per gang hour (approx.).

Bagged merchandise: about 13 tons (100 lb. bag type).

Iron: about 18 tons (fluctuates according to type of iron).

Wood: 12 tons (approx.).

Fertilisers: Muriate of potash: 10 to 13 tons.
Sulphate of ammonia: 8 to 10 tons.
Superphosphate simple: 15 to 18 tons.

Shore cranes: There is one caterpillar (PH movable crane with boom of 80 ft. length, and which can lift 12 tons).
FUEL/REPAIRS: Not available.
FRESH WATER: Can be supplied at both piers by means of tank-truck with capacity of 5 tons. In dry season supplied only during night time.
MEDICAL: No hospital. Crew members requiring medical attention are sent to Havana.
AUTHORITIES: Located at Mariel as follows:

Customs House and Immigration: Ave. 65. 126 Street and 128 Street.

Captain of the Port: Playa "La Boca" at the entrance of the port.

Port Doctor: 128 Street. Ave. 67. and Litoral.

Distance from Mariel to:

Cabanas (anchorage):	25 km. 45 minutes by car.
Cabanas (pier):	57 km. 1 hr. 47 minutes by car.
Bahia Honda:	73 km. 2 hr. by car.
Santa Lucia:	250 km. 4 hours by car.

Car is hired for transportation to above sub-ports. There is daily transportation only between Mariel and Cabanas anchorage.
AGENT: Empresa Consignatarias Mambisas, Apartado 65 12411, Avenida 5, Mariel, Pina del 'Rio. Tel. 63; night: 54. Cables: "Mambisas Mariel".

(a) SUB-PORT OF CABANAS:

Vessels assigned to Cabanas do not have to enter Mariel for clearance, but must pick up Pilot at Mariel port entrance.
PILOTAGE: See "Mariel".

Distance from position where Pilots board vessels to Anchorage 4 miles; Pier 3.5 miles.
APPROACHES: Entrance channel has sandy bottom on eastern side, and rocky bottom on western. It is about 70 m. wide.
ANCHORAGE: Has depth of 19 ft. and is used for shipment of raw sugar from sugar mill "Augusto Cesar Sandino".

Following barges available for performing above operations:

Barge name	*Capacity for raw Sugar in bags*
Mercedico	995
Oscar	10,000
America	900
Julia	850
Malula	1,200
B–R–16	1,100
V del Carmen	1,400
Cubamaco	1,150
Varadero	1,000
Astillero	1,150

Loading of barges depends on weather conditions at time of shipment.

There is 1 tugboat named *La Nina* which can tow 3 barges.
MAX. SIZE: Max. draft permitted for entry and sailing is 19 ft., and max. length 574 ft. Tidal variation 1 ft. 4 in.
RESTRICTIONS: Vessels should enter and sail only during daylight.
BERTHING: Present name: ECA "Pablo de la Torriente Brau". Former name: "Almacenes de Cabanas". Length 360 ft. (max. length permitted 450 ft.), depth 20 ft.

This dock is commonly known as "Orozo Dock", which is used in shipments of raw sugar. There are railroad tracks of standard gauge.
LOADING: Working periods: raw sugar: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

845 bags are loaded per gang-period. 6 bags loaded per sling. 2 vessels can load simultaneously, one at the dock and the other at the anchorage. There are 4 grates for loading sugar in bulk.
FUEL/FRESH WATER/REPAIRS: Not available.
AGENT/AUTHORITIES: See "Mariel". There is a Port Captain at Cabanas.

(b) SUB-PORT OF BAHIA HONDA:

Vessels assigned to load at Bahia Honda do not have to enter Mariel for clearance, but must pick up Pilot at Mariel port entrance.
PILOTAGE: See "Mariel". Distance from position where Pilots board vessels to: dock 4 miles; anchorage 2.75 miles.
APPROACHES: The entrance channel has sandy bottom on Eastern side, and rocky bottom on Western and is approximately 150 m. wide up to Corojal anchorage.
RESTRICTIONS: Entry and sailing only during daylight and necessary to await favourable tide.
ANCHORAGE: Depth 28 ft. Swing area 300 m. Max. length permitted 623 ft. Anchorage used for completion of sugar loading by means of barges that are brought from Havana.
MAX. SIZE: Length 623 ft. and max. ship draft for proceeding up to Corojal anchorage is 28 ft. Tidal variation 1 ft. 4 in.
BERTHING: Dock: "Central Harlem" (formerly "Bahia Honda"):

Length 260 ft., depth 19 ft. Dock is commonly known as Sugar dock of Harlem Sugar Mill. It has railroad track of standard gauge.
LOADING: Sugar working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

845 bags of raw sugar are loaded per gang-period as min. (more than the above stipulated amount is always loaded). Only one vessel can load at a time.
AGENT/AUTHORITY: See "Mariel". There are Custom House and Port Captain delegations at Bahia Honda.

(c) SUB-PORT OF SANTA LUCIA: 22° 44′ 13″ N. 83° 59′ 15″ W.

Vessels assigned to Santa Lucia do not have to enter Mariel for clearance, nor to pick up Pilot.
PILOTAGE: Pilots board vessels at Pasa Honda, 2 miles off the phosphorescent buoy. No pilot station. Advice of ships' arrival is given to Custom House Delegation by cable. Distance from place where Pilots board vessels up to first anchorage is 4 miles.
APPROACHES: Channel approximately 200 m. width rocky bottom. It has two turns with dangerous narrows.

LOADING: There are the following anchorages:

1st Anchorage: has depth of 30 ft., but vessels are limited for sailing to max. draft of 15 ft., and length 500 ft.

2nd Anchorage: has depth of 20 ft., but vessels are limited for sailing to max. draft of 18 ft.

3rd Anchorage: open sea without draft limitation.

Working periods: work is performed all day (during daylight) including Saturday and Sunday.

Average loading rate is about 900 tons daily, but rate might be improved in the following cases:

1. Vessels with more than 3 hatches available.
2. Vessels with booms (not of the crane type) since loading is performed by grabs which are to be rigged in order to perform quick loading.
3. Provided only one vessel performs operations (2 vessels may be loaded simultaneously but above rate cannot be complied with).

Loading at this sub-port is by means of grabs rigged to vessel's boom. In cases where vessel has no booms, but cranes, the loading is carried out very slowly as buckets are used in such cases, and having to shovel mineral into buckets delays loading operations.

There are 6 barges for loading mineral with a capacity of 150 tons each.

TUGS: 2 tugs, *Adis* and *Julita* which can tow 2 barges each.

FUEL/FRESH WATER/REPAIRS: Not available.

AGENT/AUTHORITIES: See "Mariel".

Port Authorities use launches for clearing vessels. Agents use automobile to travel from Mariel to Santa Lucia which takes 4 hours.

There are Custom House and Port Captain Delegations at the sub-port of Santa Lucia.

MATANZAS: 23.03 N. 81.34 W.

PILOTAGE: Pilots board vessels about 3 miles after passing the port entrance, in front of Electrical Plant and close to Empresa Consolidada del Petroleo Pier (Texas). Pilot station located at Reynold Garcia Pier (Terminal Maritima). Tel. number 2688.

Distance from place where Pilots board vessels to:

I.C.P. (Texas) Pier	
Reynold Garcia Pier (Terminal Maritima)	– 200 m.
Juan A. Morales Bayona (Cubadist)	– 300 m.
Jose Luis Dubrocq (formerly Fomento)	– 500 m.
Frank Pais (Armour)	

APPROACHES: There are three entrance channels:

North Channel: 50 ft. depth

Central Channel: at North side 27 ft. depth; South side 50 ft. depth.

Entry and sailing channels are straight and without turns or obstacles. North Channel mud bottom, but others with rocky bottom. Tidal variation 1 ft. 6 in.

RESTRICTIONS: Vessels can enter or sail at night but Port Authorities should be advised in advance.

ANCHORAGES:

Indio Anchorage: depth 17 ft.; swing area 120 m.

South Anchorage: depth 30 ft.; swing area 230 m.

Del Medio Anchorage: depth 27 ft.; swing area 20 m.

West Anchorage: depth 21 ft.; swing area 150 m.

North Anchorage: depth 25 ft.; swing area 150 m.

Casacajales Anchorage: depth over 30 ft.

BERTHING: Jesus Menensez (I.C.P.) Pier (formerly Texas) with a depth of 28 ft., length 749 ft., used for discharge of fuel oil. At present no operations are performed at this pier, due to its bad condition.

Frank Pais Dock E.C.D. 41 (formerly Armour) is used in discharge of fuel oil. Depth 21 ft. and length of 365 ft. Vessels drawing over 21 ft. dock under Master's responsibility.

Reynold Garcia Pier (Terminal Maritima): North side: length 450 ft. draft 30 ft. Used for loading bagged sugar and for liquid ammonia.

South side: length 529 ft. draft 31 ft. 6 in. Used for loading bulk sugar by mechanical means; also for bagged sugar.

Jose Luis Dubrocq (Fomento Maritima): fore part: length 600 ft., draft 24 ft. Used for fertilizer discharge.

Rear part: length 500 ft. draft 28 ft. (out of service).

Morales Bayona Pier (formerly Cubadist); Draft 30 ft. This pier is used for loading blacktrap molasses and alcohol.

Reynold Garcia and Jose Luis Dubrocq piers have railroad tracks standard gauges with sidings for shifting cars. Trucks can also operate at these piers.

Cascajales Anchorage: oil tanker discharge.

STEVEDORES: Working periods: Monday to Friday 0700/1300 – 1300/1900, 1900/0100 hrs.; Saturday same; Sunday no work performed except in special cases.

Raw sugar: 855 raw-sugar bags loaded per gang-period. 5 bags loaded per sling.

Refined sugar: 2,004 refined-sugar bags (50 kg type) are loaded per gang-period (797 of 100 kg type).

12 bags of 50 kilo type per sling; 5 bags of 100 kilo type.

General cargo: average rate of discharge of other kinds of cargo varies depending on the type.

Average rate of fertiliser discharge about 11 tons per gang-hour.

Crane: one steam crane with a boom of 60 ft. which can lift about 40 tons. Crane is mounted on railroad tracks and is used only at Jose Luis Dubrocq pier.

Bulk sugar: the installation of bulk sugar throwers operated by Empresa Consolidada del Azucar, at Reynold Garcia Pier, is by system of conveyor and distribution crane which runs from Parabolicos warehouses up to the end of the pier. A special structure protects the conveyor.

The crane runs on special rail throughout the pier (fore and aft) stopping at each vessel's hold. In cases where the vessel has projecting superstructure, she has to be separated from the pier.

Average loading rate is about 350 t.p.h., depending on the type of vessel. On vessels without tweendecks, an average of 43 t.p.h. has been attained.

Weights of shipment estimated on draft and information provided by Master. Notations are entered in Bill of Lading declaring quantity as subject to amount discharged at destination, which is supervised by Cuban Producers' Representative.

TANKERS: Pumping rate:

Fuel oil	– discharge:	about	500	t.p.h.
Alcohol	– loading:	,,	208	,,
Molasses	– loading:	,,	263	,,

FRESH WATER: Supplied only at Reynold Garcia Pier. Delivery slow.

REPAIRS: Can be performed by Cearra y Trabazo.

COMMUNICATIONS: Long-distance telephone, Corporacion Inalambrica Cubana, Press wireless, Government telegraph, postal communication, railroad and buses.

Vessels can communicate through CLA via Cardenas and/or Havana.

MEDICAL: Following hospitals where sick crew members can receive attention: Civil Hospital, Army Hospital, Clinica Moderna, Clinica Villar, Clinica Matanzas.

AUTHORITIES: Located as follows:

Port Doctor:	Milanes St. No. 2. Tel. 2672 (home tel. 2338).
Immigration:	Santa Teresa St. No. 19. Tel. 2695.
Port Captain:	Muelle del Real. Tel. 2469.
Custom House:	Versalles St. e/Navia and Riech St. Tel. 2269 (home tel. 2339). (Chief of Custom House watching services.)

AGENT: Empresa Consignatarias Mambisas, POB 245, Tello Lamar Street No. 88, Matanzas. Tel. 2519 and 3079 (night: 3819).

Due to short distance between Havana and Matanzas, a close co-ordination inter-agencies must exist regarding advices of ETA and ETS of vessels transitting between these two ports.

NUEVA GERONA (Isla de Pinos): 21.58 N. 82.56 W.

PILOTAGE: Pilots board vessels at Punta Frances. Distance from place where Pilots board vessels to loading berth is about 34 miles. No pilot station. Chief Pilot is located at No. 3 St. Mo. 612 e/ 6 and 8 Streets, Nueva Gerona, Isla de Pinos.

APPROACHES: Entrance channel or passage from the Gulf to the bank is about 2 miles wide. Bottom throughout the 34 miles is mud (from entrance to anchorage in front of Las Casa River). No dangerous turns or narrows.

RESTRICTIONS: Entry and sailing only during daylight.

ANCHORAGE: Fruit-loading operations performed at anchorage when vessels' draft does not permit them to enter the river.

Vessels are permitted to load at anchorage up to a max. of 19 ft. Swinging area: 600 ft.

Following barges are available:

Evangelina – capacity 80 tons (schooner)
Bongo – capacity 80 tons (barge)
Natalia – capacity 100 tons (schooner)

Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

Whenever sufficient cargo is supplied by the packing plant, the loading rates should be about 120 tons per gang in 8 hours.

MAX. SIZE: Max. draft up to which vessels can load out of the river is 19 ft. Tidal variation 1 ft.

BERTHING: Ferry Dock: Length 200 ft., draft 8 ft. Dock situated about 2 miles up river. Depth of river is 13 ft., and 250 ft. wide. At present dock used for coastwise services by Float de Navegacion Mambisas (cargo and passengers).

FUEL/FRESH WATER/REPAIRS: Not available.

MEDICAL: General hospital "Heroes de Baire", where sick crew members can receive attention.

COMMUNICATIONS: There are telephone, telegraph and cable (Inalambrica) communications, also air postal service.

AUTHORITIES: Port Authorities are located at Nueva Gerona.

It is strongly recommended that when vessels are assigned to this port, all measures be taken for perfect co-ordination between Agents, Pilots and Port Authorities, and Masters should give ETAs in advance.

SUB-AGENT: Empresas Nacional de Cabotaje, Calle 14 entre 1ra. y 3ra, Nueva Gerona, Isla de Pinos. Cable: "Vapor Nueva Gerona". Tel. 33 and 163 (night: 277).

NUEVITAS: including Pastelillo, Puerto Tarafa, and Bufadero. 21.33 N. 77.16 W.

Nuevitas has following load/discharge berths and terminal facilities at Pastelillo and Puerto Tarafa, also loading berths at Bufadero, through which molasses are exported.

(a) **Pastelillo:**

PILOTAGE: Pilots board vessels at Punta Practicos, 1 mile from buoy No. 1.

Distance from place where Pilots board to: Pastelillo, 8 miles; Bufadero, 12 miles; Puerto Tarafa, 14 miles.

Pilot station located at Punta de Practicos, East of entrance channel. Usual means of communications are radio, telephone and launches.
APPROACHES: Entrance is narrow and winding. Channel is between Point Sotavento and Practicos and is 7 miles long. Vessels may use it safely although care to be taken because of narrow and sharp turns, and velocity of tidal currents.
RESTRICTIONS: Recommended that vessels enter or sail during daylight.
ANCHORAGE: Botijuela Anchorage: Can accommodate vessels up to 33 ft. draft.
MAX. SIZE: Up to 575 ft. length – 33 ft. draft. Up to 610 ft. length – 31 ft. draft. Tidal variation 1 ft. 6 in.
BERTHING: Pier No. 4: Length 458 ft., draft 32 ft. both sides. Vessels must be operated at high tide. Trucking operations cannot be performed at this pier. Pier has 2 railroad tracks. of standard gauge with only 1 inlet.

North side of pier is used for sugar, general cargo and fuel oil. South side of pier used for sugar, general cargo and molasses.

Vessels drawing over 30 ft. 3 in. have to wait high tide for shifting to anchorage.
STEVEDORES: Working periods: Monday to Friday, 0700/1300 – 1300/1900 hrs.; Saturday, 0700/1300 – 1300/1900 hrs.; Sunday, no work is performed.

Raw Sugar: loading rate: max. 1,800 bags per gang in 6 hours. Minimum fixed rate 975 bags in 4 hours or equivalent in 6 hours. 6 bags loaded per sling.

Loading Capacity: 2 sugar vessels can perform sugar loading operations simultaneously.

Refined Sugar: this type of shipment is not regularly performed at this port.

Loading rate: 3,300 bags of 100 lb. each are loaded per gang in a 6-hour period.

General Cargo: discharging rate is about 11 to 12 t.p.h.

Raw Sugar in Bulk: there are 7 sugar thrower machines.

No shore crane available.
TANKERS: Molasses pumping rate about 85,000 g.p.h.
FUEL: Bunkers can be supplied at No. 4 pier. Grades available: fuel oil, diesel oil, and gasoline, but only supplied in small quantities. Delivery rate average – fuel oil 200 t.p.h., diesel oil and gasoline 40 t.p.h. Delivery is by pipe-line or tank cars.
FRESH WATER: Can be supplied at No. 4 pier. Delivered by means of railroad tank cars, each with capacity of approximately 34 tons. Delivery rate about 20 t.p.h.
REPAIRS: Repair Shop "Boga" incorporated in the Industry Ministry.
MEDICAL: There is a municipal hospital where sick crew members can receive attention.
COMMUNICATIONS: There are long-distance telephone communications, cables RCA, Government telegraph and postal service. There is a long-distance telephone between Nuevitas/Pastelillo/Tarafa and Bufadero.

Vessels can communicate with Nuevitas by radiogram (CLA).
AUTHORITIES: Located at Nuevitas.

Authorities travel from Nuevitas to clear the vessels for whichever of the 3 berths they may have been assigned, i.e. Pastelillo, Tarafa or Bufadero.

Means of transportation for port authorities from Nuevitas to the loading/discharging berths is automobile or launches.

AGENTS: Empresa Consignatarias Mambisas, Apartado 250, Puerto Tarafa, Nuevitas. Cable: Mambisas Nuevitas. Tel.: 3–1435 (night: 3–5805 and 3–6025).

(b) **SUB-PORT OF TARAFA:**
PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Tarafa is about 14 miles.
APPROACHES: See "Pastelillo".
RESTRICTIONS: Vessels can enter or sail only during daylight and should wait for slack water.
MAX. SIZE: Max. draft with which vessels can enter Tarafa is 25 ft. 8 in. In exceptional cases up to 26 ft. 6 in.

Max. length up to 600 ft. Vessels drawing over 25 ft. 3 in. should wait for high tide before shifting anchorage. Tidal variation 1 ft. 6 in.
BERTHING: For sugar and general cargo.

Pier "B" – North side: length 480 ft., depth 19 ft. (high water). South side: depth 19 ft. (high water).

Pier "C" – North side: length 767 ft., depth 25 ft. 6 in. (high water). South side: depth 25 ft. (high water).

Pier "D" – North side: length 767 ft., depth 25 ft. 6 in. (high water). South side: length 477 ft., depth 25 ft. (high water).

Vessels drawing 25 ft. 6 in. and over when shifting to Pastelillo must do so at high tide.

These 3 piers each have 4 railroad tracks of standard gauge but sugar cars cannot enter loaded at one side and exit at the other side. Usually loaded sugar cars are unloaded first and, whilst shifting takes place, the last ones are discharged in order not to lose time in this movement.
STEVEDORES: Working periods – raw sugar, loading rate, refined sugar, general cargo, etc., same as for Pastelillo. 6 sugar vessels can operate simultaneously. No crane available.
FUELS: No bunkers usually supplied at this terminal, but in special cases bunkers have been supplied at Pier "B".
FRESH WATER: Can be supplied at Pier "B", "C", and "D".
AUTHORITIES: See "Pastelillo".

(c) **SUB-PORT OF BUFADERO:**
PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Bufadero is 12 miles.
APPROACHES: See "Pastelillo".
RESTRICTIONS: Vessels drawing over 25 ft. 3 in. should await high tide for shifting to anchorage.

For entering-sailing, vessels should wait for slack water and only during daylight.
MAX. SIZE: Max. draft with which vessels can enter/sail to/from Bufadero is officially up to 25 ft. 3 in. but actually up to 25 ft. 6 in. Length 600 ft. Tidal variation 1 ft. 6 in.
BERTHING: Pier, length 557 ft.; draft, North side, 25 ft.; draft South side, 25 ft.

This pier is only used for molasses and fuel oil. Average pumping rate of molasses is 70,000 g.p.h. Only South side is in operation.
FUEL/FRESH WATER/REPAIRS: Not available.
AUTHORITIES: See "Pastelillo".

PUERTO PADRE–Cayo Juan Claro: 21.17 N. 76.32 W. (and sub-port of Manati)

Vessels can proceed direct to Cayo Juan Claro and Port Authorities travel to Cayo Juan Claro for clearance.
PILOTAGE: Pilots board vessels at entrance, not less than 1 mile from mouth of port. Distance from place where Pilots board vessels to pier is about 2.5 miles.
APPROACHES: Funnel-shaped at entry. 2 turns, but the one to take into consideration when manoeuvring vessels over 525 ft. is "Careneoro" turn. Vessels with a length of 565 ft. have entered this port. Bottom is rocky in entrance channel and muddy in bay.
RESTRICTIONS: Vessels can enter only during daylight and must wait for slack water for entering/sailing due to current in the channel.
MAX. SIZE: Vessels can sail with max. draft of 25 ft. up to length of 500 ft. Over 500 ft. length with draft up to 24 ft. Max. length permitted 557 ft. Tidal variation 2 ft. 3 in.
BERTHING: Loading and/or discharging operations are carried out at Cayo Juan Claro which is about 3 miles distant from Puerto Padre.

Dock No. 1 For loading sugar: length 509 ft., width 30 ft., depth 25 ft.

Dock No. 2 For loading molasses and discharge of fuel oil and gas oil: length 272 ft., width 12 ft., depth 25 ft. This dock has railroad tracks of non-standard gauge. A launch is used for handling lines in berthing.
STEVEDORES: Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

Raw sugar: loading rate max. 1,430 raw sugar bags loaded per gang period. Minimum is 650 bags. 5 bags loaded per sling. Only one vessel can operate at a time. Empty jute bags have been discharged and average discharge rate is about 45 metric tons per gang period. No crane available.

Sugar in bulk: 5 thrower machines for loading sugar in bulk.
TANKERS: Molasses average pumping rate 50,000 g.p.h. Fuel oil, discharging rate 45,000 g.p.h. Gas oil discharging rate 35,000 g.p.h.
FUEL: Not available.
FRESH WATER: Can be supplied at No. 1 pier by pipe-line. Delivery rate 17 t.p.h.
REPAIRS: Port has no repair shop, but in event winch damage or any other light repairs, this work can be carried out at the Sugar Mill "Central Antonio Guiteras" Repair Shop.
MEDICAL: General Hospital at Puerto Padre where sick crew members can receive attention.
AUTHORITIES: Port Doctor and Custom House are located at Puerto Padre. Immigration at Chaparra. Port Captain at Cayo Juan Claro.

Distance from Cayo Juan Claro where all cargo operations are performed to Puerto Padre is 3 miles. Means of transportation between Puerto Padre and Cayo Juan Claro: motor-boat, railroad, and automobile.

From Puerto Padre to Cayo Juan Claro it takes: by motor boat 30 minutes; by automobile 5 minutes; railroad 20 minutes.

Means of communications available at Puerto Padre: telephone, cable (Inalambrica), telegraph and postal service. Vessels can communicate with Puerto Padre via CLA Habana.

AGENT: Empresa Consignatarias Mambisas, Cayo Juan Claro, Puerto Padre. Tel. 208–7 (Cayo Juan Claro); (Night 165). Cable: "Mambisas Puerto Padre".

(a) **SUB-PORT OF MANATI** 21.24 N. 26.49 W.
Vessels can proceed directly to this sub-port without calling first at Puerto Padre for clearance.
PILOTAGE: Pilots board vessels about 1 mile from entrance. No pilot station. Pilots located at Manati and ETA notice to be given to them well in advance. Distance from place where pilots board vessels to pier is about 3 miles.
APPROACHES: Narrow channel, very deep (min. depth 40 ft.) Bottom is irregular, parts where it is sandy and others rocky.
RESTRICTIONS: Not necessary to await slack water for entry/sailing; but considering large tonnage of vessels presently entering port for topping-off, if there is a strong current Pilots wait until current loses strength order to avoid accidents. Vessels can enter and sail only during daylight.
ANCHORAGE: Swing area 600 ft. (approx.). Owing to reduced space, this anchorage is not safe for anchoring vessels drawing over 26 ft.
MAX. SIZE: Vessels drawing up to 30 ft. and a length of 500 ft. have entered. Max. draft with which vessels can enter and sail:

(a) Presently vessels can enter with length (Liberty type) up to 440/460 ft. drawing up to 28 ft. Up to 29 ft. as max. limit.

(b) With a length up to 500 ft. drawing not over 26 ft. Vessels with above specifications can enter port and berth whenever tide favourable and weather good.

Both sizes of vessels can load up to a max. draft of 30 ft. Also vessels with length up to 560 ft. and drawing up to 17 ft. can enter port, although it is not advisable to do so on account of the present dock conditions. Tidal variation, 2 ft. 6 in.

BERTHING: Dock length 465 ft. At South end of dock there is a small shallow which renders worthless about 70 ft. of dock space. Present max. depth at dock is 30 ft. 02 in. at high tide.

STEVEDORES: Loading sugar: working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 – 1300/1700 hrs. When necessary, work is performed at night. Sunday is also worked when required. 1,040 sugar bags loaded per gang period; 4 sugar bags loaded per sling. Only one vessel can operate at a time. No refined sugar operations performed. No shore crane available. Sugar mill has 5 grates and 3 machines for spreading sugar in hatches.

TANKERS: Molasses pumping rate 25/30,000 g.p.h. Fuel oil pumping rate at average of 1,700 b.p.h.

FUEL: Not available.

FRESH WATER: Supplied by pipe-line at pier. Pipe-line 2 in. in diameter and delivery at an average rate of 15 – 16 t.p.h. Amount that can be delivered depends on supply at sugar mill.

REPAIRS: Sugar mill repair shop for minor repairs. Welder available.

COMMUNICATIONS: Long-distance telephone communication between Manati and Puerto Padre, although difficult owing to fact that there are only two lines from Manati and they are almost always congested. There are some occasions when an entire day is spent trying to obtain communication without result. Victoria de las Tunas telephone operator serves on occasions as "relay".

Vessels cannot communicate by radio with this port.

AUTHORITIES: Port Doctor and Port Captain located at this port. Custom House delegation located here, also Immigration Inspector who attends Gibara, Vita and Puerto Padre. When vessels enter and anchor awaiting for favourable tide to dock, they are cleared by Customs at the anchorage. If vessel arrives on flood tide (which is best tide for berthing) Port Authorities visit vessel when berthed.

When vessels enter at Manati, the Manifest order number is given by Puerto Padre Custom House. Custom House clearance is given by Manati Custom House Delegation of Puerto Padre. Distance from Manati subport to Puerto Padre port is 17 miles by sea. By highway, as journey is made through Victoria de las Tunas, distance about 140 kilometres. From Manati to Victoria de las Tunas, takes 1.5 hours. From Victoria de las Tunas to Puerto Padre, about 1 hour. There is railroad transportation between Manati to Puerto Padre and it takes about the same time. There are 3 daily services between Manati and Victoria de las Tunas by train, and 2 by highway.

AGENT: Empresa Consignatarias Mambisas, Central Manati. Cable: "Mambisas Puerto Padre". Tel. 144–3.

SANTA CRUZ DEL SUR (and sub-ports of Manopla and Guayabal): 20.42 N. 77.59 W.

PILOTAGE: Pilots board vessels close to buoy indicating entrance channel (Cuatro Reales) between "La Ceiba" bank and Carapacho Cay Lighthouse. Distance from place where Pilots board vessels (Cuatro Reales Channel) to Santa Cruz anchorage is 11 miles.

APPROACHES: Entrance channel has depth of 45 ft. Bottom is mud, gravel and loose sand. In the narrowest part of channel is a turn of about 20 degrees.

RESTRICTIONS: Vessels cannot enter/sail at night. Not necessary to wait for slack water for entering/sailing.

ANCHORAGES: No. 1, 24 ft.; No. 2, 26 ft.; No. 3, 36 ft.; No. 4, 40 ft. Sugar-loading operations were perfomed at anchorages. There were 10 barges available which are presently operating at the sub-port of Santa Maria (Jucaro). Similarly, the tugs which were used at this port are at present operating at Jucaro.

MAX. SIZE: Vessels can enter/sail through channel with any draft and length subject official draft of the port which is 35 ft. Tidal variation 1 ft. 5 in.

LOADING: Raw sugar: working periods: Monday to Friday 0600/0800 – 0830/1100 – 1200/1530 hrs.; Saturday 0600/0800 – 0830/1030 hrs.; Sunday: when it has been necessary, work has been performed.

Loading rate: 1,950 bags loaded per gang period. 6 bags loaded per sling. Only 1 vessel can operate at a time. No crane available.

Refined sugar – no operations performed.

Raw sugar in bulk – no sugar in bulk is shipped by this port. Bulk sugar is shipped by the sub-port of Guayabal.

TANKERS: No tankers operate at Santa Cruz del Sur proper.

COMMUNICATIONS: Long-distance telephone communication with Guayabal can be established through San Francisco Sugar Mill. Telegraph can also be used. There is no telephone or telegraph communication beteen Santa Cruz and Manopla.

At Santa Cruz del Sur there are long-distance telephone, Government telegraph and postal service. Vessels can communicate with Santa Cruz by telegraph via Radio Habana.

MEDICAL: No hospital. The nearest hospital where sick crew members can be attended is located at Camaguey, 80 km. from Santa Cruz.

FUEL/WATER/REPAIRS: Not available.

AUTHORITIES: Port Authorities are located at this port. Launch services are used by Port Authorities to clear vessels.

Distance from Santa Cruz del Sur to Manopla: 14 miles; Guayabal: 14 miles. From Santa Cruz to Manopla by sea 1.5 hours; by road 1 hour. To Guayabal by sea 3 hours; by road 2.5 hours.

No daily transportation between Santa Cruz and its sub-ports. Launch or automobile are to be hired for this purpose.

AGENT: Empresa Consignatarias Mambisas, Calle Carretera s/n, PO Box 49, Santa Cruz del Sur, Camaguey. Tel. 11 (night 65 and 26–8). Cables: "Mambisas Santa Cruz del Sur".

(a) **SUB-PORT OF MANOPLA:**

PILOTAGE: After Pilot boards vessel at Cuatro Reales Channel, vessel proceeds to Santa Cruz for clearance, thence takes another Pilot and proceeds to sub-port of Manopla, 14 miles distant from Santa Cruz.

APPROACHES: See Santa Cruz. Entrance channel to sub-port of Manopla – Canal de Media Luna, Canal de los Bayameses, where vessels anchor, is a mile wide, bottom soft mud. No dangerous turns. Vessels of any length can enter and the anchorage depth is 24–40 ft. Official permitted draft 35 ft. Vessels can enter/sail only during daylight. Not necessary to wait for slack water for entering/sailing. Tidal variation 1 ft. 6 in.

LOADING: Anchorage No. 1: 26 ft.; No. 2: 40 ft. Loading sugar operations were performed at above anchorages by means of barges. The following barges and tugboats were available:

Macareno No. 1	– capacity: 329 metric tons, 2870 bags of raw sugar or 75,000 gallons of molasses.
Macareno No. 2	– capacity: 329 metric tons, 2,870 bags of raw sugar or 75,000 gallons of molasses.
Eulalia	– capacity: 269 metric tons, 2,350 bags of raw sugar. Has no tanks.
Miguelito	– capacity: 269 metric tons, 2,340 bags of raw sugar. Has no tanks.
Josefa	– capacity: 269 metric tons, 2,340 bags of raw sugar or 48,000 gallons of molasses.

Tug: *Fox* – length 66 ft., breadth 14 ft., 165 h.p. Tows the fleet of barges utilised at Manopla.

TANKERS: Average pumping rate of molasses 20,000 g.p.h.

COMMUNICATIONS: No long-distance telephone communication. There is telegraph service which works up to 1800 hrs.

FUEL/WATER/REPAIRS: Not available.

AUTHORITIES: See "Santa Cruz".

(b) **SUB-PORT OF GUAYABAL:**

PILOTAGE: After Pilots board vessels at Cuatro Reales Channel, they proceed directly to sub-port of Guayabal, where Customs clearance takes place.

APPROACHES: Dredged channel 2,474 m. in length, 60 m. in width with average depth of 30 ft.

ANCHORAGE: Suitable for vessels with draft up to 40 ft.

MAX. SIZE: Official draft for the port is 35 ft., but Pilots advise max. draft with which vessels may sail from the berth is 32 ft. 9 in. at high water, with max. length 510 ft.

BERTHING: Pier: length 508 ft., depth 32 ft. 9 in. at high water.

STEVEDORES: Sugar loading in bulk. Loading of molasses and alcohol has not been performed for some time. Fuel oil and general cargo discharge.

Sugar in bulk – at pier there is an installation operated by electric motor control which moves a convex-shaped conveyor and transports the bulk sugar from warehouse to the vessel. 2 thrower machines, 600 and 400 t.p.h. respectively. Average loading rate about 250 t.p.h. although occasionally average of 400 tons has been obtained. There is some time lost on account of shifting the crane. Occasionally shovellers are required, and work continues 24 hours a day.

General cargo – it is not customary to receive general cargo at this sub-port, although on occasion bales of empty jute bags have been received, destined to neighbouring sugar mills. At present there are no facilities for discharge of general cargo, and no shore cranes available.

TANKERS: Shipment of molasses and alcohol has been discontinued for some time. Vessels discharging fuel oil may berth with max. draft of 27 ft. without touching bottom, which is of soft mud.

COMMUNICATIONS: Communications between Guayabal and Santa Cruz are poor. It is necessary to travel to Sugar Mill San Francisco (about 20 km. from the pier) in order to communicate by telephone with Santa Cruz.

Masters must send messages giving ETA addressed to Mambisas Santa Cruz del Sur.

FUEL/REPAIRS: Not available.

FRESH WATER: Supplied at pier by pipe-line at average rate of delivery 10 t.p.h.

AUTHORITIES: Port Captain and Immigration's Delegations at Guayabal. Custom's delegate travels from Santa Cruz to Guayabal to conduct clearance. Distance 24 miles (by sea) from Guayabal to Santa Cruz. By road 60 km. Time 3 hours by sea and 2 hours by road.

AGENT: Vessels operating at Guayabal are attended by Santa Cruz del Sur agency personnel.

SANTIAGO DE CUBA: 19.50 N. 75.52 W.

PILOTAGE: Pilots board vessels 1 mile from mouth of port. Pilot station located in small Cay at entrance of bay known as Gramma Cay (formerly Smith Cay). Launch service is only means of communication available between Santiago de Cuba and Gramma

Cay. Pilots also have office located at Custom House building with telephone communication. Distance from place where Pilots board vessels to: Piers 4 miles; Anchorage 3.5 miles; Refinery Pier 1.5 miles.

APPROACHES: The entrance, up to a distance of 0.5 mile, has a rock bottom. Thereafter, for a distance of 1 mile muddy bottom, and remaining 2.5 miles is soft mud. There are some turns, and the channel and entrance to the port are narrow.

RESTRICTIONS: Vessels can enter and sail only during daylight from 0600 to 1800 hrs.

ANCHORAGES: Inner anchorages located in the area from North of "Ratones Cay" up to West of buoy No. 20. Can accommodate vessels drawing up to 30 ft. and a length up to 680 ft.

MAX. SIZE: Vessels with a length of 680 ft. and a draft of 35 ft. can enter up to the refinery, provided they arrive during early morning hours. Tidal variation 1 ft. 6 in.

TUGS: Tugs are used for deep-drafted vessels and otherwise as situation demands. Following tugs are available:

Toledo	length 5.18 m.; h.p. 165; speed 9 knots
Santa Barbara	length 60 ft.; h.p. 165; speed 8 knots
Caridad	length 45 ft.; h.p. 110; speed 7 knots

BERTHING: Dock No. 1 "Luis Felipe Mena Gil" (formerly Malecon). Length 400 ft., depth 25 ft. at centre, 22 ft. at West end, and 22 ft. fore and 24 ft. aft at East end. Dock used for sugar loading and discharge of mineral, heavy lifts and volume cargo. It has 2 railroad tracks of standard gauge. (Notwithstanding above depth, vessels drawing up to 28 ft./28 ft. 6 in. sail from this dock.)

Ferrocarril Pier – length 240 ft., depth 23 ft. Vessels moor to dolphins. Distance between end dolphins is 400 ft. Used only for molasses loading. There is a pipe-line installation.

Pier No. 2 – "Miguel Santiesteban Reyes" (formerly Muelle de Luz) Wooden pier, length 500 ft., depth (North side) 22 ft. 06 in. shore end; 23 ft. 06 in. sea end. (South side) 20 ft. 06 in. shore end; 22 ft. 6 in. sea end. Used for general cargo discharge. Trucks and trailers operate at this pier.

Pier No. 3 – "Rolando Roca Pacheco" (formerly La Maritima). Concrete pier, length 650 ft., depth (North side) 22 ft. shore end; 4 ft. sea end. (South side) 24 ft. shore end; 25 ft. sea end. Used for discharge of general cargo. Trucks and trailers operate at this dock.

La Molinera Oriental Pier (present name: "Frank Pais"). Depth 21 ft. fore; 22 ft. 06 in. aft.

Vessels do not berth directly on to this pier, but are secured to dolphins at narrow side of the pier. Used for bulk wheat discharge. Capacity of silos 8,200 tons. Conveyor and pipe-line are available.

Cement Factory Pier – length 290 ft., depth 17 ft. Used for cement loading. Trucks can be used.

Refineria Hnos. Diaz Pier – length 789 ft., depth 40 ft. both sides. depth 45 ft. at head of pier. Used for discharge and loading fuel. Also used for bunkering. Pipe-line installation.

Muelle Romero Dock – length 492 ft., depth (East side) 14 ft. fwd., 19 ft. aft (West side) 19 ft. 06 in. fwd., 22 ft. aft.

Above depths taken at low water.

STEVEDORES: Working periods: Monday to Friday 0700/1300 – 1300/1900 hrs.; Saturday the same; Sunday worked only if vessel completing cargo.

Raw Sugar: Loading rate about 1,200 bags loaded per gang period; 6 bags loaded per sling. 2 vessels can load sugar simultaneously.

General Cargo – approximate discharging rates:

General cargo	7–8 tons per gang hour
Bagged cargo	15 tons per gang hour
Iron	7 tons per gang hour
Wood	3 standards
Fertilisers	15 tons per gang hour

Shore Crane – there is movable crane with boom of 75 ft. length and lifting capacity about 19 tons.

Bulk sugar – 5 thrower machines available.

TANKERS: Average pumping rate: Molasses 30,000 g.p.h. Fuel oil 13,000 b.p.h.

COMMUNICATIONS: Radio telegrams, radiotelephony, telegraph and telephones. R.C.A., Inalambrica. All-American, Prewi, radio and Government telegraph. Also air, railroad and bus services.

Vessels can communicate with Santiago de Cuba through CLM and RCA.

MEDICAL: Sick crew members can be attended at Army Hospital or Los Angeles Hospital.

FUEL: Fuel oil and diesel oil available. Delivery rate about 7,000 b.p.h.

FRESH WATER: Can be supplied docked/anchored.

REPAIRS: Following repair shops: Joaquin Lamas, Giron.

AUTHORITIES: Located at Custom House building.

AGENT: Empresa Consignatarias Mambisas, PO Box 522, Jose Antonio Saco 10, Santiago de Cuba. Tel. 2891/7489 (night: 6874). Cables: "Mambisas Santiago de Cuba."

TANAMO: 20.44 N. 75.20 W.

PILOT: Pilot boards about 1 mile from entrance. Pilot station located at entrance of port mouth. Usual means of communication is by launch. Distance from place where Pilots board vessels to: Punta Gorda Dock: 5 miles; Cayo Mambi Dock: 7 miles.

APPROACHES: Entrance channel has rocky and muddy bottom. There are 90° turns, and narrow passes.

RESTRICTIONS: Entry and sailing at slack water and daylight only. Tug assistance required for vessels between 450 and 600 ft. length.

MAX. SIZE: If berthing, draft 22 ft., length 450 ft. If anchoring, draft 28 ft.

BERTHING: Punta Gorda Dock: length 345 ft., depth East side 22 ft., West side 19 ft. Dock used for loading sugar and molasses; also for fuel oil discharge or heavy cargo.

Cayo Mambi Dock: length 200 ft., depth 14 ft. Dock used in discharge of coastwise merchandise.

Docks have railroad tracks of non-standard gauge. Punta Gorda Dock has 4 inlet tracks only. Cayo Mambi has 2 tracks.

STEVEDORES: Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.; Sunday no work performed.

Raw sugar: 975 sugar bags loaded per gang period. 6 sugar bags loaded per sling.

Refined sugar: 1,875 bags of 100 lb., loaded per gang period. 12 bags of 100-lb. type loaded per sling.

General Cargo: Working periods same as for sugar.

TANKERS: Molasses average pumping rate: 20,000 g.p.h. Fuel oil average pumping rate: 11,750 b.p.h.

COMMUNICATIONS: Long-distance telephone communication at sugar mill. Radio service Inalambrica and Government telegraph. Interior telephone communication between sugar mill yard and port.

Air service at Cayo Mambi. Vessels can communicate with Cayo Mambi by Government telegraph.

FRESH WATER: Can be supplied at Punta Gorda, delivery by pipe-line at rate of 5 t.p.h.

FUEL/REPAIRS: Not available.

MEDICAL: There is a hospital where sick crew members can receive attention in urgent cases. For serious cases, sick men are sent to Nicaro Hospital or to Santiago de Cuba.

AUTHORITIES: Port Doctor and Immigration Inspectors located at Sagua de Tanamo. Captain of Port and Custom House located at Cayo Mambi. Custom House and Captain of Port are Delegations of Antilla.

Entry and sailing clearances attended by Cayo Mambi Delegation Office. Port Authorities travel from Cayo Mambi to Punta Gorda by railroad, thereafter by launch to the anchorage.

SUB-AGENT: Empresa de la Industria Azucarera de Oriente, Central Frank Pais (Tanamo), Cayo Mambi, Oriente, Cables: "Franpa Cayo Mambi". Tel. 2 (night: Zona 2). Central Switchboard.

VITA (sub-port of Gibara – Oriente Province): 21.05 N. 75.57 W.

PILOTAGE: Pilots board vessels 3 miles from entrance channel. Pilot station located at Vita. Interior telephone communication. Distance from place where Pilots board vessels to dock: 5 miles.

APPROACHES: Owing to narrowness of channel, turns may be considered as dangerous for vessels over 450 ft. length.

RESTRICTIONS: Entry and sailing only during daylight.

MAX. SIZE: Max. draft with which vessels can enter/sail is 27 ft. at high tide and 26 ft. at low tide. Max. length 500 ft. (although vessels with length of 550 ft. have entered this port).

BERTHING: Dock: length 300 ft., depth 26 ft. Vessels drawing 26 ft. 06 in. or 27 ft., touch bottom. Loading of sugar and molasses and discharge of fuel. Only one railroad track of non-standard gauge.

STEVEDORES: Working periods: Monday to Friday 0700/1100 – 1300/1700 hrs.; Saturday 0700/1100 hrs.

800–1,100 sugar bags loaded per gang period. Four sugar bags are loaded per sling.

TANKERS: Average pumping rate (molasses) 25,000 g.p.h.

COMMUNICATIONS: Long-distance telephone, post and telegraph services.

MEDICAL: No hospital at Vita. Sick crew members can receive attention at Gibara Hospital. Port Doctor at Santa Lucia, Oriente.

FUEL/REPAIRS: Not available.

FRESH WATER: Can only be supplied in exceptional cases. Delivery by 2-in. diameter pipe, by gravity. Delivery average 3 t.p.h. Recommended that Masters always check availability in advance.

AUTHORITIES: Immigration at Chaparra, who travels to Vita on ship's arrival advice. Captain of Port at sub-port of Vita. Gibara is the Customs Official Port having Custom Delegation at sub-port of Vita. Vessels can proceed directly to Vita where they are cleared by Authorities.

SUB-AGENT: Empresa de la Industria Azucarera de Oriente, Central Rafael Freyre (antes Santa Lucia), Oriente. Cables: "Rafy Santa Lucia Oriente." Tel. Dock 43–3. Centre 37–1. Home 28.

Cyprus

DHEKELIA: 35.58 N. 33.44 E.

Sovereign Base Area

DOCUMENTS:
3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc.).
2 Manifests (Customs forms).

PILOTAGE: Not compulsory but strongly recommended. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Lornaea.

MAX. SIZE: Tankers up to 560 ft. length with max. draft 30 ft.

HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.

RADIO: Messages through Cyprus Radio, call sign 5BA.

TUGS: None available and not required.

BERTHING: One conventional buoy mooring for tanker discharging fuel oil to Dhekelia Power Station. Depth of water 10.7 m.

MEDICAL: Necessary for Agent to receive advance notice of medical attention required. Hospital facilities available.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: See "Limassol".

IDENTIFICATION CARDS: When on shore leave, seamen's books required.

TIME: GMT plus 2 hours. No changes during the year.

FAMAGUSTA: 35.07 N. 33.57 E.

The port has been declared as closed by the Authorities of the Republic of Cyprus until further notice.

DOCUMENTS:
1 Arrival Declaration form.
1 Merchant Ship Voyage Report (for Port Marine Police).
1 Maritime Declaration of Health (International Form Med. 20).
1 Declaration of all articles obtained outside Cyprus or during voyage by Master, Officers and Crew (wines and spirits, tobacco, cigarettes, cigars, perfumery, jewellery, cameras, watches, arms and ammunition, etc. – Form C.121).
5 Crew Lists.
5 Passengers' Lists (landing and in transit).
1 List of Ship's Stores.
1 Dangerous Cargo List.

PILOTAGE: Masters to cable ETA 24 hours before arrival to Agent who will arrange berthing and piloting-in. Radio ETA message to Harbour Master not necessary except at times of congestion, when Agent will advise Master to do so for purposes of registering turn.

In normal weather conditions Pilot boards vessel at Turning-buoy or at anchorage. In bad weather conditions, Pilot will advise Master to proceed entrance of Outer Harbour, where Pilot will board. Communications between pilot station and vessels approaching port or anchored at roadstead by VHF Channel 16.

Pilot boat: open motor launches (about 150 h.p.), light grey colour, flying pilot's flag. Light or sound signals for Pilot requirements: International signals apply.

ANCHORAGES: Vessels not berthing on arrival, to anchor at roadstead; a recommended position is 281° – 1.4 miles from F. White and Red Reef Lighthouse. In case of very bad weather a safe anchorage to be sought further North, near Boghaz Area.

RESTRICTIONS: Passenger vessels (vessels built to carry more than 12 passengers) allowed to enter port up to 2300 hrs., provided such vessels will be at Turning-buoy by that time and also if berth space is available.

Cargo vessels allowed to berth latest up to 2000 hrs. provided berth space available and that vessel will immediately operate with at least two gangs.

No tide restrictions, but for vessels entering Inner Basin max. draft 22 ft., and for Outer Basin max. draft 30 ft.

MAX. SIZE: Vessels berthing in Inner Harbour 6.7 m. draft and 131 m. LOA. Vessels berthing in Outer Harbour 9.15 m. draft and 220 m. LOA.

HEALTH: For passenger vessels, with surgeon on board, Master to cable to "Quarantine Department Famagusta", advising that all on board are in good health. For cargo vessels, pratique will be arranged soon after vessel has berthed. If vessel called at Cyprus port prior to Famagusta, pratique will be automatic.

In case of suspected disease or fever on board, the Health Authorities will take the necessary precautions and issue instructions according to the prevailing circumstances.

RADIO/VHF: Cyprus Radio – 5BA. Vessels can also call Harbour Master Famagusta on VHF, Channel 16. Tugs on VHF Channels 14 and 16.

TUGS: Tugs join vessel at entrance of Outer Basin, and ship's lines are used. Use of tugs is at discretion of Pilot. No charges made for the use of tugs, which are Government property.

BERTHING: According to rotation of arrival. If port is congested, vessels at anchorage should fly respective numerical flag denoting their number according to rotation of arrival.

Inner Harbour: Length of Quay, 540 m. Depth alongside, 7.3 m. One pier, length 99 m., depth alongside 5.2 m.

Outer Harbour: Length of Quay, 655 m., depth alongside 9.75 m.

STEVEDORES: For week-day work, gangs to be ordered by 1530 hrs. previous day. For Sunday work, gangs to be ordered by 1130 hrs. Saturday. For week-day work, it is also possible to apply for gangs in the morning or during the day subject to gangs available. Average rate of discharge on piece-work: general cargo 10–15 tons, bagged cargo 15–20 tons per hour/gang.

MEDICAL: Advisable for Master to include in ETA message to Agent if any medical attention required; hospital and private clinics facilities available. Smallpox vaccination necessary; other inoculations or vaccinations according to prevailing circumstances.

DENSITY/TIDE: Mediterranean salt sea water. Difference of 1–2 ft. between low and high water.

FRESH WATER: Water hydrants installed alongside quay, both in Inner and Outer Basins and delivery through hoses; rate of delivery 10–15 metric tons per hydrant per hour.

Note: Certain limitations to quantities deliverable can be possible during Summer months (June-August) owing to general shortage of water.

FUEL: No bunkering facilities alongside quay or in the port elsewhere. Limited fuel deliveries to vessels alongside quay can be made by lorry-tankers of 8–10 tons each. (Example of fuel available 530 seconds Redwood No. 1 at 100 degrees Fahrenheit.)

GANGWAY DECK WATCHMEN: Not obligatory, but available and most Masters engage watchmen.

OPENING/CLOSING HATCHES: Carried out by crew; stevedores on board are sometimes willing to help but they are not obliged to do so.

CUSTOMS ALLOWANCES: See "Limassol".

CARGO GEAR: Mostly supplied by shore stevedores or other contractors on hire, and it is expected to be tested and safe. Any gear supplied by the vessel must be certified tested and suitable for purpose used. Floating crane, lifting capacity 60 tons available.

IDENTIFICATION CARDS: Passports are accepted by the Police and Immigration Authorities. Identification cards, however, are advisable as crew members on shore leave must carry either their passport or identity card and the loss of the former, whilst ashore, may involve complications.

CONSULS:

Finland	Netherlands
France	Norway
Italy	Sweden
Japan	Thailand

REPAIRS: Minor repairs for deck and engine can be carried out at local workshop. Cement boxes and plating both above and underwater can be carried out.

DRY DOCKS: No dry docks. Two slipways operate at South end of port and can take vessels of up to 400 tons weight.

AIRPORT: Nicosia International Airport 40 miles from Famagusta (1 hour's drive). Daily flights to European/U.K. and Middle East destinations.

TIME: GMT plus 2 hours. Permanent.

HOLIDAYS: Recurrent official Customs and port holidays:
(a) First week-day of January;
(b) Epiphany Day (Greek Orthodox) 6th January;
(c) Good Friday (Greek Orthodox);
(d) Saturday before Easter (Greek Orthodox);
(e) Easter Monday (Greek Orthodox);
(f) Christmas Day, or if that day be a Sunday, the following day;
(g) 26th December, or if that day be a Sunday, the following day, unless Chrstmas Day falls on a Sunday, in which case the Tuesday following Christmas Day;
(h) First day of Ramazan Bairam, or if that day be a Sunday, then the following day, unless the day in *(i)* hereinafter has occurred first and has fallen on a Sunday, in the same year;
(i) First day of Qurban Bairam, or if that day be a Sunday, then the following day, unless the day in *(h)* above has occurred first and has fallen on a Sunday, in the same year;
(j) Birthday of the Prophet;
(k) 25th day of March (Greek Independence Day);
(l) First day of May;
(m) 28th day of October (OXI DAY – Greek);
(n) 29th day of October (Turkish Independence Day);
and any other day appointed by Council of Ministers as a day on which Customs Houses shall be closed for business.

All ports closed for work on New Year's Day and on 1st May. Members of Greek Trade Unions have option to abstain from work on 25th March, Easter Sunday, Easter Monday, 28th October and Christmas Day. It has also been noted that on 1st April (EOKA DAY) no work is done. Members of Turkish Trade Unions have option to abstain from work on Ramazan Bairam, Qurban Bairam, Birthday of the Prophet, 19th May and 29th October. However members of each community may work during any holidays but if they do so they are paid holiday wages.

POLICE/AMBULANCE/FIRE: Port Marine Police Tel. 63239; Police Headquarters 62016; Fire and Ambulance 999.

TELEPHONES: Lines available for placing telephones on board.

GENERAL: Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also landing of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters. Agents can arrange removal of garbage by contractor or municipality.

SERVICES: Compass adjusting; radar repairs; scraping and painting ship's sides.

SHORE LEAVE: All crew members allowed ashore after free pratique granted. Each crew member to carry passport or Identity Card.
REGULATIONS: Authority is required from Harbour Master: for immobilising engine for cleaning or repairs whilst vessel alongside quay; for lowering lifeboats; for using ship's radio; for sailing (a Port and Customs clearance is required).
Ships berth by rotation according to time of arrival. However, port regulation exists that passenger and cruising vessels as well as ferryboats can berth (max. 2 berths) on priority.
DELAYS: Delays in berthing are very seldom. Slight congestion of 1–2 days, however, is sometimes observed in month of May when it is peak export season for spring-crop potatoes and carrots.

LARNACA: 34.55 N. 33.39 E.

DOCUMENTS:
3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
3 Stores Lists (cigarettes, spirits etc.).
2 Manifests (Customs forms).
1 General Declaration.
PILOTAGE: Not compulsory but strongly recommended. Government Pilot boards vessel outside Fairway light buoy (fl. W. ev. 2 secs.). Master to give Agent 24 hour's notice of ETA and Agent informs Port Authority accordingly. Pilot boat light grey colour flying Pilot flag. Pilot may be contacted on VHF Channel 16 during working hours. Pilot's telegraphic address: "Port Superintendent Larnaca, Cyprus".
MAX. SIZE: For port berthing normally 500 ft. length, but larger vessels may receive berthing permission subject special permission being obtained from Harbour Master in consideration of vessel's manoeuvrability and prevailing weather conditions.
New port is dredged to 31 ft. (9.5 m.). Height of quay above sea level 2 m. 30 cm. Two cargo sheds 100 m.×30 m. Max. size at new port, length 150 m., draft 9 m.
Tankers discharge outside port at mooring buoys, draft up to 32 ft. Max. LOA 600 ft.
ANCHORAGE: Open roadstead.
HEALTH: Smallpox vaccination necessary; other inoculations or vaccinations according to prevailing circumstances. Pratique required only at first port. Government Health Services board vessel soon after berthing to grant Pratique. Also see "Limassol".
RADIO: Harbour Master Larnaca on VHF Channel 16.
TUGS: Two Government tugs 750 h.p. and 600 h.p. join vessel outside breakwater using ship's lines.
BERTHING: Vessels may berth inside port between 0600 hrs. and sunset, but may unberth and sail until midnight. Cargo vessels allowed to berth during night-time provided berth space available and that vessel will immediately operate with at least one gang.
Quay length in port is 1,060 ft. (326 m.).
Tankers moored during daylight hours only.
CRANES: Three mobile cranes lifting capacities 15 tons each, one 5 tons and one 2 tons.
STEVEDORES: Gangs arranged by Agent before arrival.
MEDICAL: Necessary for Agent to receive advance notice of at least 2–3 hours before arrival. Hospital facilities always available.
TANKERS: Diameter of discharge lines up to 12 in. Max. draft 32 ft. Discharging takes place at buoys outside port.
Buoy berths outside port:
Synergas Co-Operative Society Ltd: Depth of water, 11.0 m. Pipe-lines, two. Fresh water not available. Pilot available through Harbour Master at Larnaca Position of buoys, 34° 55.5′ N., 33° 40′ E.
Petrolina Ltd: Depth of water at end of pipe-line, 11.0 m. Pipe-lines, three. Fresh water available by pipe-line. Pilot available through Harbour Master at Larnaca. Position of buoys, 34° 55′ N., 33° 39′ E.
Shell Company of Cyprus Ltd: Depth of water, 11.0 m. Pipe-lines, One 8 in. white oil line jointly owned by Shell, Mobil & Esso. Fresh water available by pipe-line. Pilot available through Harbour Master at Larnaca. Position of buoys, 34° 54.75′ N., 33° 39′ E.
Agip: Depth of water, 6 m. (approx). Pipe-lines, two. Fresh water not available. Pilot available through Harbour Master at Larnaca. Position of buoys, 34° 55.5′ N., 33° 39.5′ E.
Cyprus Petroleum Refinery Larnaca: Depth of water, 11.0 m. Pipe-lines, one of 12 in. for crude oil and one of 8 in. for ballast. Fresh water available by pipe-line. Pilots available through Harbour Master at Larnaca. Position of buoys, 34° 54.75′ N., 33° 39′ E.
Mobile Oil Cyprus Ltd: Depth of water, 11.0 m.
Pipe-lines: 1×8 in., Jointly owned by Mobile, Shell & Esso.
1×4 in., LPG Line owned by Esso.
1×4 in., Vapour line owned by Esso.
1×3 in., LPG Line owned by Mobil.
1×3 in., Vapour line owned by Mobil.
1×2 in., Fresh water underwater pipe-line.
Pilot available through Harbour Master at Larnaca. Position of buoys, 34° 54.75′ N., 33° 39′ E.
DENSITY: 1025.
TIDE: Up to 1.5 ft. rise of tide.
FRESH WATER: Available. Delivery by hoses at main quay at about 50 t.p.h. Suppliers, Larnaca Water Board.
FUEL: 12 hour's advance notice required. Available in unlimited quantities.
CUSTOMS ALLOWANCES: See "Limassol".
HATCHES: Opened and closed by crew.
IDENTIFICATION CARDS: When on shore leave, seamen's book is required.
CONSULS:

Italy	Portugal
Sweden	Finland
Denmark	

REPAIRS: Minor repairs and overhauls may be carried out.
REPATRIATION: Facilities available.
AIRPORT: For the present Larnaca International Airport 3 miles from Larnaca Port daily flights to Europe and Middle East.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: Cargo work can be arranged on Custom Holidays on payment of overtime with exception of New Year's Day, Christmas Day and Easter Sunday. For public holidays see "Famagusta".
TELEPHONES: Lines available for placing telephones on board.
Police Headquarters 2001; Hospital 2007.
SERVICES: Compass adjusting, radar repairs, hull scraping and painting.
REGULATIONS: Harbour Master's authority required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio.
Port and Customs clearance required for sailing.
Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also landing of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.

LATCHI (Limni Mines): 35.03 N. 32.27 E.

DOCUMENTS: See "Limassol".
PILOTAGE: No Pilot available. Vessels chartered for Company advise ETA via Cyprus Radio to "Limni Poliscyprus". Anchorage 0.5 mile North of Mavroli Pier. During daylight hours Company launch leads vessels to anchorage.
ANCHORAGE: As above, depth 0.5 mile from pier is 10 fathoms.
MAX. SIZE: No restrictions on size.
HEALTH: All necessary action to obtain pratique made by Agent in the event of any suspected disease on board, necessary action and precautions taken by Health Authorities.
RADIO: Cyprus Radio – call sign BA on 500 or radio telephone No. 2182.
TUGS: None available.
BERTHING: Mavroli Pier in Khrysokhou Bay, Cyprus, in position 35° 03′ 15″ N. 32° 27′ 10″ E. bearing 072° approximately 3.2 miles from Latchi. Necessary to have Cyprus flag, and to have gangway and not a rope ladder for Authorities and stevedores to board.
STEVEDORES: ETA advice required order arrange gangs at least 24 hours. Loading rate 2,000 tons per day. Loading from 6 barges, average capacity 45 tons each.
MEDICAL: Agent to receive 24 hours notice. Hospital facilities available at Ktima, 24 miles from Latchi Port. Each member of crew to possess valid vaccination certificate.
DENSITY: 1025.
FRESH WATER: None available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Unnecessary.
OPENING/CLOSING HATCHES: Done by the crew.
CUSTOMS ALLOWANCES: See "Limassol".
IDENTIFICATION CARDS: Required.
CONSULS: No consuls at port.
REPAIRS: No repairs can be carried out.
REPATRIATION: Can be arranged through Nicosia Airport.
AIRPORT: Nicosia Airport 68 miles away, served by regular airlines.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: See "Limassol".
POLICE/AMBULANCE/FIRE: Such services arranged through Agent.
TELEPHONES: No arrangements exist for placing on board.
SHORE LEAVE: Landing permits obtainable from local Police Authorities by lodging passports or seamen's books.

LIMASSOL: 34.40 N. 33.03 E.

PORT LIMITS: The territorial waters of Cyprus contained within a line drawn 135° to the high seas from the Roman Catholic cemetery, situated 16.5 cables N.E. of Limassol fixed red light, and a line drawn 135° to the high seas from the centre of Zakaki village.
DOCUMENTS:
Ports Department:
1 Arrival Declaration (given to Master by Boarding Officer).
1 Crew List.
1 Passenger List and 1 transit passenger list (the latter in case of passenger vessels).

Customs Department:
1 Crew List.
1 Passenger List.
1 Transit List.
1 Fire Arms Declaration.
1 Stores Declaration.
1 Declaration signed by each member of crew stating dutiable goods in their possession.
1 Authority by Master for appointment of Agent.
Police Department:
1 Crew List.
1 Passenger List.
1 Transit Passenger List.
Health Department:
1 Maritime Declaration of Health.
1 Crew List.
1 Passenger List.
1 Transit Passenger List.

PILOTAGE: Services of Pilot requested by Agent representing vessel. Ships piloted only during daylight, usual "G" flag hoisted.
ANCHORAGE: No specific boundary but ships usually anchor about 0.5 mile South-Eastwards of lighter basin entrance where depth 8 fathoms.
RESTRICTIONS: Vessels allowed to enter port only during daylight hours starting at 0600 hrs. In some cases vessels are allowed to berth after sunset.
MAX. SIZE: Max. permissible length for vessels entering harbour is 265 ft. draft 15 ft. No limit for vessels remaining at roadstead.
BREAKWATER PORT: Depth alongside 11 m., max. draft 10.5 m. No limit on length.
HEALTH: Pratique granted by Health Authorities after boarding at anchorage. Automatic pratique only granted to vessels having a doctor on board, certifying that everybody well. A telegram to this effect must be sent 24 hours before vessel's arrival, to "District Medical Officer, Limassol". No pratique necessary when vessel arrives from another port in Cyprus.
RADIO: Cables sent through "Cyprus Radio", call sign: 5BA.
RADAR/VHF: No port radar service. Office of Harbour Master equipped with VHF radiotelephone operating on Channels 16 and 14 during office hours only.
TUGS: Two tugs, 1,320 h.p. each.
BERTHING: *Breakwater Port:* Consists of two quay walls each 400 m. in length.

Warehouses with a floor area of 22,000 sq. m. can be used for storage of goods.

Berths can be used for exports such as citrus, grapes, wines, cement, carobs, general cargo, etc.

Imports of homogeneous cargoes, i.e. grain, iron, steel pipes, etc., of general cargoes and of cargoes for direct delivery which do not require storage within the port, i.e. fertilizers, frozen meat, sugar, etc.
CRANES: Floating crane with capacity of 80 tons at 17 m., 60 tons at 22 m. and 15 tons at 30 m.
STEVEDORES: 24 hours notice to vessel's Agent of ETA enable arrange gangs.
MEDICAL: Unless very urgent case on board no need for advance notice to District Medical Officer. Any other case dealt with by doctor coming on board for pratique purposes, and Agent. Hospital and private clinic facilities available. Usual International vaccination certificates required for each member of crew.
TANKERS: No tankers berthed in Limassol, but at private berths away from port and for discharging only. No slop discharge facilities.
FRESH WATER: For ship entering port fresh water facilities on quay.
FUEL: Diesel oil and furnace oil available for ships entering port. Brought alongside by tanker lorries from Larnaca.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: 50 grams tobacco or 40 cigarettes, and 0.25 litres spirits, 0.25 litres wines, per man per day.

For reasons of administrative convenience, issues of high-duty goods for use by crew on board will be made every three days, beginning with the first day of the ship's arrival in Cyprus waters. For each member of the crew (other than the Master, the Chief Officer and the Chief Steward) each issue will consist of: 120 cigarettes or an equivalent quantity of other tobacco goods, 1 bottle of spirits, 3 bottles of wine.

Each issue for the Master, the Chief Officer and the Chief Steward of ocean-going vessels will consist of: 200 cigarettes, 2 bottles of spirits and reasonable quantity of wine they may request.

Concessions to crew landing from ship: On coming ashore, for a short period, 50 grams of tobacco, or 40 cigarettes per day or part thereof.

The above allowances are in force for all Cyprus ports.
CARGO GEAR: Must comply with existing International Safety Regulations.
IDENTIFICATION CARDS: Seaman's Book or Passport needed for seamen going ashore.
CONSULS: Belgium, Holland, Italy, France.
REPAIRS: Only minor repairs can be carried out.
REPATRIATION: Facilities for effecting crew changes and arranging any necessary repatriations. Usually arranged with Agent.
AIRPORT: Larnaca international Airport, served by regular lines, situated 43 miles from Limassol.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: Every Sunday; 1st January; 6th January; 25th March; 1st May; 28th October; 29th October; Good Friday; Saturday following Good Friday; Easter Monday; First Day of Kurban Bairam; Birthday of Prophet; First Day of Ramazan Bairam; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Police 63171; Ambulance 63111; Fire Brigade 71939 or 999.
TELEPHONES: Available on request, for placing on board.
SERVICES: Compass adjusting, servicing of radar, R/T, echo-sounders.
SHORE LEAVE: Allowed.

MONI: 34.42 N. 33.11 E.

PILOTAGE: Government Pilots available from Limassol.
RADIO: Communication between ship and shore by Walkie-Talkie after berthing.
BERTHING: *Electricity Authority of Cyprus:* Buoy berth for oil. Min. depth of water 18.29 m. One pipe-line. Position of buoys 34° 41′ 50″ N., 33° 10′ 36″ E.
Cyprus Cement Factory: Depth of water 9.75 m. One pipe-line. Position of buoys, 34° 41′ 52″ N., 33° 10′ 50″ E.
FRESH WATER: By barge from Limassol, rate 10 t.p.h.

MORPHOU BAY

GENERAL SITUATION: Morphou Bay situated on N.W. coast of Cyprus. Bay is well situated geographically, as owing to high hills all round here is shelter from all winds except those between N.W. and N.N.E. Loading records for many years past show that, whilst wind fairly frequent from N.W., winds of storm force practically unknown. Tides and currents are negligible.

1. Xeros Pier – Karavostassi, operated by Cyprus Mines Corporation, and,
2. Another loading installation at Karavostassi operated by Hellenic Mining Company.

1. Xeros Pier – 35° 08′ 16″ N. 32° 49′ 14″ E.
ORE LOADING: Ships moored in open roads; loading and discharging effected by lighters towed by tug to and from Jetty. Loading effected by grabs, each weighing about 10 cwt. and carrying about 20 cwt. of ore. Ship's winches must therefore be capable of lifting at least 40 cwts. Loading operations normally carried out 17 hours per day. Average loading rate is 1,800 to 2,000 tons per loading day of 17 hours. Ships load in turn and normally only one ship loaded at a time.

Inward cargoes only handled by special arrangement.
JETTY LIGHT: Corporation's Jetty 400 ft. long. A red light (electric) flashing every 3 seconds (duration of flash 0.2″; eclipse 2.8″) is on shore end of Jetty (Lat. 35° 8′ N. Long. 32° 51′ E.). Jetty berth not available to ocean-going vessels, depth being only 11 ft. Jetty equipped with electric crane with maximum lifting capacity 5 tons.
MOORINGS: Vessels ride to own anchors and depend on them for safety and security, using Corporation buoy as stern mooring to assist in loading. Buoy is in about 7 fathoms and located about 1,500 ft. from end of Jetty. Holding ground in anchorage is of tenacious sand and clay sloping away from shore.
DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
Vaccination Certificates.
Declaration of Health.
1 Crew Declaration (tobacco, Liquor, Souvenirs, etc.).
1 Arms and Ammunition Declaration.
2 Stores Lists.
1 Specification for Agency.
1 Notice of Readiness.
Produce ship's Registration Certificate.
1 Bill of Lading.
1 Cargo Manifest (if carrying cargo).

PILOTAGE: Not required for vessels dropping anchor in roads. A non-qualified but well-experienced Pilot will assist Master in tying vessel to mooring buoy for loading.
ANCHORAGE: Anywhere one mile offshore between Vouni Palace and Pendayia Hospital.
RESTRICTIONS: None, but advance notice should be given by cable.
MAX. SIZE: For vessels loading at CMC mooring, max. laden draft 32 ft. For tankers discharging oil the max. draft on arrival should be 25 ft.
HEALTH: If arrival in daylight and advance notice has been given by cable, then pratique normally given on arrival – subject weather conditions. If arrival after dark, pratique given early following morning. Suspicion of disease on board should be notified by cable before arrival, or at least to Medical Officer when he boards for pratique. Vessels in free pratique from another port in Cyprus do not require further pratique providing travelled to Karavostassi coast-wise.
RADIO: ETA cable to "Pyrites Lefka Cyprus", and sent through Cyprus Radio.
TUGS: Not required. Ship's lines used for stern-tying to mooring buoy for loading.
STEVEDORES: Arranged by Shippers, who also Agents (Cyprus Mines Corporation).
MEDICAL: Advance notice of required medical attention not necessary unless doctor required to board ship. Company Hospital facilities available. Vaccination certificates required.
TANKERS: Discharging only, into 8 in. line. Connection made by

Receivers. No slop discharge allowed. One berth only, max. draft on arrival 25 ft.
DENSITY: Unaffected by tide which is minimal.
FRESH WATER: Available from lighter with 25 ton capacity.
FUEL: Not available, (may be purchased in drums at considerable expense).
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: See "Limassol".
CARGO GEAR: All winches, derricks, runners, guys and stays to be in good working order, and test certificates made available on request.
IDENTIFICATION CARDS: Not needed.
CONSULS: None in port. Several Embassies and Consulates located in Nicosia.
REPAIRS: Minor deck and engine repairs may be carried out by Corporation if essential to loading operation, or safety of vessel.
REPATRIATION: Agency (CMC) can arrange for travel of changing crew members.
AIRPORT: Nicosia International Airport 35 miles from port, served by regular airlines.
TIME: GMT plus 2 hours Permanent.
HOLIDAYS: No work on 1st January, 25th March, Orthodox Easter Friday, Saturday, Sunday and Monday, 1st May, 28th October, 24th 25th, 26th December, 31st December.

Customs Houses closed on Sundays, afternoon on Wednesdays and Saturdays, New Year's Day, 6th January, Good Friday (Greek Orth.), Saturday before Easter and Easter Monday (Greek Orth.), 1st day of Qurban Bairam, 1st day of Ramazan Bairam, 25th March, Birthday of Prophet Mohammed, 29th October, Christmas Day and Boxing Day. (If New year's Day, or Christmas Day falls on a Sunday, then day following is observed.)
POLICE/AMBULANCE/FIRE: Police Xeros 249; Ambulance ask through Agency; Fire Xeros 243.
TELEPHONES: Cannot be installed on board.
GENERAL: Cyprus Mines Corporation ships flotation pyrites, copper concentrates and copper precipitates in bulk from lighters which come alongside. The speed of loading depends largely on the efficiency of the vessel's loading gear.
SHORE LEAVE: Crew members allowed on shore.
REGULATIONS: No unusual regulations. Ship's boats may be used only in vicinity of ship for boat-drill, etc. They are not to be used for coming ashore.
DELAYS: Occasionally due to congestion, and sometimes to weather.

2. Hellenic Mining Co., Installation 35° 08′ 18″ N. 32° 50′ 10″ E.
PILOTAGE: Company's Pilot available for mooring and shifting operations.
ANCHORAGE: Five moorings buoys, and vessels use own anchors.
MAX. SIZE: Ships of practically any size, from small freighters to ore-carriers of 25,000 tons or more, can be accommodated. Length of vessel immaterial but there may be certain reasonable limitations as to beam and height from waterline in ballast.
BERTHING: Iron jetty extends 433 m. into sea. Depth of water alongside pierhead about 10 fathoms.
STEVEDORES: Hours of working are: 0800 to 1200 hrs. and 1300 to 1700 hrs. Saturdays: 0800 to 1200 hrs, but normally work, on overtimes, arranged continuously, all round the clock without break, until vessels fully loaded.
MEDICAL: Doctors and hospital available.
FRESH WATER: Available.
GENERAL: All other details see Xeros Pier above.

VASSILIKO BAY: 34.43 N. 33.19 E.

SITUATION: 13.5 miles due East of Limassol on South coast of Cyprus, and 1.5 miles West of Zyghi.
PILOTAGE: Company's Pilot available for berthing and shifting operations.
PYLON: The pylon, diameter of 34 ft. fitted with mechanism which enables buckets conveying ore along ropeway, to be emptied automatically through a chute into holds of ships.
MAX. SIZE: Ore carriers of 12,000 d.w.t. and over can be accommodated. Max. permissible height of ship between sea level and top of hatches (vessel in full ballast) 25 ft. Max. length 450 ft. Max. beam 60 ft.
BERTHING: Depth of water at pylon 30 ft., but if necessary ships may berth further out where depth 31–32 ft. In such cases, double chute used. Height of articulation of chute 49 ft. above sea level; height of unloading tip varies according type chute used. Bottom of sea near pylon, sandy.
LOADING: Loading of ores (pyrites and gypsum-rock) effected through an aerial maritime ropeway line, which starts at a point close to the shore and extends over a distance of 1,750 ft. in the sea to a reinforced concrete pylon. Ropeway cables supported at 3 intermediate points by steel trestles.
CAPACITY: Installation has loading capacity of 3,500/4,000 tons pyrites and 2,500/3,000 tons gypsum rock per 24 consecutive hours; electrically operated and all ores automatically weighed at loading point by means of electric Avery machine.
TANKERS: One pipe-line to buoy berth, depth of water, 12.19 m. Position of buoys, 34° 42′ 42″ N., 33° 18′ 42″ E.
FRESH WATER: By barge from Limassol.
HOLIDAYS: All weekends and 18 days throughout the year.
GENERAL: All other details see "Morphou Bay, Hellenic Mining Co."

NOTES

Please also advise Shipping Guides (Services) Ltd.

Dahomey refer to Benin, People's Republic of, page 93.

Denmark

AABENRAA: 55.05 N. 09.25 E. (See Plan)

DOCUMENTS: See "Kalundborg".
PILOTAGE: Telegraphic address: "Pilot – Aabenraa". Short notice about 2/4 hours – VHF Channel No. 16. Small red motor-boat flying International pilot flag. Normally located middle of Aabenraa Fjord. On request Pilot comes aboard vessel between buoys 3–4, way 25.
ANCHORAGES: Aabenraa Fjord or road. Depths: about 75/80 ft.
MAX. SIZE: Length and breadth no restrictions. Draft limit: max. 36 ft. at Aabenraa, max. 32 ft. at Ensted Harbour (Power Station). No tide – occasionally low water of 3–5 ft. in heavy gales from West. Entry day or night.
HEALTH: Pratique granted by Customs Officers. In event of disease or fever on board, vessel's Agent to be informed before arrival.
RADIO: Blavand Radio or Lyngby Radio.
TUGS: Usually not necessary, but pilot boat may assist at reasonable rates.

Large vessels may require towage assistance on entering and leaving Enstedvaerkets Harbour, and in such cases a few days notice is required to call a Svitzer-tug.
BERTHING: Length of quays, 1,700 m. Depths 5.5 m. – 11.0 m. Two electric travelling cranes, capacity, 5 tons at 20 m. One stationary electric crane, capacity 20 tons at 4 m. from quay wall. One Coles mobile crane, capacity 11 tons at 3.05 m.
STEVEDORES: Stevedores informed by Agent.
MEDICAL: A few hours notice in order to arrange for doctor to come on board. Hospital in Aabenraa.
TANKERS: Diameter of discharge line: 10 in. 2 berths – draft Aabenraa berth 36 ft. – draft Power Station berth 32 ft., normal water level.
TIDE: No tide – vessels arriving and sailing by day and night.
FRESH WATER: Day and night from shore line, 10/15 t.p.h.
FUEL: All grades available. Minimum 24 hours notice.
OPENING/CLOSING HATCHES: Normally done by crew.
CERTIFICATES:
Tonnage Certificate.
Radio Certificate.
Load-line Certifcate.
Safety Equipment Certificate.
Deratting Certificate.
CUSTOMS ALLOWANCES: Tobacco, 100 cigarettes per man for 3 days. Wine and/or Spirits, 1 bottle spirit or wine per man.
IDENTIFICATION CARDS: Not needed.
CONSULS: German; Finnish; Norwegian; Swedish; British.
REPAIRS: Available.
DRY DOCKS: One dock – length 100 ft., breadth 54 ft., depths on blocks 12 ft., lifting capacity power 800 tons.
REPATRIATION: Facilities exist.
AIRPORT: About 30 km. Feeding line for Copenhagen – daily departure.
TIME: Local time is GMT plus 1 hour. No alterations to clocks.
POLICE/AMBULANCE/FIRE: Dial "000".
TELEPHONES: None available for placing on board.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Normally no delay except during severe Winters due to ice between mid December and end March.
AUTHORITY: Harbour Master.
AGENT: P. F. Cleemann, Vikinghus, 6200 Aabenraa. Tel. (04) 62–21–82. Cables: "Cleemann".

AALBORG: 57.03 N. 09.55 E. (See Plan)

DOCUMENTS:
Ship's Register.
Load-line Certificate. (All vessels over 150 GRT.)
Road Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or Exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.
PILOTAGE: Compulsory at Hals Bar for ships drawing more than 5 m. Pilot boards at Hals Bar Light. Pilot boat equipped with VHF Channel 16. The Western entrance at Logstor is only navigable in daylight for vessels under 4 m. draft.
ANCHORAGE: Vessels may anchor in Limfjord or Aalborg Roads, depths 9 — 15 m.
RESTRICTIONS: The port is situated in Limfjord, 16 miles from entrance at Hals. Controlling factor is depth at Hals Bar. 9.5 m. (31 ft) MLW. Night entry permitted.
MAX. SIZE: Maximum draft for crossing Hals Bar 8.5 m (28 ft).
HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival. When vessel arrives from port outside of Europe and U.S.A. and has been less than 14 days at sea, all crew members require valid smallpox vaccination certificates.
RADIO; Radio stations to be used: Skagen and Lyngby, Port Authority, Pilot station. Tugs and Bridges can be contacted on VHF channel 16.
TUGS: Nine tugs available from 250 to 850 h.p. Not compulsory except through bridges for vessels over 1,500 d.w.t.
BERTHING: Aalborg on North and South sides of Limfjord. Total quayage 11.1 km., whereof public quays 9.8 km. All main quays suitable for vessels able to cross Hals Bar. Depths alongside 7.5 to 10,0 m.
Vendsysselvaerket power station wharf, depth 10.0 m.
Lindholm Pier Cement factory wharf, depth 7.8 m.
Rordal Cement factory wharf, depth 7.5 — 9.3 m.
BRIDGES: Two lift bridges cross Western end of Aalborg harbour. Horizontal opening 30 m. Only vessels bound for Lindholm Pier are affected.
MEDICAL: Doctors, hospital facilities available.
FRESH WATER: Supplied by pipe-line at all berths.
FUEL: All grades available.
DEVELOPMENTS: Aalborg has considerable areas under development for industry. In connection with this, preparations are being made for the building of new public harbour facilities. On the South bank of the fjord the Port Authority has available a 3.2 km stretch of coast with an area of approx. 200 hectares. This area is in connection with a new industrial and residential district of approx. 600 hectares. According to present plans approx. 7,000 m. of new quayage can be built here. Investments are estimated at 200 mill. Kr. Factories within the electronic and textile sectors are already established here and a continuous expansion goes on. On the site a special harbour with a quayage of 660 m. and with facilities for unit load ships as well as conventional cargo ships, with warehouses and administration blocks etc. was constructed during 1972 as base port for the Royal Greenland Trade Department's routes calling at all ports in Greenland. On the North bank of the fjord east of the existing harbour areas approx. 140 hectares have been laid out as a new harbour and industrial area. This area has coast length of approx. 3.5 km.
DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally by crew with assistance of stevedores.
IDENTIFICATION CARDS: Not required.
CONSULS:

Belgium	Tel.	(08)	13 23 33
Brazil	,,	,,	13 12 33
Finland	,,	,,	13 30 33
France	,,	,,	12 09 00
Great Britain	,,	,,	13 12 33
Greece	,,	,,	13 31 00
Iceland	,,	,,	12 44 33
Netherlands	,,	,,	13 42 33
Norway	,,	,,	12 14 24
Spain	,,	,,	18 50 99
Sweden	,,	,,	12 00 51

REPAIRS: All hull and machinery repairs can be effected.
DRY DOCKS: One dry dock for vessels up to 119 m. long. Three floating docks max. capacity 20,000 tons (70,000 d.w.t.).
CUSTOMS ALLOWANCES: 200 cigarettes, 3 litres of wine and 1 bottle spirits permitted out of bond for each man.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day (May 2nd); Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half-holidays; May 1st, June 5th and December 24th.
REPATRIATION: Aalborg Sofarts Service (Seamen's Service) Tel. (08) 17 12 12.
POLICE/AMBULANCE/FIRE: Tel. 000
TELEPHONES: Installed by request at certain quays.
SHORE LEAVE: No restrictions.
AIRPORT: Situated 3 miles from town centre.
AUTHORITY: Aalborg Havnevaesen.
AGENT: Chr. Jensen, Soeborg & Benthin's Succrs. Slotsgade 35, PO Box 160 9100 Aalborg. Telex 69735. Cables "Soeborg". Tel. (08) 122566.

ARHUS: 56.09 N. 10.13 E. (See Plan)

DOCUMENTS:
Ship's Register.
Derating Certificate.
Load Line Certificate (all vessels above 150 g.r.t.).
Radio and Equipment Security Certificate (all cargo vessels on 500 g.r.t. and above).
Customs Passport from last port of call.
Spirits and Tobacco List specifying stock in hand for ship and crew.
PILOTAGE: Not compulsory. Harbour Pilot normally boards 1-2 miles outside port.
ANCHORAGE: Anchorage in roads – good holding ground. Nature of bottom: clay.
RESTRICTIONS: No restrictions. Night entry permitted.
MAX. SIZE: Oil port 36 ft. General cargo port up to 33 ft. Container terminal up to 36 ft. No tide.
HEALTH: Necessary formalities carried out by customs on arrival.
RADIO: Radio stations to be used: Skagen and Lyngby. Pilot station and tugs can be contacted on VHF Channel 12 and 13 – emergency 16.
TUGS: Signal by VHF.
CARGO HANDLING FACILITIES: 10 cranes for coal, fertilisers, sulphur, ore, etc.; max. capacity per crane, 120 t.p.h. 11 cargo

handling cranes up to 2.5 tons and 9 cranes up to 5 tons. One floating crane up to 20 tons and 4 mobile cranes up to 4 tons.

Container Terminal: Min. depth of water 10 m. (33 ft.). Total quay length 816 m. (2,677 ft.). 1 cargo handling and container crane up to 50 tons. 1 gantry container crane up to 32 tons. Fork lifts up to 32 tons.

Roll-on/roll-off: 2 moveable and 3 solid roll-on/roll-off berths. Fork lifts up to 32 tons. Several berths for liquid chemicals and LPG carriers.

STEVEDORES: Available. Ordered by Agents.
MEDICAL: All medical services possible. Call Pilots if medical attendance required aboard.
TANKERS: Discharge lines: 4 in., 6 in., 8 in. and 10 in. Quay 201–203, max. oil discharging 1,200 cu.m./hr. Quay 202 and 124, 1,000 cu.m./hr., and quay 120, 800 cu.m./hr.
FRESH WATER: Most berths supply by shore installations, otherwise barge.
FUEL: All grades available.
FIRE PRECAUTIONS: Tankers discharging: Fire watch. Special harbour fire fighting on tugs.
DEVELOPMENTS: In the Northern port there will be 36–39 ft. depth of water in the future. The newly started project for the new Eastern Division comprises of a land area of 45 hectares, 1,680 m. of quays and up to 39 ft. depth of water.
DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally by crew with assistance of stevedores.
IDENTIFICATION CARDS: Not required.
CONSULS: Belgium, Tel. (06) 13.18.55; Finland (06) 29.21.00; France (06) 12.58.55; Germany (06) 12.32.11; Great Britain (06) 17.66.33; Greece (06) 13.06.55; Iceland (06) 13.40.00; Japan (06) 14.48.00; Netherlands (06) 17.81.20; Norway (06) 14.59.40; Spain (06) 15.57.55; Sweden (06) 27.32.33.
REPAIRS: Most repairs and overhauls possible.
DRY DOCKS: Arhus Flydedok og Maskinkompagni A/S: 7,000–16,000 d.w.t.
REPATRIATION: Arhus Sofarts Service. Tel. (06) 19.13.33.
AIRPORT: 32 km. – 20 miles from port.
TIME: GMT plus 1 hour (permanent).
HOLIDAYS: 5 day week, but loading and discharging can be effected on Saturdays and Sundays on payment of overtime. See "Copenhagen".
POLICE/AMBULANCE/FIRE: Tel. "000".
TELEPHONES: At several piers.
SHORE LEAVE: No restrictions.
AUTHORITY: Port of Arhus Authority.

ASNAES: 55.40 N. 11.05 E.

PORT LIMITS: When boarded by Harbour Pilot at the Forth of Kalundborg; or when at anchorage at the Forth waiting for berth.
DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Deratting or Exemption Certificate.
Construction Certificate.
Certificate of Insurance or other financial security in respect of civil liability for oil pollution damage.
2 Crew Lists.
Tobacco and Spirit List covering all goods on board belonging to crew, officers, Master, ship's bar or passengers.
Cargo Manifest or Bill of Lading.

Smallpox: When a ship arrives from places outside Europe and USA, and it has been at sea less than 14 days, each member of the crew has to present a valid smallpox certificate to the authorities on arrival.
PILOTAGE: Pilotage not compulsory. Harbour Pilot boards at entrance of Kalundborg Forth; bigger ships usually take Pilot by Skaw lightvessel about 130 miles from Kalundborg. Skaw as well as Harbour Pilots listening on VHF Channel 16.

Pilots to be ordered by ETA–telegram to Agents at least 24 hours in advance.
ANCHORAGE: Large vessels anchor in 16 m. of water outside between Roesnaes and Asnaes; S.W. to N.W. winds cause swell, but holding ground is good.
RESTRICTIONS: No entry restrictions; arrival day and night and no tide with normal winds.
MAX. SIZE: Oilberth: depth alongside: 13 m. Coalberth: depth alongside: 11 m. Length of quay: 285 m.
HEALTH: No special restrictions as to free pratique, which will be granted by authorities on arrival, however, see "Documents", "Smallpox" – suspected disease or fever must be telegraphed to agents before arrival.
RADIO: Lyngby radio. VHF: Channel 16 to pilot station (also Skaw Pilot).
RADAR: No radar installations.
TUGS: At Forth of Kalundborg – 2/3 miles from port – ships' lines to be used.
BERTHING: One oil berth: length 200 m. (a further length of ships at abt. 100 m. acceptable for berthing alongside the dolphins). Max. safe arrival draft: 41 ft. (12.5 m.), however, ships of more than 70,000 d.w.t. 40 ft. (12.19 m.) have berthed.

One Coal berth: length 285 m. Max. safe arrival draft: 35 ft. (10.67 m.). 3 cranes available.
DENSITY: Brackish – about 1011.
STEVEDORES: Private stevedores to be ordered through receivers – coal discharge rate per crane per hour: about 200 tons.
MEDICAL: Doctors and hospital facilities available. No advance notice necessary.
TANKERS: 2 discharge hoses (a possibility of 3) of 8 ins. each. No slop facilities. Average discharge rate 3,000 t.p.h., max. back pressure 14 kg.
FRESH WATER: Available by pipe-line at the berth. Rate 10 t.p.h.
FUEL: Available by barge or truck.
CONSULS: Swedish and Norwegian at Kalundborg. Others at Copenhagen.
REPAIRS: All types of smaller repairs can be carried out.
DRY DOCKS: No dry dock available.
SURVEYORS: Major Classification Bureaus represented in Copenhagen. 100 km. from Kalundborg.
HATCHES: Opening closing hatches to be carried out by crew.
AIRPORT: Nearest at Copenhagen.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits.
REPATRIATION: All repatriation can be arranged normally via Copenhagen 100 km. from Kalundborg.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: Saturday/Sunday normally no work – but can be arranged. Holidays: 1st January; 15th, 16th and 19 April (Easter); 14th May (Prayer Day); 27th May (Ascension Day); 7th June (Whit Monday); 25th and 26th December (Christmas); 5th June half holiday, (Constitution Day).
POLICE/AMBULANCE/FIRE: 0-0-0 all alarms.
TELEPHONES: No telephone connection on board.
SERVICES: No tank-cleaning facilities; all other services to ships can be arranged through specialists from Copenhagen.
SHORE LEAVE: No restrictions for shore leave.
IDENTIFICATION CARDS: No shore passes necessary.
DEVELOPMENTS: During the Summer 1977 a further coal discharge-crane expected to be installed.
AUTHORITY: Private port owned by: Electricitetsselskabet Isefjordvaerket I/S, Hellerup. Local Office: Asnaesvej, Kalundborg.

COPENHAGEN: 55.42 N. 12.37 E. (See Plan)

DOCUMENTS:
1 Crew List.
2 Passenger Lists.
1 List giving stock of stores and provisions.

Customs officers bring form to be signed by Captain indicating that no epidemic diseases are on board. Formal Bill of Health signed by Danish Consul in port of departure is not necessary.
PILOTAGE: Telegr. address: Coppilot-Copenhagen. Tel. Tria 6700. Pilotage not compulsory. ETA: 1 hour. VHF Channel 16. Pilot boats blue with "LODS" on the side. Pilot flag "G" (white light) – VHF. Pilot comes on board at buoy No. 21 (Pilot for Drogden at the same place). Pilot boards by ship's ladder.
ANCHORAGE: Depth 11 m., 1 mile North of Middelgrund Port.
MAX. SIZE: Limited by draft only. Depths in the port, 10 m.; in the Oil Harbour, 10.5 m.; at the Oil Pier, 12 m.
HEALTH: See "Documents". If fear of suspected disease or fever: yellow flag – VHF.
RADIO: Lyngby Radio: OXZ. VHF Channel 16 to all installations. ETA cables to Agents and receivers, preferably by Lyngby Radio.
RADAR/VHF: No port radar. VHF Channel 16. Port Radio Beacon 219.9 kHz.
TUGS: Towage not compulsory. Tugs join ships at entrance to port. Ship's hawsers only.
BRIDGES: Larger ships must take Pilot and tugs to pass the bridges down to the South Harbour.

The Knippelsbro and Langebro will be closed for passage as follows:

Monday – Saturday	0615 – 0655 hrs.
	0735 – 0900 hrs.
Monday – Friday also	1530 – 1800 hrs.
Saturday	1205 – 1230 hrs.
	1305 – 1330 hrs.
	2000 – 2400 hrs.
Sundays and Holidays	0000 – 0800 hrs.
	1200 – 1800 hrs.
Constitution Day 5th June	1400 – 1800 hrs.
Christmas Eve 24th December and New Year's Eve 31st December	1800 – 2400 hrs.

The Sjaellandsbro will only be open for passage on weekdays 0600 – 2000 hrs. with exception of the restricted hours mentioned above for the Knippelsbro and Langebro.

on Sundays and Holidays the bridge will be open for passage as follows:

15th May – 15th September	0600 – 1000 hrs.
	1700 – 2000 hrs.
16th September – 14th May	0700 – 1000 hrs.
	1700 – 1800 hrs.

STEVEDORES: ETA earliest possible by VHF and not later than noon on the day before loading or discharging is intended to be commenced.
MEDICAL: No advance notice necessary. Hospitals available.

TANKERS: 10/12 berths according to size.

Provestens Oil Harbour: depth at		
	Quay 1:	9.0 m.
	Quay 2:	10.5 m.
	Quay 3:	10.5 m.
	Quay 4:	10.5 m.
	Quay 5:	10.5 m.
	Oil Pier:	12.0 m.
	Bunker Pier:	10.0 m.

Length and beam unimportant. Slop barge available.
CONTAINER TERMINAL: At the Levant quay in the free port. Quay length 665 m., depth alongside 10 m. Container crane capacity 32 tons, also two luffing cranes of 50 tons and 5 tons capacity for general cargo. Horizontal handling by two straddle carriers.
FRESH WATER: From quay or water boat.
FUEL: All grades available. At bunker station, no notice required, delivery 24 hours a day. By lighter in port or in roads; 10 hours notice preferred.
FIRE PRECAUTIONS: Ready hawsers fore and aft. No engine repairs.
GANGWAY/DECK WATCHMEN: Deemed unnecessary.
OPENING/CLOSING HATCHES: To be opened by ship's crew.
CERTIFICATES: To be on board:
Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
International Load Line Certificate.
Deratisation Certificate.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes. Wine and Spirits, 1 bottle wine and 1 bottle spirits.
IDENTIFICATION CARDS: Not necessary except in Oil Harbour, where the Port Authority deliver the cards.
CONSULS: The following countries are represented.

Argentina	Iceland	Romania
Australia	Israel	Spain
Belgium	Italy	Sweden
Brazil	Japan	Turkey
Canada	Liberia	United States
Finland	Netherlands	U.S.S.R.
France	Norway	Venezuela
Great Britain	Panama	West Germany
Greece	Poland	
India	Portugal	

REPAIRS: All types of repairs possible.
DRY DOCKS: Respective lengths, 787 ft. 5 in., 712 ft. 11 in. and 478 ft.
FLOATING DOCK: One of 7,000 tons capacity.
SLIPWAYS: 4 from 120 ft. to 280 ft. length.
REPATRIATION: Facilities exist for changing crew and arranging any necessary repatriation.
AIRPORT: 6 miles from centre. Direct lines for all parts of the world.
TIME: GMT plus 1 hour. No change.
HOLIDAYS: New Year's Day (January 1); Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day (December 25); Boxing Day (December 26).
Half holidays: Labour Day (May 1); Constitution Day (June 5); Christmas Eve (December 24).
Working hours: 0700-1630 with 2 half-hour meal breaks.
Saturday: All work performed at overtime rates.
Overtime work on Saturday and Sunday should be ordered by 1130 hrs. on Friday.
The working hours vary slightly from port to port as some start at 0730 hrs. and others at 0800 hrs., but a 42.5 hour week is common to all.
POLICE/AMBULANCE/FIRE: Call "000".
TELEPHONES: In many berths telephones can be placed on board ships.
GENERAL: Customs Authorities supervision of ship's provisions and bonded stores is carried out in the Free Port in the same way as in Customs Port. In this connection the Free Port is no Free Port.
SERVICES: All services available (tank cleaning, discharge of tank washings, compass adjusting etc.).
SHORE LEAVE: No restrictions.
AUTHORITY: Port of Copenhagen Authority.

ESBJERG: 55.28 N. 08.28 E. (See Plan)

DOCUMENTS: Refer to "Copenhagen".
PILOTAGE: Advance notice of 3 hours prior to ETA "Graadyb Barre" is required; this may be done via Blaavand Radio. Alternatively, Port Authority's VHF may be used. Watch is kept on Channel 16. Telegraphic address is "Pilotstation Esbjerg". Pilot vessel is a 75 g.r.t. cutter, stationed in the Port of Esbjerg, it is furnished with VHF, Channel 16. Vessel carries signals prescribed. Pilot to be taken on board outside Graadyb Barre, at buoy "O". Vessels awaiting Pilot or high tide may anchor between buoys "1" and "Graadyb 0".
Pilotage is not compulsory except when tugs are assisting in berthing.
ANCHORAGES: There are anchorage areas inside Skallingen peninsula, between buoys "E" and "F" (depth min. 31 ft.) and outside the Fish Wharves (depth 31 ft.).
RESTRICTIONS: Normally not sufficient ice to impede navigation. No ice dues charged.
MAX. SIZE: Length and breadth: no restrictions. Draft 25 ft. Tankers up to 30 ft. Entry to port is through a dredged channel, width 200 m., depth 9.30 m. at MLWST.
RADIO: Blaavand Radio, call sign OXB.
TUGS: Tugs join vessel at Esbjerg Roads. Ship's own hawsers must always be used. 4 tugs available of 600, 700, 700 and 1,200 h.p.
BERTHING:

	Approach at MLWST.	*Berth at MLWST*
Traffic Harbour	22 ft.	22 ft.–27 ft.
Ferry Harbour	26 ft.	15 ft.
Outer Ferry Harbour for Roll-on/Roll-off vessels	26 ft.	22 ft.
Dock Harbour	22 ft.	22 ft.
England Quay	31 ft.	22 ft.
East Harbour	31 ft.	22 ft.
East Harbour – New Berth (when entering max. draft 30 ft.–31 ft. LOA 560 ft.)	31 ft.	35 ft.
Fishery Harbour	15 ft.	15 ft.–17 ft.
Fishery Harbour – Herring oil Berth	17 ft.	17 ft.

CARGO HANDLING: The port of Esbjerg has no specially equipped berths besides the tanker berths and container terminal for lift-on/lift-off, but private companies own suction plants for discharge/loading of feeding stuffs. Furthermore, minor mobile cranes also with grabs and stationary coal cranes are available. Container terminal for roll-on/roll-off. Vessels with own gear can however be handled successfully, at different berths. 10 mobile cranes, capacities between 6 and 24 tons, 2 of which are fitted with grabs. 39 tugmasters, capacities between 13 and 19 tons, 49 forklift trucks, capacities between 4 and 30 tons. There is also 1 stationary crane, capacity 35 tons.
STEVEDORES: Gangs are mustered daily at 0700, and 1000 hrs. ETA should be given to above hours to ensure that gang(s) are available on arrival. Working hours are from 0700 to 1630 and meal hours are 0830–0900 and 1200–1300. No work on Saturdays. Overtime can be arranged.
MEDICAL: Medical attention can be arranged at any time. Modern hospital facilities available.
TANKERS:
Traffic Harbour
Depth in approaches to oilberths in Traffic Harbour MLWST 22 ft. (MHWST 26 ft.)
Old Oilberth No. 101: Depth alongside old oilberth No. 101 MLWST 22 ft. (MHWST 26 ft.)
New Oilberth No. 102: Depth alongside new oilberth No. 102 MLWST 25 ft. (MHWST 29 ft.)
During time alongside these berths, vessels can touch bottom, which is soft and muddy. Largest vessel berthed had a LOA of 621 ft. A tanker with a LOA of 560 ft. has berthed at No. 101, and simultaneously another tanker with a LOA of 600 ft. has berthed at No. 102. The length between the outer point of No. 101 and the opposite outer point of No. 102 is 1,200 ft.
East Harbour
Depth in approaches to oilberth in East Harbour MLWST 31 ft. (MHWST 35 ft.). Max. length 564 ft., max. draft 30 ft. 6 in.
Powerstation Vestkraft No. 506: Depth alongside Powerstation Vestkraft No. 506 MLWST 35 ft. (MHWST 39 ft.).
Under normal weather conditions Pilot states to be able to berth tankers with a LOA of maximum 660 ft.
FRESH WATER: Can be delivered at all berths. Capacity 20 t.p.h.
FUEL: All viscosities available by road tanker. Marine Gas Oil also by tanker vessel. 4 hours should be given, always during office hours.
FIRE PRECAUTIONS: A fire watch is necessary when loading/discharging oil and petrol, if flash point is under 50.
GANGWAY/DECK WATCHMEN: Watchman is not essential, but advisable.
OPENING/CLOSING HATCHES: This can be done by members of ship's crew, or by stevedores at an additional charge of 8%.
IDENTIFICATION CARDS: Advisable.
CONSULS:

Belgium	tel. (05) 12 69 77 (after hours (05) 15 06 01)
Finland	tel. (05) 12 40 00
France	tel. (05) 12 31 33
Iceland	tel. (05) 12 51 00
Netherlands	tel. (05) 12 13 11
Norway	tel. (05) 14 25 00 (after hours (05) 12 48 08)
Gt. Britain	tel. (05) 13 08 11
Sweden	tel. (05) 12 82 22
Germany	tel. (05) 12 33 00

CUSTOMS ALLOWANCES: 40 cigarettes.
REPAIRS: All types of deck and engine repairs can be effected.
DRY DOCKS: No dry docks, but slipways: Slipway No. 1 for trawlers, own weight max. 125 tons; Slipway No. 2 for vessels, own weight max. 160 tons; No. 3 500 tons; No. 4 750 tons.
REPATRIATION: Ample facilities for effecting crew changes and arranging repatriations.
AIRPORT: 8 km. from centre of town. Daily flights to Copenhagen.
TIME: Local time is GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day (Jan. 1); Maundy Thursday; Good Friday; Easter Day; Day after Easter Day; the 4th Friday after Easter; Ascension Day; Whit Sunday and Whit Monday; Christmas Day and Boxing Day. Permission to load/discharge on these days obtainable.
POLICE/AMBULANCE/FIRE: In case of emergency, dial "000" and ask for: Brand (fire), Politi (police), or Ambulance. Regular Tel. numbers are: Police 12 46 66; Ambulance and Fire Dept. (Falck/Zonen) 12 82 99.
TELEPHONES: Not possible to have telephones installed on board.
SERVICES: No tank-cleaning equipment available. For discharge

of tank washings apply to Port Master's Office, Tel. 12 92 00. Compass adjusting can be effected.
SHORE LEAVE: Normally granted.
DEVELOPMENTS: Extension of theHarbour towards the East with a new quay (Europaksj), extension of lift-on/lift-off container terminal, modernization of Trafichavn and Sonderhavn.
AUTHORITY: Port of Esbjerg Authority.
AGENT: J. Lauritzen EFTF., Vestkraftkaj. Tel. (05) 123133. Telex 54133 and 54155. Cables "Lauritzen".

FREDERICIA: 55.35 N. 09.46 E. (See Plan)

DOCUMENTS:
1 copy Bill of Lading for all cargo (manifests are not required).
1 copy Manifests for Dangerous Cargo.
2 copies Crew List.
2 copies List of Dutiable Goods.
2 copies Stores Lists.
PILOTAGE: Three Pilots available for docking purposes and for through traffic to any place in Denmark or the Baltic. Pilots have a 24-hour watch and are located on the top floor of the KFK grain silo in the West Harbour. Can be contacted day or night over VHF radio, Channel 16, or Tel. 05-920959.
ANCHORAGE: To avoid hindrances to docking or undocking ships, ships of over or about 4,000 d.w.t. are requested to anchor off Trellenes. Smaller ships will find good anchoring conditions in Mollebugten.
RESTRICTIONS: None.
MAX. SIZE: Limited by Kattegat to 42 ft. 6 in. draft. Tankers up to 900 ft. length, draft 49 ft. can berth.
HEALTH: See "Copenhagen".
RADIO: VHF Channel 16.
TUGS: Tugboat m/s "Svava" from Svitzer's Salvage Enterprise is stationed in Fredericia, but any amount of tugs are available, when ordered previously.
BERTHING:

Berth	*No.*	*Length*	*Depth*	
Shell Oil Pier	1	30 m.	10 m.	
	2	30 m.	15 m.	
Kastel Harbour	1/2	340 m.	12 m.	
Old Harbour	6	160 m.	6.5 m.	
	7	170 m.	5.5 m.	
	8	140 m.	5.5 m.	150 m. to shipyard
	9	110 m.	6.5 m.	
Shipyard and Fishing Harbour	10	90 m.	3 m.	
West Harbour	11	240 m.	5 m.	All 240 m. shipyard
	12	120 m.	7 m.	
	13	110 m.	7 m.	
	14	100 m.	7 m.	
	15	150 m.	9 m.	
	16	150 m.	9 m.	
	17	125 m.	6 m.	
	18	80 m.	6 m.	
	19	80 m.	7 m.	
Oil Pier	20	60 m.	15 m.	
	22	60 m.	11 m.	
New Chemical Pier	23	40 m.	7.5 m.	
New Mollebugt Harbour	24	250 m.	9–10 m.	

N.B.: Tide varies normally by 0.5 m.
STEVEDORES: Ordinary working hours Monday to Friday: 0700-0830, 0900-1200, 1230–1600 hrs. Night gangs on week days must be ordered no later than 1230 hrs. the same day. Working overtime weekends is possible, but gangs must be ordered no later than Friday 1230 hrs. Average output per 8-hour day, loading or unloading general cargo, is 200 tons per gang.
MEDICAL: Hospitals available.
FUEL: Available.
FRESH WATER: Available ex wharf.
DEVELOPMENTS: Plans to build an ocean berth in the Mollebugten just West of pier 22. The ocean berth will be 350 m. long and have a depth of 12 m. Part of the New Harbour is ready – See Plan.
GANGWAY/DECK WATCHMEN: Available upon request.
OPENING/CLOSING HATCHES: Stevedores or crew.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
International Safety Certificate.
Deratification Certificate.
CUSTOMS ALLOWANCES: See "Copenhagen".
IDENTIFICATION CARDS: Required.
CONSULS: Finland, France, Holland, Iceland, Norway, and Sweden.
REPAIRS: All repairs undertaken with modern equipment.
DRY DOCKS: Length 354 ft., breadth 72 ft. Max. depth at Dock gate 16 ft. 06 in. Slipway available for ships up to 1,000 tons, light displacement (divers available).
REPATRIATION: All facilities exist.
TIME: GMT plus 1 hour. No change.
HOLIDAYS: See "Copenhagen".
POLICE/FIRE/AMBULANCE: Police 921577; Ambulance 924000; Fire 921573; Emergency 000.
TELEPHONES: Both oil piers have telephones in the watchmen's room but for local calls only.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

FREDERIKSHAVN: 57.28 N. 10.33 E. (See Plan)

DOCUMENTS: See "Copenhagen".
PILOTAGE: Pilot at "Skagen Rev" lightship boards from the pilot vessel "Skawpilot"; the hull painted orange, the funnel yellow with black ring on top, or speedboat, hull painted orange and word "Pilot" on each side of the hull. Call the Pilot either over the coast radio station "Skagen Radio", call sign "OXP" or direct by VHF Channel 16. Pilot outside the harbour boards at the buoy 1.7 miles S.E. of the harbour entrance. The pilot boat is a little red painted motorboat. Call the Pilot either by "Skagen Radio" or VHF Channel 16. ETA required as soon as possible.
ANCHORAGE: In the roads South of the red leading lights in 10 m. water depth. Good holding ground. At the entrance to the fishing harbour between the pierheads for a width of 50 m. on each side of the heads, anchoring is prohibited (submarine cable).
An oil pipe-line runs from the outer harbour across the sea-lane to traffic harbour. Anchoring is prohibited in this area.
RESTRICTIONS: Vessels coming from or entering the naval base and the fishing harbour must wait for ships entering or leaving the commercial harbour. Maximum speed in the harbour except outer harbour is 3 knots. Ships entering the harbour must if necessary wait outside for ships leaving the harbour.
MAX. SIZE: Max. length about 200 m., draft 8 m. at high water. At oil quay max. draft 8 m. at high water. Tide about 0.3 m.
HEALTH: Use international quarantine signals. If suspected disease or fever on board wire the Agent to arrange everything to obtain pratique as soon as possible.
RADIO: Nearest coast radio station "Skagen Radio", call sign "OXP". The harbour office is fitted with VHF Channels 16 and 12. Watch kept day and night.
TUGS: Tugs join vessel outside the harbour between the buoy and the harbour entrance. Only the ship's line to be used.
BERTHING: No special requirement for berthing in the harbour, but several big ferries are running in and out during day and night and sailing after a time schedule. It is therefore recommended to call the harbour office, VHF Channel 16, for permission to enter Fishing harbour situated in the Northern part of the commercial harbour.
BULK HANDLING FACILITIES: One grain berth, with 8 m. depth alongside, equipped with suction pipe capacity 60 t.p.h.
Ferry berths in Harbour, depth 6.4 m. to 7 m., equipped for handling containers and roll-on/roll-off traffic. Heavy lift crane of 50 tons capacity.
TANKERS: Oil quay max. depth 8 m., Hoses 8 in. diameter. Reducing pieces may be necessary. Slop water discharging and cleaning can be done by oil-separator. Tankers draft max. 8 m. at high water.
STEVEDORES: ETA advices are required before 0900 hrs. in order to arrange gangs for discharge/loading the same day.
MEDICAL: No special requirement is necessary for medical attention. The town has all ordinary medical and hospital facilities.
FRESH WATER: Supplied by water hydrants on all quays.
FUEL: All kinds of fuel are available and no advance notice is necessary.
FIRE PRECAUTIONS: No smoking and no open fire. If discharging oil, fire watchman from the Harbour Authority required. If discharging gas, dangerous chemicals and ammunitions, etc., beside the watchman, the Harbour Authority will require restricted access to vessel.
GANGWAY/DECK WATCHMEN: Not compulsory but available if required.
OPENING/CLOSING HATCHES: Ships crew open and close the hatches. If necessary the longshoremen can do it for extra pay.
CUSTOMS ALLOWANCES: Only for ships coming from abroad – 0.25 litre wine and 0.25 litre spirits, 40 grams tobacco or 40 cigarettes per man per day and only 3 days ration in one time. On requirement after that, the Master can obtain a new allowance in proportion to the stay in harbour.
CONSULS: Sweden Tel. 08-422922, Germany Tel. 08-420011, Norway ,, 08-420900, France ,, 08-422299, Finland ,, 08-421044
REPAIRS: Three steel shipyards and one wood shipyard doing all kinds of repairs.
DRY DOCKS: Four dry docks, two floating dock and two small slips. Dimensions of largest dry dock: length 195 m., breadth 32.2 m. and depth 7 m. Largest floating dock: length 129 m., breadth 28 m., depth 3.7 m., capacity 7.500 tons.
REPATRIATION: Agent will arrange repatriation. All facilities for changing crew.
AIRPORT: Aalborg Airport, 60 km's. from port, several daily flights to Copenhagen.
TIME: Local time GMT plus 1 hour.
HOLIDAYS: Weekends, Easter, Whitsun, Christmas, New Year and two Danish holidays in the Spring.
POLICE/AMBULANCE/FIRE: Police, Tel. 08-421444; Ambulance, Tel. 08-422222; Fire, Tel. 08-421444. in emergency dial 000.
SERVICES: Separating of slop water, compass adjusting, oil bunkering, repairing all kinds of navigation instruments and provisions.
AUTHORITY: Harbour Council

GULFHAVN: 55.12 N. 11.16 E. (See Plan)

Tanker discharge terminal operated by Gulf Oil Refining A/S.

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Radio-telephone Certificate.
Derating Certificate or Exemption Certificate.
Exact list of tobacco, cigarettes and spirits showing the vessel's and the crew's supply on arrival.
Bill of Lading (if vessel is carrying cargo).
Copy of the crew list is required by Gulf Oil Refining A/S.

PILOTAGE: 2 Pilots and pilot vessel available. Pilot acts as Berthing Master; may be requested to board arriving vessels at either: Halsskov Lightship position 55° 20.1′ N. 11° 02.5′ E. or 2 nautical miles South of Halskov Lightvessel or any place in proximity of Gulfhavn.

Pilot vessel equipped with VHF following Channels: 6, 10, 12, 16 of which Channel No. 6 used for ship-to-ship communication. Pilot station at Agerso also equipped with VHF radio with following Channels: 12, 13 and 16. Pilot can be contacted at the station on Channel 16.

A vessel's ETA should be communicated by Master to Agent, 72, 48 and 24 hours prior to arrival. Agent will keep Refinery advised and make necessary arrangement with Pilot.

ANCHORAGES:
Korsor: Roads: depth 20 m. (65.6 ft.). Bottom sand, good holding ground. Width of area about 2 square nautical miles.
Gulfhavn Roads: depth 30 m. (98.4 ft.). Bottom clay. Good holding ground. Width 0.5 nautical mile. Length 1.5 nautical miles.

Power cables running between Zealand and Agerso Island (marked on charts) must be avoided.

MAX. SIZE: Max. draft at normal tide is 15 m.; safe draft is considered to be 14.3 m.

VHF: Call sign "Gulfhavn" Channels 12, 14 and 16, on 16, 24 hours a day.

TUGS: None available locally. If required 24 hours notice must be given. Pilot will advise if weather conditions demand use of tugs (in good time).

BERTHING: Oil pier is a T-shaped structure on which 4 berths provide – 1 berth for 100,000 d.w.t. tankers, 1 for 20,000 d.w.t. tankers, 1 for 5,000 d.w.t. tankers and 1 for smaller vessels up to 500 d.w.t.

Depths alongside:	Berth 1	15.0 m. (49.2 ft.)
	Berth 2	12.0 m. (39.4 ft.)
	Berth 3	7.5 m. (24.6 ft.)
	Berth 4	4.5 m. (14.8 ft.)

Adequate lifting facilities to assist in hose connecting and handling of necessary hose equipment should be ready on arrival. Refinery representative will board on arrival and discuss discharging/loading operation.

Berth No. 1

Berth 1 is equipped with mechanically operated Woodfield hose-handling structure. The booms are 12.2 m. (40 ft.) long. Berth No. 1 is primarily equipped for handling incoming crude, but can be used for other purposes (gasoils, intermediate and heavy fuels) when not being occupied by crude vessels.

The booms are arranged in the following sequence of product handling:

Boom No.	*Size of booms and contents*
1	10 in. Ballast water
2	12 in. Crude oil
3	12 in. Crude oil
4	12 in. Crude oil
5	8 in. Intermediate and heavy fuel (all grades)

The sequence is from South to North or from right to left as you face the shore.

The distance from Danish Mean Sea Level to the highest position of centre line of manifold is 17.0 m. (55.8 ft.).

In addition to the oil products handled on Berth No. 1 there are the following other connections on the pier:

Size of connection	*Contents*
6 in.	Ballast water
6 in.	Gas oil
6 in.	Intermediate and heavy fuel (all grades)
4 in.	Tetra methyl lead

Berth No. 2

Berth No. 2 is equipped with mechanically operated hose-handling structure (Woodfield). The booms are 9.1 m. (30 ft.) long.

The booms are arranged in the following sequence of product handling:

Boom No.	*Size of booms and contents*
1	10 in. Ballast water and crude oil
2	10 in. Intermediate and heavy fuel (all grades)
3	12 in. Intermediate and heavy fuel (all grades)
4	10 in. Diesel fuel
5	10 in. Diesel fuel
6	10 in. Gasoline
7	10 in. Gasoline

The sequence is similar to pier No. 1, i.e., South to North.

The distance from Danish Mean Sea Level to the highest position of centre line of manifold is 15 m. (49.2 ft.).

In addition to the oil products handled on Berth No. 2, there are the following other connections on the pier:

Size of connection	*Contents*
6 in.	Intermediate and heavy fuel (all grades)
6 in.	Gas oil
6 in.	Ballast water
6 in.	Stoddard solvent
6 in.	Naphtha
6 in.	Kerosene
6 in.	Gasoline

In addition to the oil products handled on Berth No. 2, Berth No. 3 and 4 can also handle L.P.G. (liquid petroleum gas) and Berth No. 4 solid sulphur product. All connections on Berth No. 3 and 4 are 6 in.

MEDICAL: Hospital at Skelskor; Tel. Skelskor (03) 59 44 50.

DENSITY: Ranges between 1023 and 1007, dependent on season and weather conditions.

FRESH WATER: Available at all 4 berths. Limited to 160 tons. Supplied with a pumping rate of 45 t.p.h.

FUEL: Bunker fuel available at all 4 berths. 24 hours notice required.

FIRE PRECAUTIONS: The harbour is not equipped with fire-fighting vessel. Fire-fighting equipment is stationed on quay.

GANGWAY/DECK WATCHMEN: Available if required.

IDENTIFICATION CARDS: Required by crew.

CONSULS:
Finnish Consulate: (Mr. Axel Le Dous) Algade 14, Korsor, Tel. (03) 57 03 20.
Norwegian Consulate: (Mr. J. U. Jepsen) Jens Baggesensgade 35, Korsor, Tel. (03) 57 00 06.
Swedish Consulate: (Mr. Bjarne Fischer) Brogade 2, Korsor, Tel. (03) 57 00 02.
German Consulate: (Mr. Finn Poulsen) Batterivej 7, Korsor, Tel. (03) 57 05 86.
All other consulates are situated in the Copenhagen area.

REPAIRS: Small deck and engine repairs can be carried out.

REPATRIATION: Facilities exist via Agent.

AIRPORT: Copenhagen 120 km. away.

TIME: GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Police Skelskor (03) 59 61 00; Ambulance Skelskor (03) 59 47 07; Fire Refinery 00.

TELEPHONES: A public telephone box situated at entrance of pier outside cooling-water pumphouse. In addition temporary phones will be provided upon request at Berths 1 & 2. Billing will be handled directly by Agent.

SHORE-LEAVE: Allowed, but personnel not allowed to walk in refinery area. Transport will be arranged from ship to refinery entrance upon request.

AUTHORITY: Stigsnaes Toldkontrol.

HADERSLEV: 55.15 N. 09.29 E.

DOCUMENTS: See "Copenhagen".

PILOTAGE: Aarosund Pilot station.

ANCHORAGES: Aarosund.

RESTRICTIONS: Impossible to enter Haderslev by night since there are no lights in the fjord.

MAX. SIZE: Length 110 m.; width 17 m.; depth 4.9 m.

HEALTH: See "Copenhagen".

RADIO: Lyngby Radio.

TUGS: None available.

MEDICAL: Advance notice required if hospital facilities are required.

FRESH WATER: Fresh water from quay.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Carried out by the crew.

CUSTOMS ALLOWANCES: Tobacco (100 cigarettes per man per 3 days); wine/spirits (1 bottle per man per 3 days).

IDENTIFICATION CARDS: Not needed.

CONSULS: Norwegian, Swedish, French, Belgian.

REPAIRS: Small repairs available.

REPATRIATION: No facilities.

AIRPORT: 15 km. from Haderslev.

TIME: GMT plus 1 hour.

HOLIDAYS: Discharging can be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police, 045 2 2525; Ambulance, 000; Fire, 000.

TELEPHONES: No facilities.

SHORE LEAVE: Allowed.

AUTHORITY: Harbour Master.

HELSINGOR (Elsinore): 56.02 N. 12.37 E. (See Plan)

DOCUMENTS:
1 Cargo Manifest.
2 Crew and Passenger Lists.
2 Tobacco Lists.
2 Stores Lists.
Measurement Certificate or Registry Certificate.

PILOTAGE: Call Pilot by hoisting Pilot Flag "G", or Morse signal "PT". Cable Address: "Helsingorpilot". Alternatively contact by VHF.
VHF Channel 16, Frequency 156,80 mHz (receiving frequency)
VHF Channel 13, Frequency 156,65
VHF Channel 12, Frequency 156,60
One hour's notice required before arrival at port. Pilot cutter, green hull, yellow superstructure, "Pilot" painted on superstructure. Boarding North of, South of and East of the port of Helsingor. Waiting area 0.5 mile South of the port of Helsingor. Helsingor

Pilots are also sea Pilots for Kattegat, the Belts, The Orestraights and the Baltic.
ANCHORAGE: South of the port, in the roads of Helsingor, depths from 19 to 25 m. with sand or loose clay bottom.
RESTRICTIONS: Following signals are given from the lighthouse situated on the head of the Southern pier: prohibition to sail is signalled by red rapid flashes in the harbour direction and green flashes out towards the approaches. Entering and sailing prohibition is signalled by red rapid flashes both sides. "Vessels moving in the harbour" is signalled by yellow flashes out towards the approaches, yellow in towards the harbour. Ship departing waits for ship entering. When a vessel gives signal to enter (1 long whistle or blast) it is regarded as an entering vesse!.
MAX. SIZE: Up to 26 ft. draft.
RADIO: Harbour Office of Helsingor call VHF Channel 16, shift to Channels 12 or 13 for working.
TUGS: Tug stationed in Helsingor to give towing assistance from the roads. Vessel should have ready a 6 in. nylon towing rope.
BERTHING: Vessels berthed in order of arrival.
MEDICAL: Hospital and medical facilities available.
FUEL: Not available.
FRESH WATER: Approx. 30 tons of fresh water per hour delivered through 15 in. hoses at the berths.
WATCHMEN: Not required.
CUSTOMS ALLOWANCES: For use on board during call reasonable stores and other requirements will be approved by the customs. Following quantities allowed per man per 24 hours, not exceeding 3 days: 40 cigarettes or 10 cigars or 20 cigarillos or 40 grams other tobacco products, 0.25 litre wine and 0.25 litre spirits.
IDENTIFICATION CARDS: Crew need passports.
REPAIRS: Helsingor Skibsvaerft og Maskinbyggeri A/S are qualified to undertake all forms of repair work.
DRY DOCKS: Dock No. 1: 155 m. long, 20.5 m. wide, 6.6 m. depth. Dock No. 2: 116 m. long, 16.3 m. wide, 4.7 m. depth.
AIRPORT: 1 hour by car from Copenhagen International Airport.
TIME: GMT plus 1 hour.
HOLIDAYS: Work can be performed all the year round.
POLICE/FIRE/AMBULANCE: Police Tel. 03.21.14.48; Ambulance/Fire Tel. 03.21.01.45.
TELEPHONES: Telephones are only available on board in particular circumstances.
SHORE LEAVE: Crew are free to go ashore.
AUTHORITY: Harbour Master.

HORSENS: 55.52 N. 09.52 E. (See Plan)

DOCUMENTS:
Crew List (East Euorpean countries only).
List of Tobacco.
Manifest (for Agents and Stevedores).
Bills of Lading (for Agent's use).
Ship's papers:
International Load Line Certificate.
Certificate of Register (international letter of measurement).
Derating Certificate.
Radio Safety Certificate.
PILOTAGE: Pilot station is situated at Juelsminde.
VHF Channels 6, 12 and 16.
Advance notice of 2 hours required.
Normally pilot boat will be located South of Lillegrund – 55.43° N. 10.08° E.
ANCHORAGE: No special anchorages at the firth; vessels may anchor where safe navigation permits – attention is called to cable area at Hjarno Sound.
MAX. SIZE: Max. length, approx. 500 ft.; max. breadth, approx. 70 ft.; max. draft, approx. 22 ft. A dredged channel 32 m. wide and 6.9 m. deep leads to the harbour.
HEALTH: Kindly inform Agent or Port Authorities in advance in event of any suspected disease or fever on board. Normally no necessary procedure to obtain pratique. Pratique is automatic after calling at another Danish port.
RADIO: VHF at Harbour office, Channels 9, 12, 13 and 16.
TUGS: Tug "Vitus" stationed in the harbour.
STEVEDORES: For working Monday morning ETA must be given Friday during office hours. Otherwise ETA must be given the day before work to commence. One suction apparatus for discharging grain. Normally the cargo is handled by shore cranes. There are 2 coal cranes and 5 piece-goods cranes available.
MEDICAL: No advance notice required. Hospital facilities available.
TANKERS: Discharge lines diameter: 6 in. and 8 in. Four berths for tankers, 1 at Esso with 5.6 m. of water alongside, 1 at DAK with 6.9 m. of water, 1 at KH with 6.9 m. of water and 1 at Nynas Johnson.
FRESH WATER: Delivered alongside from shore connections.
FUEL: All types of light fuel available.
GANGWAY/DECK WATCHMEN: No service of watchmen necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCE: Tobacco: 30 cigarettes per man per day – or 100 cigarettes permitted to be held out of bond. Wine and or Spirit: One bottle of each to be held out of bond.
IDENTIFICATION CARDS: Not needed.
CONSULS: Finland, 05-623433; Norway, 05-624666; Sweden, 05-624411; France, 05-623288.
REPAIRS: No shipyard – only small repairs can be carried out.
REPATRIATION: No special facilities for effecting crew changes exist.
AIRPORT: Distance from airport about 50 km., with regular airlines.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Dial 0-0-0. Fire alarms placed around the port.
TELEPHONES: Not available on board vessels.
SHORE LEAVE: Allowed.
DELAYS: No delays can normally be expected. Larger ships with big draft may expect delay during nights with poor visibility. They have to wait for daylight in order to enter port through dredged channel.
AUTHORITY: Harbour Master.
AGENT: Wilh. Chr. Bech Rederi-& Skibsmaeglerforretning. Proprietor: O. H. Rasmussen, Jens Hjernoesvej 22, dk-8700 Horsens. Phone: 5–62 65 66. After office hours: 5–61 19 65 – 61 08 10 – 62 29 56. Telegrams: "Brokerbech". Telex: 61616.

KALUNDBORG: 55.41 N. 11.06 E. (See Plan)

OPERATORS: Dansk Esso A/S.
DOCUMENTS: Ship's Register
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Derating Certificate or exemption.
Bill of Lading (if cargo).
Crew List.
Customs need a Tobacco and Spirit List, showing the vessel's and the crew's supply by arrival.
PILOTAGE: Not compulsory. Pilot station situated at Kalundborg, telegram: Kalundborg Pilot, tel. Kalundborg 03.51.08.89. Green plastic vessel carrying int. signal flag or lights for Pilot. Contact by VHF Channels 16, 12 and 6. Pilot is taken on board at the entrance of Kalundborg Fjord.
ANCHORAGE: Large vessels anchor in 42 ft. of water outside between Rosnaes and Asnaes; S.W. to N.W. winds cause swell but holding ground is good. Small vessels anchor between Gisselore Point and Harbour. From where channel leads to harbour.
Tankers: The anchorage is approximately 4–5 miles W.N.W. of the oil pier. Particulars regarding the anchorage will be given by the Pilot.
RESTRICTIONS: Depth in channel and at entrance 39 ft. 4 in., entrance width 131 ft. Also see "Tankers".
MAX SIZE: 900 ft. length. 38 ft. draft.
RADIO: *Arrival Message:* The Masters of crude or deep-sea vessels are requested to advise the refinery through their Agents of their ETA 72 hours in advance, and again 24 hours before ETA. For other vessels operating in Scandinavian waters, a 24 hours ETA notice will be required. For coastal traffic in Danish waters, ETA is required when departing for Kalundborg. If there should be any significant change in the ETA over 2 hours, additional advice is required.
HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival. When vessel arrives from port outside of Europe and U.S.A. and has been less than 14 days at sea, all crew members require valid smallpox vaccination certificates.
TUGS: Available, normally join vessel off harbour, often using vessel's lines. If tug's lines are used, an extra charge will be made.
Tankers: The required number of tugs will be ordered through the Agent in accordance with the agreement between the Pilot and the Pier Captain.
For vessels between 16,500 d.w.t. and 70,000 d.w.t. the following tug assistance will normally be required: One 1,700 h.p. tug forward on starboard side and 2 tugs of 1,800 h.p. and 400 h.p. aft.
For vessels over 70,000 d.w.t. an additional tug of minimum 1,000 h.p. will normally be required.
For all traffic to and from Pier C, tug assistance must be used in all cases where a vessel of 10,000 d.w.t. and over is already moored at Pier B.
Also see "Tankers" Pier Traffic Restrictions.
East Harbour: Depth is 23 ft. Equipment: 1 crane for coal-discharge and 1 crane for grain-discharge.
Fertiliser-quay: Depth is 26 ft. 6 in. Equipment: 1 crane for phosphate-discharge.
West Harbour: Depth is 22 ft. 6 in. Equipment: 1 suction-apparatus.
2 mobile crane available in all harbours.
TANKERS:
Pier A: For deep-sea vessels. Max. draft 41 ft. up to 70,000 d.w.t. For larger vessels between 70,000 and 100,000 d.w.t. the max. draft is 40 ft.
Crude discharge is via 2×12 in. hoses to the 30 in. crude pipe-line to the refinery, approximately 2 km. in length.
Bunker/Heavy Fuel deliveries through 14 in. line and 12 in. hose to the vessel. There are 10 other products, all in 10 in. lines and 10 in. hoses connected to the vessel.
The products are:
Naphtha/LVN.
Regular/Premium Gasoline.
Kerosene.
Auto Diesel.
Heating Oil.
Marine Diesel.
Fuel Oils: LFO, LSHFO, LPHFO.

Ballast is discharged through 1 by 10 in. and 1 by 12 in. hose into a 14 in. pipe-line.

Pier B: For vessels up to 16,000 d.w.t. (under special circumstances vessels up to 25,000 d.w.t. can be accepted). Max. draft 33 ft. Bunker/Heavy Fuel deliveries through 14 in. and 12 in. hose to the vessel. There are 10 other products all in 10 in. lines and hoses connected to the vessel. The products are:

Naphtha/LVN.
Regular/Premium Gasoline.
Kerosene.
Auto Diesel.
Heating Oil.
Marine Diesel.
Fuel Oils: LFO, LSHFO, LPHFO.

LPG is available through a 4 in. line.

Ballast is discharged through 1×10 in. and 1×12 in. hose into 14 in. pipe-line.

Pier C: For vessels up to 3,000 d.w.t. Max. draft 15 ft. 4 in. Products are:

Regular/Premium Gasoline.
Naphtha (discharging).
Kerosene.
Auto Diesel/Heating Oil.
Marine Diesel.
Fuel: HFO, LFO, LSHFO.

Loading is through 6 in. hose over the vessel's rail, although LPG is loaded via 4 in. line and 3×2 in. hoses, and asphalt over 6 in. steel arm.

Ballast can be discharged into a 6 in. line.

Pier D: For vessels up to 1,300 d.w.t. Max. draft 15 ft. 4 in. Loading through 6 in. hose over vessel's rail.

Products are:
Varnolene.
Solvents.
Regular/Premium Gasoline.
Naphtha/LVN (loading and discharging).
Kerosene.
Marine Diesel.
Auto Diesel/Heating Oil.
Fuel: HFO-LSHFO.

Ballast can be discharged into a 6 in. line.

The above maximum drafts for Pier A, B, C and D are based on normal water level in the Fjord.

Pier Traffic Restrictions: Restrictions for movements of vessels under varying weather conditions:

All Piers will be closed for in and outgoing traffic if the wind force is over 23 m/sec. (9 Bs).

Pier A & B, if the wind direction is between S.W. and N.N.W. and the wind force is between 15 m/sec. (7 Bs) and 23 m/sec. (9 Bs) tug must be used.

Pier C, If the wind direction is between S.W. and N.E. and the wind force is between 15 m/sec. (7 Bs), and 23 m/sec. (9 Bs) tug must be used.

Pier D, If the wind direction is between S.W. and N. and the wind force is over 15 m/sec. (7 Bs), the pier will be closed for all traffic.

Woodfield Loading Arms: If the wind force is over 23 m/sec. (9 Bs), all discharging/loading via loading arms will be stopped. Valves on shore line and vessel closed, and the system drained free of oil. It is the pier foreman's duty to enforce the above wind restrictions. His decisions will be based on actual measurements of the meteorological conditions.

Discharging and Loading Rates: Crude discharge rate is 38,000 Bbls. or about 5,000 t.p.h. Maximum inline pressure is 105 p.s.i.g. except for LPG where the maximum pressure is 250 p.s.i.g.

Approach Speed and Engine Check: Vessels approaching the Pier for berthing without tug assistance must slow down to an absolute minimum speed before passing the outer dolphin. Before reaching this point, a test of a true and realistic reverse manoeuvre must have been carried out to make sure that the system is functioning correctly.

Traffic Passing the Pier: There is a brisk ferry boat traffic in the outer harbour. Approximately 40 times a day a ferry passes the outer pier head in a distance of 100–300 m.

Dry cargo vessels up to about 10,000 d.w.t. call at the Kalundborg harbour and will be passing the outer Pier at a distance of approximately 500 m. from the pier head. The vessels pass at slow speed.

Tank/dry cargo vessels call at the nearby Power Plant which is equipped to handle vessels of 70,000 and 20,000 d.w.t., respectively.

Wind Conditions: The prevailing wind is from West, but most of the heavy winds and storms come from N.W.

Wind velocities exceeding 15 m/sec. (7 Bs) occur on the average about 20 days a year from S.W., about 15 days from West, 40 days from N.W. and 25 days from North.

Tide and Current: The difference between the average high-tide and average low-tide is approximately 0.3 m.

A storm from N.W. can give a high-tide of approximately 1.3 m. over normal daily average, whereas a storm from S.E. can result in a tide 0.9 m. below daily normal average.

There is practically no current at the Pier.

Wave Height at the Pier: The highest waves at the Pier will occur when the wind is from W.N.W.

The theoretical average wave height exceeds 0.7 m. for approximately 35 days a year, and an average wave height of 1 m. will be exceeded about 6 days a year.

Signal Flag: Vessels must, when loading/discharging, carry signal flag "B" during the day from sunrise to sunset, and a red light during the night.

Sanitary Regulations: The Standard regulations for Danish Harbours governing sanitation also apply to Kalundborg Oil Pier.

Trash and galley refuse must not be thrown overboard. Special containers for refuse are placed on the Pier.

Precautions must be taken to prevent discharge from toilet, bath room, etc. onto the Pier.

Gangway: Vessel to provide a safe gangway.

Laundry: Requirements should be given to the Agent's representative immediately on arrival. Laundry to be ready for delivery on arrival. A complete list is required.

Visitors: Only persons on business are allowed on the Pier. Visitors, as guests of the Master, are allowed to board vessels provided there is a request from the Master to the pier office. Further details for obtaining permits for visitors can be obtained from the pier office.

Telephone: For short distance calls a coin telephone is provided in the Pier Office building; for long distance calls arrangement must be made through the vessel's Agent.

BERTHING:

New Embankment – South Harbour: 9.5 m. basin, max.safe draft 30 ft., max. length 720 ft. Equipment: roll-on/roll off facilities.

STEVEDORES: Available, ordered by Agent, no ETA to stevedores necessary.

BALLAST: All ballast is to be discharged into the shore ballast tank. This tank is a 30,000 Bbls. tank, and usually there is approximately 20,000 Bbls. room available.

Disposal of ballast overboard is prohibited. Engine room or pump room bilges must not be pumped overboard when in Danish waters.

Sea valves will be sealed on vessel's arrival and must not be broken without approval by the pier captain or his substitute. Ballast for entering the harbour should be carried in a minimum number of tanks, and all other tanks stripped so as to minimize the time required for ballast discharge when alongside the Pier.

MEDICAL: Hospital and doctors available.

DENSITY: 1,011.

FRESH WATER: Available, supplied from shore by hose, about 15 t.p.h. 25 t.p.h. in Oil Harbour.

FUEL: All grades available, 24 hours ETA required by truck or barge.

FIRE PRECAUTIONS: No smoking allowed.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCE: Each Crew member allowed 100 cigarettes or 20 cigars or 100 grams tobacco and 1 bottle spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: Swedish, Norwegian; others at Copenhagen.

REPAIRS: All types of repairs available.

REPATRIATION: All facilities exist.

AIRPORT: Nearest at Copenhagen about 80 miles from Kalundborg. Served by regular airlines.

TIME: GMT plus 1 hour. No alterations through the year.

HOLIDAYS: New Year's Day; Easter Thursday; Good Friday; Easter Monday; Ascension Day; 1st May; Whit Monday; Prayer Day; 5th June; Christmas Day; 2nd Christmas Day. No work can be carried out.

SHORE LEAVE: Allowed.

DELAYS: Due to ice between 15th December and 31st March.

AGENTS: Jorgen Schultz, Postbox 44, Cables "Schultz Kalundborg".

Petertank I/S, Postbox 38. Cables "Petership Kalundborg".

Kalundborg Shipping Agency. Postbox 34. Cables "Kalship Kalundborg".

KOGE: 55.27 N. 12.12 E. (See Plan)

DOCUMENTS: For Customs vessels require:

Vessels of 150 ton and upwards, Load Line Cert.
Vessels of 300 ton and upwards, Load Line Cert. Radio Security Cert.
Vessels of 500 ton and upwards, Load Line Cert. Radio Security Cert. Equipment Security Cert.
For all passenger vessels also Security Cert.
For stevedores vessel shall have Bills of Lading, Manifests and Loading plans.

PILOTAGE: Vessel to call Pilot 2 hours before arrival. VHF on pilot station and pilot boat. Watch on Channel 16. Normal international light and sound signals used. Pilot boat located about 2 nautical miles East of port. No difference in bad weather.

ANCHORAGES: 1–2 nautical miles East of port with good bottom conditions.

MAX. SIZE: Max. permissible length, 150 m.; max. permissible draft, 7 m.

HEALTH: Normal quarantine rules.

RADIO: Lyngby Radio or any other radio station in Denmark.

TUGS: No tugs in port. Can be obtained from Copenhagen.

STEVEDORES: Normal ETA and description of vessel required.

MEDICAL: Doctor and hospital assistance available; other facilities to be obtained from Copenhagen.

TANKERS: Only 1 tanker berth, no specific requirements.

GENERAL: Wind between N.E. and S.E. can give up to 1.6 m. high water and West wind up to 0.9 m. low water.

FRESH WATER: Water from wharf.

FUEL: Products are delivered in Koge, others from Copenhagen.

FIRE PRECAUTIONS: Normal fire precautions. Tankers cannot

request to go to berth before loading/discharging. 2 fire watchmen from the fire department.
GANGWAY/DECK WATCHMEN: Not necesssary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Tobacco: about 40 grams per day per man or 40 cigarettes per day per man. Wine and/or Spirits: about 0.25 litre spirits and 1 litre wine per man per day.
IDENTIFICATION CARDS: Not needed.
CONSULS: Nearest in Copenhagen.
REPAIRS: Small repairs.
DRY DOCKS: 2 small slipways for vessels up to 200 tons.
REPATRIATION: No facilities exist.
AIRPORT: Nearest is Kastrup Lufthavn; Copenhagen about 40 km. away.
TIME: GMT plus 1 hour. No change during year.
HOLIDAYS: Normal Danish holidays, change from year to year. Normally work can be arranged.
POLICE/AMBULANCE/FIRE: Ambulance and Fire (03) 653300; Police 651448 or use alarm 000.
TELEPHONE: No arrangements exist for placing on board.
GENERAL: The port North of Koge, Junckerhvnen, 55° 27′ 4″ N. 12° 118′ 7″ E. is a private port used only for vessels to the factory.
SERVICES: Pilot makes compass adjustments.
SHORE LEAVE: Allowed.
AUTHORITY: The Harbour Master.
AGENT: F. Ohlssons, EFTF, Havnen, DK-4600 Koge, Denmark. Telex 5736; Tel. (03) 650006; Telegram Ohlsson.

KOLDING: 55.29 N. 09.29 E.

DOCUMENTS: See "Copenhagen".
PILOTAGE: Pilot station in Skaerbaek at mouth of Kolding Fjord. Tel. (05) 562486. VHF Channel 16.
ANCHORAGES: At Skaerbaek.
MAX. SIZE: Maximum permissible length 180 m. Max. draft: 7.0 m.
RADIO: Lyngby Radio.
TUGS: Available.
STEVEDORES: Obtained through Agents.
MEDICAL: Hospital facilities available.
FRESH WATER: Available from quay.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes. Wine and/or Spirits: 1 bottle wine, 1 bottle spirits.
IDENTIFICATION CARDS: Not needed.
CONSULS:
Finland: J. Borum, Haderslevvej 25, Kolding. Tel. (05) 521233.
Iceland: V. Thorning-Petersen, Kolding. Tel. (05) 520022.
Norway: Eduard Christensen, Lasbygade 34, Kolding, Tel. (05) 527711.
Sweden: Ove Gronborg, Osterbrogade 14, Kolding. Tel. (05) 522711.
REPAIRS: Only small repairs can be carried out.
AIRPORT: Distance from Billund Airport 40 km. Billund Airport is served by regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: See "Copenhagen".
POLICE/AMBULANCE/FIRE: Police, tel. (05) 522800; Ambulance, tel (05) 522344; Fire, tel. (05) 522344, Help, tel. 000.
TELEPHONES: Telephones obtainable on board.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

KYNDBY: 55.49 N. 11.53 E.

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.
PILOTAGE: Not compulsory but recommended. Pilot boards at entrance of Isefjord at Hundested.
ANCHORAGE: Off the berth.
MAX. SIZE: Up to 21 ft. 6 in. draft.
RESTRICTIONS: Daylight berthing only.
HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival. When vessel arrives from port outside of Europe and U.S.A. and has been less than 14 days at sea, all crew members require valid smallpox vaccination certificate.
TUGS: Obtained from Copenhagen or Elsinore if required by larger vessels.
BERTHING: Power Station quay, 300 m. long, depth alongside 23 ft. 6 in. 16 in. pipe-line for fuel oil discharge.
FRESH WATER: Available by pipe-line at quay.
FUEL: Not obtainable.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle wine and 1 bottle spirits permitted out of bond for each man.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day (May 2nd); Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half-holidays: May 1st, June 5th and December 24th.
REPAIRS: No facilities.
AUTHORITY: Electricitetsselskabet Isefjordvaerket Interressenskab.

NAESTVED: 55.14 N. 11.45 E.

DOCUMENTS: See "Kalundborg".
PILOTAGE: Compulsory between the entrance to Karrebaeksminde and Naestved for all ships over 150 g.r.t. VHF Channel 16. Tel. 03727223 and 03742323.
ANCHORAGES: 1 – 2 miles S.W. of head light in Karrebaeksminde in 10 – 12 m. depth.
RESTRICTIONS: Only navigable from half hour before sunrise to half hour after sunset, and according to tides.
MAX. SIZE: Max. length 100 m. Max. draft 5.60 m. with breadth 12.20 m. Max. breadth 14.40 m. with draft 4.80 m.
HEALTH: See "Kalundborg".
RADIO: Lyngby radio. VHF Channel 16.
TUGS: m/s "Eno" 360 h.p. VHF Ship's lines.
BERTHING: No berthing in Karrebaeksminde. Naestved 3 quays: 365, 270, 170 m., all with depth 6 m.
BRIDGES: One in Karrebaeksminde, total width 23.3 m.
MEDICAL: Hospital available.
FRESH WATER: Available from quay, 10 t.p.h.
FUEL: All grades. Deliveries by lorry only.
AIRPORT: Kastrup Airport, Copenhagen 90 km. away.
TIME: GMT plus 1 hour.
SHORE LEAVE: No restrictions.
AUTHORITY: Harbour Master.

NAKSKOV 54.50 N 11.08 E.

PILOTAGE: Al Albuen at the entrance of the firth.
RESTRICTIONS: Sailing in the harbour at night-time with help of projector only.
MAX. SIZE: Draught: 19 ft., Length: 660 ft., Breadth: 70 ft., Height: None — no bridges to pass.
TUGS: One tug, 750 h.p. always available.
BERTHING: Protected from all winds. Depth up to 20 ft. 6 ins (6.3 m). 7,500 ft. of quay. In the fairway leading up to the harbour there is a depth of 20 ft. 6 ins (6.3 m.), distance about 6 miles.
CARGO HANDLING FACILITIES: Tracks along the quays in connection with the railway station and all Danish Railways. Also good road connections.
3 grain silos: 4,000, 12,000 and 15,000 tons 3 grain elevators loading 90, 80 and 50 t.p.h. respectively. 1 grain elevator discharging rate 40 t.p.h. 4 mobile belt conveyors loading up to 100 t.p.h. 2 mobile cranes (20 tons lift) — also grab and polygrab.
MEDICAL: Treatment of all kinds possible.
FRESH WATER: Available.
FUEL: Available.
CONSULS: Dutch, Finnish, French, Norwegian and Swedish.
DRY DOCK: Shipyard provided with 2 dry docks up to 32,000 d.w.t., building slips up to 35,000 d.w.t. Cranes to lift up to 100 tons.
AGENT: Casper Andrea's Succrs. Havnegade 33, PO Box 66, DK-4900 Nakskov, Denmark. Phone: 03-923333 Telex: 47545 andrea dk. Tlgms: Andrea Nakskov.

NYBORG: 55.19 N. 10.49 E.

DOCUMENTS:
Health Declaration.
Customs Declaration.
PILOTAGE: Required notice ETA 6 hours. Pilot station Tel. (09) 310089. Pilot boat VHF Channel 16. Pilot station Slipshavn. Pilot cutter yellow-painted with "Nyborg Lods" in black letters.
ANCHORAGE: South of Knudshoved Lighthouse. Depth 16 m. (52 ft.). Small vessels anchor S.W. of Avernakke Pynt.
MAX. SIZE: Avernakke Pynt Bro (Oilpier) draft 32 ft. length about 600 ft. Vesterhavn draft 24 ft. length about 400 ft.
RADIO: Lyngby Radio.
TUGS: One tugboat normally stationed in the port. Tugs required notice 8-10 hours.
STEVEDORES: Ordered by Agent.
MEDICAL: Hospital facilities available.
TANKERS: Discharge at Avernakke. Discharge lines 8 in. and 10 in.
DENSITY: About 1005.
FRESH WATER: Supply by pipe-line to berths.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: Crew allowed open and close, otherwise according Charter Party.
CUSTOMS ALLOWANCE: Tobacco, 100 cigarettes for 3 days. Wine and/or Spirits; 1 bottle spirit for 3 days.
IDENTIFICATION CARDS: Not required.

CONSULS: Finland 311198, Norway 310737, Sweden 312106.
In Odense (near Nyborg);

Great Britain	115456	France	118700
Holland	115456	Iceland	120076
Portugal	120012	Spain	127781
W. Germany	972323		

REPAIRS: Most repairs possible.
DRY DOCKS: 700 d.w.t.; slipway 70 d.w.t.
AIRPORT: Nearest airport, Beldringe, Odense.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day, Ascension Day; Whit Monday; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Police 311448; Ambulance 000; Fire 000.
SHORE LEAVE: No restrictions.
AUTHORITY: Havnefoged, Havnekontoret.

NYKOBING: 55.55 N. 11.41 E.

DOCUMENTS:
Ship's Register.
Loadline Certificate.
Derating Certificate.
Crew List stating quantity of cigarettes, cigars, tobacco, cigarette paper, spirits, wine and guns.
Cargo List.
PILOTAGE: Pilot ordered through Agents and will board at Skellerev or Argus Ground (both outside Guldborg bridge).
ANCHORAGE: By Skellerev, safe ground.
RESTRICTIONS: Port only accessible by daylight, max. draft 19 ft. 6 in., max. breadth for passing Guldborg bridge 25 m. Entrance from South (Gedser) not recommended, as depth of water in the Southern part of Guldborgsund only amounts to 8 ft.
RADIO: For vessels coming through the Kiel Canal, Kiel Radio could be used, otherwise nearest station Lyngby Radio.
TUGS: Available on request.
BRIDGES: Vessels calling Nykobing Falster have to pass Guldborg bridge about 8 miles North of harbour. Turning bridge, breadth 25 m., opens by request after sunrise and half an hour after sunset (from 1st Nov. to 1st March from half an hour before sunrise). When requesting passage use international flag "N" on half foremast and give one long and one short blast.
STEVEDORES: Ordered by Agents on receiving vessel's ETA.
MEDICAL: No advance notice required for medical attention.
FRESH WATER: Supplied from quay installations.
FUEL: All grades obtainable – delivered by tank lorry.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Carried out by crew.
TOBACCO/WINE ALLOWANCES: Each crew member 100 cigarettes (or corresponding quantity of tobacco) and 1 bottle spirits.
IDENTIFICATION CARDS: Not necessary.
CONSULS:
Norway
Sweden
West Germany
Netherlands
Finland
REPAIRS: Small deck and engine repairs possible.
AIRPORT: Nearest at Copenhagen (2 hours by train.)
TIME: No alteration to clocks. GMT plus 1 hour.
HOLIDAYS: New Year; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; 1st May (Labour Day, half only); Ascension Day; Whit Monday; Constitution Day (5th June, half only); Christmas and Second Christmas Day.
POLICE/AMBULANCE/FIRE: Dial 0–0–0 and ask for police, ambulance or fire service.
SHORE LEAVE: Crew members may go ashore without any restrictions.
AGENT: Marquardt & Tornoe's EFTF., P.O. Box 81, 4800 Nykobing FL. Denmark. Tel. (03) 85 31 77. Telex 47310.

ODENSE: 55.25 N. 10.25 E. (See Plan)

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.
PILOTAGE: Compulsory between Stige and Odense. Pilot boards at Gabet, entrance to the fjord or at Stige, entrance of channel.
ANCHORAGE: Inside Odense Fjord in depths of 25 ft. Larger vessels anchor outside of Gabet.
RESTRICTIONS: Port is entered through dredged channel, 22 m. wide, 25 ft. depth. Navigation usually throughout the year. Ice-breaker assistance available if necessary. Vessels over 3,000 tons enter in daylight only. Speed limit of 6 knots in entrance channel.
MAX. SIZE: Draft, max. 24 ft. fresh water, length, 160 m. controlled by swinging basin.
HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival. When vessel arrives from port outside of Europe and U.S.A. and has been less than 14 days at sea, all crew members require valid smallpox vaccination certificates.
RADIO: Lyngby Radio and VHF Channel 16.
TUGS: A tug is available. Not compulsory but necessary for larger vessels.
BERTHING: Three harbour basins including 11,200 ft. of quays with depth of 24 ft. 6 in. alongside. Coal quays at Fynsvaerket, depth 24 ft. 6 in. alongside.
Berths rigged for handling bulk cargo by cranes. Berths available for containers and roll-on/roll-off traffic.
TANKERS: Discharge at Lindoe private quay, 304 ft. long, depth alongside 7.5 m.
DENSITY: 1003.
STEVEDORES: Can be arranged through Agent.
AIRPORT: Situated 15 km. from the harbour.
POLICE/FIRE/AMBULANCE: In emergency dial 000 and ask for service required.
CONSULS: All European countries represented in Odense.
MEDICAL: Doctors, hospital facilities available.
FRESH WATER: Available by pipe-line at all berths.
FUEL: All grades available.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle wine and 1 bottle of spirits permitted out of bond for each man.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day (May 2nd); Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half-holidays: May 1st, June 5th and December 24th.
REPAIRS: All engine and boiler repairs can be effected.
Lindoe Shipyard situated in Odense Fjord about 15 km. from Odense.
AUTHORITY: Havne Kaptajnen.
AGENT: C. Hoppe & Company, POB 136, 5100 Odense. Tel. 09-14 14 13. Telex 59 88. Cables: "Brokerhoppe Odense".

RANDERS: 56.29 N. 10.04 E. (See Plan)

DOCUMENTS:
2 Crew Lists
2 Lists with statement of each Crew member's cigarettes, tobacco and spirits.
PILOTAGE: Apply for Pilot 6 hours before arrival. VHF Channel 16, one hour before. Pilot station, Tel: 06-485024.
ANCHORAGE: Outside Entrance buoy in 8 m.
RESTRICTIONS: Only vessels less than 1,000 d.w.t. may enter at night.
MAX. SIZE: Max. length, 475 ft.; breadth, 57 ft.; draft, 19 ft.
HEALTH: No special requirements.
RADIO: Lyngby Radio and Skaw Radio.
VHF: VHF service from Harbour Office, Channels 12, icebreaking 16.
TUGS: 500 h.p. 13 tugs available – use ship's lines.
STEVEDORES: Ordered by Agents. Working periods: Monday to Friday 0730-1130 hrs., 1200-1615 hrs.; Saturday no work.
MEDICAL: Hospital facilities available.
TANKERS: 6 in. and 8 in. discharge lines; no slop facilities.
DENSITY: Brackish in port area. No tide.
FRESH WATER; Shore installations.
FUEL: All grades. Deliveries by lorry only.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Tonnage Certificate, Derating Certificate, Load Line Certificate.
CUSTOMS ALLOWANCES: Each crew member 100 cigarettes or 25 cigars or 100 grams tobacco, and 1 bottle spirits and 1 bottle wine meant for 3 days.
IDENTIFICATION CARDS: Not required.
CONSULS: Norway (06) 42 61 00, Finland (06) 42 51 11, Sweden (06) 420022, Iceland (06) 42 55 55.
REPATRIATION: Several hotels and Seamans' Home.
REPAIRS: Engine repairs and minor repairs.
SURVEYORS: Arranged by Agent.
AIRPORT: Tirstrup Airport 40 km. from Randers, 5–7 daily connections with Copenhagen.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January (New Year); Maundy Thursday, Good Friday, Easter Monday; 1st May from 1200 hrs. (Labour Day); Whit Monday from 1200 hrs.; 24th December from 1200 hrs.; 25-26th December (Christmas).
POLICE/AMBULANCE/FIRE: Tel. 000.
AUTHORITY: Harbour Master, Randers Havnevaesen.
AGENTS: Carl Hassager & Co., c/o Axel Urup Skov, Sydhavnen, DK 8900 Randers. Tel. 06 42 05 22; AO 06 42 31 91; Telex 63732; Cables: Hassager, Lloyd's.

RODBY: 54.39 N. 11.20 E. (See Plan)

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Stores List.
1 Manifest or Bill of Lading.

PILOTAGE: As the harbour is so easily accessible there is no Pilot. A person with local knowledge may be engaged by calling ferry "Danmark" VHF 16.
ANCHORAGES: At a distance of 1.5–2 miles, bearing S.E. – S.S.E. of approaching buoy, depth of water 10 m.
REGULATIONS: Ferries owned by D.S.B. or D.B. (Trainferries) have priority using the entrance.
MAX. SIZE: Length 80 m. depth of water in North and West Basin: 5 m. N.E. Storm can give rise of up to 1.5 m. S.W. – Storm can give fall of 1.2 m. on daily depth.
HEALTH: No Certificates required.
RADIO: All messages via "Lyngby Radio".
TUGS: None.
STEVEDORES: Provided by "Rodby Shipping" Telephone 03. 905522. Telex 40022 or Shipbroker A. Hovmand, Telephone 03. 888011, Telex 40256.
BERTHING: Quay length 518 m. equipped with 3 mobile cranes 8, 15 and 25 tons capacity.
MEDICAL: 2 hospitals available.
FRESH WATER: Can be supplied alongside the quay.
FUEL: Obtainable alongside the quay.
OPENING/CLOSING HATCHES: By crews or stevedores, ship's option.
CERTIFICATES: On arrival, ships register only.
CUSTOMS ALLOWANCE: 200 cigarettes, 1 litre spirits and 3 litres wine.
IDENTIFICATION CARDS: Not required.
AIRPORT: Maribo Airport, 14 km.
SHORE LEAVE: After clearing inwards, Crew members are allowed to go ashore without special permission.
AUTHORITY: Harbour Master.

RONNE: 55.06 N. 14.42 E. (See Plan)

DOCUMENTS:
1 Crew list.
1 Passenger List.
1 Customs Declaration.
1 Declaration for crew's tobacco, spirits, etc.
1 Declaration of Health.
1 Declaration to Police, number of crew, passengers, etc.
1 Bill of Lading (or Manifest).
PILOTAGE: Apply for Pilot via Ronne or Lyngby Radio, advance notice not less than 1 hour. Pilot listens continuously on VHF. Call Ronne Pilot or Ronne Harbour. Area where Pilot to be taken on board is by Ronne light-buoy, 2 miles S.W. of the harbour; if weather bad Pilot boat guides the ship inside the breakwater and then boards.
ANCHORAGE: No safe anchorages outside the harbour.
MAX. SIZE: Max. length 400–450 ft., draft 22 ft. There is no tide.
HEALTH: No special procedure necessary, but if there is suspected disease or fever on board or ship comes from area with fever, etc., call for quarantine doctor. If ship's last call was Danish port pratique automatic.
RADIO: Ronne Radio, call-sign OYE; or Lyngby Radio, call-sign OXZ.
TUGS: Normally join the vessel inside breakwater; ship's lines to be used.
BERTHING: 3 berths equipped with hydraulic ramps for roll-on/roll-off traffic via stern or head only, one of which is suitable for ships up to 450 ft. length, 65 ft. beam, draft 21 ft.
3 berths for sand loading 400–600 t.p.h., for vessels up to 350 ft. length, 21 ft. draft.
2 berths for macadam loading 400 t.p.h., for vessels up to 300 ft. length, 21 ft. draft.
1 permanent heavy lift crane with 30 ton capacity is situated on pier 23.
1 grab-crane with 3 ton capacity is situated on pier 13.
3 mobile cranes with capacities up to 12 tons are available for both hook and grab operations.
Also berths for handling coal and grain.
STEVEDORES: To arrange gangs Monday morning, advices have to be given Friday before 1100 hrs. To arrange work other days, notice must be given before 1600 hrs. the day before.
MEDICAL: Hospital facilities are available. It is not necessary to give advance notice.
TANKERS: Two berths for coastal tankers draft up to 22 ft., length up to 300 ft.
FRESH WATER: Available 10–12 t.p.h.
FUEL: Light fuel, Redwood 200 sec. Heavy fuel 3500 sec., also 1000 and 1500 sec. Notice 6 hours ETA.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES: Nationality Cert., Derat. Cert., Load Line Cert. Radio Cert. (Safety Cert. for passenger ships only).
CUSTOMS ALLOWANCE: Tobacco: 40 cigarettes or other tobacco per day. Wine/Spirit: half a bottle per day.
IDENTIFICATION CARDS: Not needed.
CONSULS: The following countries are represented in Ronne: Sweden, Finland, France, Netherlands, Norway and West Germany.
REPAIRS: All kinds of repairs can be carried out.
DRY DOCKS: Only small ships up to 350 tons.
REPATRIATION: Possible.
AIRPORT: 3 miles, served 3–5 times per day by SAS to Copenhagen.
TIME: GMT plus 1 hour. No alteration.
HOLIDAYS: New Year's Day; Easter, 3 days Thursday, Friday, Easter Day (Monday); May 1; Whit Monday; June 5; Christmas Eve; Christmas Day; 2nd Christmas Day. Cargo work only possible for foodstuff, etc.
SERVICES: Compass adjustment at Duc d'Albe in Southern part of Forhavn.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

SKAERBAEK: 55.31 N. 09.37 E. (See Plan)

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.
PILOTAGE: Not compulsory. Pilot joins at mouth of Kolding Fjord. Can be contacted by VHF Channel 16.
ANCHORAGE: Off Skaerbaek in depths of 39 ft.
RESTRICTIONS: Depth at tanker berth, 39 ft. normal water level. Max. length b/CM:125 m.
RADIO: Lyngby Radio.
TUGS: Available, at short notice.
BERTHING: Power station wharf: 260 m. length; depth alongside 23 ft. Oil Jetty: depth 39 ft.
TANKERS: Discharge at jetty through 3×12 in. loading arms.
MEDICAL: Medical attention available, nearest hospitals at Kolding and Fredericia.
REPAIRS: Local machine shops can manage small repair jobs.
FRESH WATER: Obtainable from quay.
FUEL: Not available.
CONSULS: Nearest at Kolding. Distance 15 km.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle wine and 1 bottle spirits permitted out of bond for each man.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half holidays: May 1st, June 5th and December 24th.
AIRPORT: Billund Airport, 40 km. distant.
AUTHORITY: Sydostjydske Faellescentral Skaerbaekvaerket.

SONDERBORG: 54.55 N. 09.47 E.

DOCUMENTS:
Ship's Register.
Crew List.
Crew Manifest.
Radio Safety Certificate.
PILOTAGE: Vessels exceeding 20 ft. in draft or 3,000 gross tonnage use Northern entrance where Pilot boards vessels at buoy 4 or 7, route 25.
Ships coming from South (passing harbour bridge) contact pilot boat at buoy 6 or 7 route 8. Pilot not compulsory. VHF on pilot station. Harbour Master and Pilot tel. 044 22765.
RESTRICTIONS: No restrictions night entry. No tide. N.E. to E. winds raise water level up to 3 in. S.W. to N.W. winds lower it by same amount.
TUGS: Available; 6 hours notice required.
BERTHING: *South Harbour:* Mainly used by small passenger and fishing boats.
North Harbour: Concrete quay about 2,000 ft. long, depth alongside 24 ft. At plywood factory, dolphin moorings up to 29 ft. draft. Harbour is divided into above mentioned two parts by a rail bridge. Lifting sections 98 ft. wide. Submarine cables in area from 50 yd. South of bridge to 100 yd. North.
FRESH WATER: Supplied by pipe-line to berths.
FUEL: Available.
REPAIRS: Two slipways. 100 and 500 tons capacity.
AIRPORT: In Sonderborg, Regular airline inland.
TIME: GMT plus 1 hour.
AUTHORITY: Harbour Master.

SVENDBORG: 55.03 N. 10.38 E. (See Plan)

DOCUMENTS:
Certificate of Registry.
Freeboard Certificate.
Derat Certificate.
Crew List.
PILOTAGE: Telegraphic address, "Pilotstation, Svendborg". For contacting pilot boat on VHF, use Channel 16. International signals for Pilot. In Eastern entrance Pilot boards at Thuro Rev. In Western entrance Pilot boards at Lehnskov, or if ordered at Skrams Flak.
ANCHORAGE: At Lunkebugt (Eastern entrance) and by Lehnskov (Western entrance).
MAX. SIZE: Longest ship ever docked was 541 ft. long, 67 ft. breadth, draft 22 ft. 06 in. Shorter ships may enter with deeper draft.

HEALTH: Pratique automatic.
RADIO: All Danish coast stations can be used. (See "Horsens".)
TUGS: Normally no tugs stationed in Svendborg, ships wanting tugs order through Agent before arrival.
BRIDGES: 1 mile West of harbour a bridge crosses the sound. Free height 33 m.
STEVEDORES: Ordered by Agent.
MEDICAL: Doctors and hospital service always available.
DENSITY: Approx. 1024.
FRESH WATER: Available at all piers. 20 t.p.h.
FUEL: No bunker lines. Diesel can be delivered by tank cars.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Tobacco: 40 cigarettes or 40 gr. tobacco. Wine/Spirit: 0.25 litre.
IDENTIFICATION CARDS: Not needed.
CONSULS: Vice-Consulates: Norway, Tel. 09 21 31 17; Sweden, 09 21 14 10; Finland, 09 21 22 21; W. Germany, 09 21 15 39; Iceland, Tel. 09 21 42 83.
REPAIRS: All repairs to deck and machinery carried out by shipyard.
DRY DOCKS: Floating docks for ships up to 10,000 d.w.t.
REPATRIATION: Facilities exist.
TIME: GMT plus 1 hour (same all year).
HOLIDAYS: New Year's Day; the day before Good Friday; Good Friday; Easter Monday; May 1st; Ascension Day; May 5th; Prayer Day; Whit Monday; June 5th; 25th and 26th of December.
FIRE/AMBULANCE/POLICE: Call 000.
TELEPHONE: No telephone for ships.
SERVICES: Compass adjusting.
SHORE LEAVE: No restrictions concerning shore leave for crew. Dogs not allowed to go ashore.
AUTHORITY: Harbour Master.

VEJLE: 55.42 N. 09.33 E. (See Plan)

DOCUMENTS: Required on arrival:
2 Crew Lists.
2 Passenger Lists.
1 Tobacco List.
1 National Reg. Certificate.
1 Load Line Cert.
1 Tonnage Cert.
1 Manifest.
1 Bill of Lading.
1 Derating Cert.
1 Radio Safety Cert.
1 Clearance inward and outward.
1 Safety Cert.
PILOTAGE: Pilot by request at Rosenvold Hage, radio Pilot Vejle, VHF Channel 16, Vejle pilot station. 3 hours notice of ETA.
ANCHORAGE: (1) At Rosenvold Hage, (2) at Traeskohage.
MAX. SIZE: Length max. 550 ft., max. draft 23 ft.
HEALTH: Pratique procedure is carried out by customs dept.
RADIO: Lyngby Radio, OXZ, Blaavand Radio OXB.
TUGS: Available inside port, ship's lines.
STEVEDORES: Available. 0700 hrs. start must be informed 24 hours in advance.
MEDICAL: Hospital facilities available day and night with doctors available 24 hours per day.
TANKERS: 2 tanker berths, max. draft 23 ft. No slop tank available. Diameter of discharge lines 8 in. and 6 in.
DENSITY: Average density 1020.
FRESH WATER: Delivered from lines on piers. 14 t.p.h.
FUEL: All grades available. No advance notice required.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes, Wine and/or Spirits: 1 bottle of each.
IDENTIFICATION CARDS: Not needed.
CONSULS: Vice-Consuls: Greece, 821929; Norway, 829122; Spain, 820233; Germany, 820011.
REPAIRS: Deck and engine repairs can be undertaken.
DRY DOCKS: None.
REPATRIATION: No facilities.
AIRPORT: Billund 32 km., 3 flights per day.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; Easter; 1st May, Whit Sunday, Christmas holidays. Cargo work can be done on overtime except 1st May (Labour Day).
POLICE/AMBULANCE/FIRE: Police, tel. 821744; Ambulance, 822244; Fire, 822244.
TELEPHONES: No arrangements exist for placing on board.
SHORE LEAVE: Allowed for all crew.
AUTHORITY: Harbour Master.

VORDINGBORG (South Harbour – formerly Masnedsund): 55.30 N. 11.54 E. (See Plan)

DOCUMENTS: See "Copenhagen".
PILOTAGE: Available from Masnedoe Pilot Station tel. 03-770355.
ANCHORAGE: Vordingborg Roads.
MAX. SIZE: Draft 21 ft. max., breadth 25 m. owing to passage of bridge before entering harbour.
RADIO: Lyngby Radio.
TUGS: Available from Nakskov, Korsoer, Copenhagen. Notice for towage about 6/8 hours.
BERTHING: Berths equipped for handling grain, ore, coal, liquid chemicals and LPG carriers.
MASNEDOE POWER STATION: Private harbour. Draft 21 ft. Fresh water available. Pilotage, towage, as for Vordingborg.
BRIDGES: Passage of bridge 25 m. wide, opening day and night. Bridge normally in radio contact with pilot station. Fully lighted.
STEVEDORES: Local stevedores ordered by Agent.
MEDICAL: Hospital available.
FRESH WATER: Supplied by pipe-line to berths.
FUEL: All common fuels available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close, otherwise as per C/P.
CERTIFICATES:
Registered Certificate of tonnage.
Derating Certificate.
Construction Certificate.
Load Line, and Equipment Certificate on first call.
CUSTOMS ALLOWANCE: About 200 cigarettes and a limited amount of spirits each man.
CARGO GEAR: 2 mobile cranes, one grain-sucker and elevator, one coal crane.
IDENTIFICATION CARDS: Not required.
CONSULS: At Copenhagen.
REPAIRS: Most repairs, engine and equipment available. Electronic service only available from Copenhagen.
DRY DOCK: No local dry dock. Nakskov/Copenhagen nearest.
HOLIDAYS: See "Copenhagen".
POLICE/AMBULANCE/FIRE: Police 03-771448; Ambulance, Fire Brigade 0–0–0.
AGENTS: A. P. Steffensen, Postal address: 4760 Vordingborg tel. 03-770210-770212. Telex: 5476. Cables: Stefbroker Vordingborg a.o. 03-770960.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Dominican Republic

GENERAL: All ports.

DOCUMENTS:

Vessels calling at Dominican ports require a complete Dominican consular despatch from every loading port as well as from the last foreign port of call. Should there be no Dominican Consulate at the respective loading port, the Agents should prepare 3 copies of the manifest to be delivered to Customs. If no Dominican Consulate at the last foreign port of call, the Agent will attend to all the formalities required by the local port authorities.

Smallpox vaccination certificates, not over 2 years old, will be required by the Port Doctor as well as the Deratization, resp. Exemption Certificate.

Additional papers, besides consular despatch, required by authorities are as follows:

Port Doctor:
1 copy crew list,
1 copy landing/transit passenger list,

Harbour Master:
Port clearance from last port of call,
3 copies crew list,
3 copies landing/transit passenger list,
3 copies negative passenger list (if none landing),
3 copies arms list.

Customs:
2 copies crew list,
2 copies arms list,
2 copies landing/transit passenger list,
2 copies negative passenger list (if none landing),
2 copies stores list,
1 copy tallybook.

Immigration:
2 copies crew list,
2 copies landing/transit passenger list.

Police:
1 copy crew list,
1 copy landing/transit passenger list.

Department of Agriculture:
1 copy stores list,
1 copy tallybook.

Agency:
1 copy crew list
1 copy landing/transit passenger list,
4 copies manifest (if not airmailed previously),
2 copies each B/L (if not airmailed previously),
7 copies tallybook.

Additional lists, etc., required are:
10 crew lists,
10 landing/transit passenger lists,
5 negative passenger lists (if none landing),
5 arms lists,
3 stores lists,
9 tallybooks,
4 copies cargo manifest (if not previously airmailed),
2 copies B/L (if not previously airmailed).

HOLIDAYS: New Year's Day (January 1st); Our Lady of High Grace (January 21st); Duarte's Day (January 26th); Independence Day (February 27th); Good Friday (Variable); Labour Day (May 1st); Corpus Christi (Variable); Restoration of Independence (August 16th); Our Lady of Mercy (September 25th); Christmas Day (December 25th).

Regular working hours: 0800 — 1200 hrs., 1400 — 1800 hrs., Mondays to Fridays and 0800 — 1200 hrs. Saturdays.

Saturday: Overtime is payable to labour for work performed after 1200 hrs. Pilots and government officials are paid overtime rates all day, but Customs personnel are only paid overtime rates after 1200 hrs.

The above holidays are legal in the Dominican Republic and for the diplomatic and consular representations abroad.

Work can be performed on all Sundays and holidays against payment of overtime to labour, Pilots, Customs and government officials.

TIME: GMT minus 4 hours all year round.

SPARES: Same can be withdrawn same day of arrival via air express. No Customs duties assessed as brought under Customs custody on board vessel. Airwaybill should be addressed to Agent, with clear indication that it covers spares for such and such a vessel.

SECURITY: Stevedores board vessel with special passes issued for vessel in question. Any other visitors must obtain pass from Harbour Master's Office. Nevertheless it is definitely recommended that all cabins be kept locked. This also applies to hatches that are not being worked.

POLLUTION: No garbage, refuse, etc., can be thrown overboard. Vessels liable to heavy fines for oil pollution, etc.

PLAGUE CONTROL: All lines leading to shore must be protected by ratguards. Non-compliance subject to Customs fines.

AZUA (Puerto Viejo): 18.30 N. 70.40 W.

See "General" before first port.

PILOTAGE: Ordered by Agent; vessel should wait for Pilot at a distance of 0.5 mile from the port.

ANCHORAGE: In the approaches, depth is 28 ft.

RESTRICTIONS: Berthing during daylight only.

HEALTH: Pratique is obtained by Agent. In case of infectious illness the whole crew is put in quarantine.

TUGS: Not available.

BERTHING: Finger pier, length 650 ft., width 120 ft. Dredged to 35 ft.

MEDICAL: Necessary for Agent to receive advance notice of required medical attention. Doctor available.

FRESH WATER: Delivered by barge.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Required.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: No restrictions.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: No repairs possible.

REPATRIATION: Facilities available.

AIRPORT: Situated 170 miles from port.

POLICE/AMBULANCE/FIRE: Tel. 175.

TELEPHONES: None available on board.

SHORE LEAVE: Allowed.

AUTHORITY: Comandancia de Puerto de Azua RD.

AGENTS: See "Santo Domingo".

BARAHONA: 18.10 N. 71.10 W.

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone frequency 2738. Pilot boards approximately 1.5 miles outside the port. Pilot also on VHF Channel 16.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: No entry or departure at night.

MAX. SIZE: 575 ft. length; 29 ft. draft.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: One small tug available, ship's lines used.

BERTHING: Sugar molasses wharf, general gypsum wharf.

STEVEDORES: ETAs required 24 and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.

TANKERS: Discharge at molasses wharf.

DENSITY: Salt water inside harbour.

FRESH WATER: Pipe-line at wharves, ship's hoses used.

FUEL: Small quantities of diesel available by truck from Santo Domingo.

GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.

OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.

CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.

IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.

CONSULS: All Consuls at Santo Domingo.

REPAIRS: Minor repairs only.

REPATRIATION: Can be arranged.

AIRPORT: Distance to airport 230 km.

POLICE/FIRE/AMBULANCE: Police, tel. 417; Ambulance, tel. 441; Fire, tel. 348 or 398.

TELEPHONES: Shore telephone alongside ship connected to Sugar Mill.

SHORE LEAVE: Allowed.

GENERAL: No boats to be lowered without official permission. Berthing/unberthing during daylight only.

AUTHORITY: Comandante de Puerto.

AGENTS: See "Santo Domingo".

BOCA CHICA: 18.27 N. 69.35 W.

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone frequency 2738, and 2638 kHz. Pilot also on VHF Channel 16. Pilot boards 1 mile outside the harbour.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: No entry or departure at night.

MAX. SIZE: 400 ft. length; 25 ft. draft.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: If required, tug is brought from Santo Domingo.

STEVEDORES: ETAs required 24 and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: Only small propane gas tankers can be accommodated.
DENSITY: Salt water inside harbour.
FRESH WATER: Pipe-line connection at dock, low pressure, Ship's hoses used.
FUEL: Only available by truck from Santo Domingo.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.
CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Minor repairs only.
REPATRIATION: Can be arranged.
AIRPORT: 6 km/s to airport, served by regular airlines with numerous flights daily.
POLICE/FIRE/AMBULANCE: At Santo Domingo.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed.
AUTHORITY: Comandante de Puerto.
AGENTS: See "Santo Domingo".

CABO ROJO: 17.55 N. 71.39 W.

See "General" before first port.
PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738.
ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.
RESTRICTIONS: Entry and departure permitted daylight only.
MAX. SIZE: 600 ft. length; 40 ft. draft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: When within range, Santo Domingo Radio.
TUGS: No tugs available.
BERTHING: Alcoa Private Wharf, bauxite only. Mechanical loading, no stevedores.
MEDICAL: Medical attention can be arranged by Alcoa after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: One tanker at a time could be accommodated.
DENSITY: Salt water inside harbour.
FRESH WATER: Sometimes available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Performed by crew.
CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Distance to airport 360 km.
POLICE/FIRE/AMBULANCE: Contact Port Authority.
TELEPHONES: Telephone on dock connected to Alcoa office.
SHORE LEAVE: Allowed.
GENERAL: No boats to be lowered without official permission.
AUTHORITY: Comandante de Puerto.
AGENTS: See "Santo Domingo".

LA ROMANA: 18.27 N. 69.01 W.

See "General" before first port.
PILOTAGE: Compulsory. Ordered by Agents on receipt of vessel's ETA, 72, 48 and 24 hours before arrival. Pilot launch painted white with grey cabin and with letters "LP-24" painted on sides. Pilot boards 1.5 miles from port entrance. Contact Pilot on 2738 and 2638. Pilot also on VHF Channel 16.
ANCHORAGE: West of Isla Catalina in depths of 15 to 18 fathoms.
RESTRICTIONS: No entry or sailing in hours of darkness.
MAX. SIZE: Length: 580 ft. Draft: arrival 25 ft., sailing 28 ft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: Santo Domingo Radio, HIX2, frequency 2738 kc/s. Near the port, use Centromana Radio on same frequency.
TUGS: One tug of 620 h.p. available. Extra charge for use of tugs line.
BERTHING: One concrete pier 720 ft. long.
STEVEDORES: To be ordered 4 hours before commencing work.
MEDICAL: Doctors and hospital facilities available. Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: Berth for 1 tanker at the pier. Discharge lines 10 in., 8 in., and 4 in.
DENSITY: 1025.
FRESH WATER: Available from 2 in. pipe-line on pier. Very low rate of supply.
FUEL: Not available.
WATCHMEN: To be provided by vessel. Compulsory gangway watch kept by Customs Guards.
OPENING/CLOSING HATCHES: Generally by ship's crew.
CUSTOMS ALLOWANCES: Seamen may take ashore only 2 packets of cigarettes and no alchohol.
IDENTIFICATION CARDS: Shore passes issued by Immigration Officer.
REPAIRS: Only minor repairs can be effected.
REPATRIATION: Arranged via Santo Domingo.
AIRPORT: Distance 70 kms.
POLICE/FIRE/AMBULANCE: Police, 235; Ambulance, 455; Fire, 455.
TELEPHONES: In dock office, ask Sugar Mill for number required.
SHORE LEAVE: Allowed.
AUTHORITY: Comandante de Puerto.

MANZANILLO: 19.43 N. 71.45 W.

See "General" before first port.
PILOTAGE: Compulsory. Pilot comes from Puerto Plata. Boards incoming vessels about 1 mile from the dock. (The Pilot's working hours from 0800 to 1200 hrs., 1400 to 1700 hrs.; a fee charged after working hours. A fee is also charged for movements in harbour.) Ships will be received Saturdays and Sundays and at night for the same rate for the Pilot. Contact Pilot on 2738 and 2638, also on Channel 16 VHF.
ANCHORAGE: Vessels that cannot be docked on arrival will find safe anchorage to the East of the dock where there is plenty of swinging room, in about 20 fathoms of water, with good holding ground of mud and sand.
APPROACHES: Coast Guard Service recommend that a ship, entering Manzanillo Bay from the East, should stay well out until it has rounded shoals surrounding Seven Brothers Islands. At approximately 19° 58′ W. Long. a course of 127° will bring it into the bay near the wharf. A ship arriving from the West should stay about 6 miles off Cape Haitian Light. When abreast the light a course of 111° will lead into the Bay a short distance North of the pier.
RESTRICTIONS: Entry and departure day and night.
RADIO: Radio Station HIL31. This station is private and for the use of Grenada Co. only. Messages of ETA, etc. from vessels should be sent via Miami WAX or New Orleans Radio WNU.

Vessels bound for Manzanillo, should radio their ETA to Santo Domingo Pilot Station daily, from 0600 to 1800 hrs. on frequency 2738 and 2182.

Vessels having single sideband equipment may also contact Radio Instituto Agriario Dominicano at Manzanillo, at wavelength 26.70 and 26.38 kHz from 0700 to 1200 hrs. and 1400 to 1700 hrs. EST.
TUGS: No heavy duty tugs available but there is a launch for the handling of ship lines. Tug available from Puerto Piata if required due to size of vessel.
BERTHING: Prevailing winds are Easterly and sometimes interfere with docking or undocking. On the East side vessels should dock bow in, since there is not enough room to swing vessels safely around for a port docking. On the West side vessels can dock either side to the pier, depending on the direction and force of the wind. In general banana vessels will be docked on West side of the pier and cargo vessels on the East side. Pier has a concrete deck 744 ft. long, 72 ft. wide. Both sides of the pier are protected with a pine fender system. The water depth at land end of pier is 10 ft. and at the seaward end 40 ft.
MEDICAL: Small dispensary in Manzanillo. Hospital facilities in Monte Cristi, 30 km. away.
STEVEDORES: Available.
FRESH WATER: Available for ships calling at this port only.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Carried out by crew.
OPENING/CLOSING HATCHES: Crew or stevedores.
CUSTOMS ALLOWANCES: Each crew member will be allowed to take ashore one only opened package of cigarettes.
CREW IDENTIFICATION CARDS: Required.
REPAIRS: Small repairs carried out only.
REPATRIATION: Facilities available.
SHORE LEAVE: Members of crew are allowed to go ashore at this port, but Masters should caution them not to take on their persons any dutiable articles, as the Customs will search such men upon landing and should any such articles be found on their persons, this will be treated as an attempt to smuggle; severely punishable offence.
AUTHORITY: Comandante de Puerto.
AGENTS: Agencia Maritima y Comercial C.p.A. Paseo Presidente Billini (Malecon) 27, Apartado 1125, Santo Domingo. Tel.: 688-3371. Telex: RCA 4137. Cables: "Rmella Santo Domingo".

PALENQUE: 18.12 N. 70.11 W.

SHIPMASTER'S REPORT (October 1976)
The vessel called at Punta Palenque to discharge a cargo of feedstock from Venezuela. The SBM is located in position 18° 12.2′ N. 70° 11.3′ W. and operated by Refineria Dominicana.

ARRIVAL ADVICE: Agent at last port should telex ETA to Punta Palenque. Unable to establish Radio contact with local coast station.
DOCUMENTS:
7 Crew Lists
2 Store Lists.
1 Crew Effects List.
2 Passenger Lists.
2 Lists of Arms & Ammunition.
2 Lists of Narcotics.
1 Health Declaration.
Clearance last Port.
PILOTAGE: Pilotage is compulsory. Mooring and unmooring 24 hours a day. Pilot boards about 1 mile Southwest of SBM.

Pilot boat, a small tug with black hull and white superstructure, is equipped with VHF Channels 16 & 14, call sign Punta Palenque Pilot. Pilot moors the vessel with the assistance of the Loading Master who gives directions on the focs'le. The tug delivers the mooring gear consisting of 2 nylon tails put on vessel's bits and shackles. The nylon tail will be shackled to SBM mooring lines. These mooring lines consist of about 100 ft. nylon rope and 10 ft. chain. The chain is heaved inboards by means of 1 wire and 1 nylon or polyprop messenger and connected to nylon tails on vessel's bits.
MAX. SIZE: Vessels up to 260 m. in length with max. draft of 14.6 m. A circle of 2000 ft. around the buoy with a min. depth of 50 ft.
HEALTH: Radio Pratique not available.
TUGS: Not available for mooring itself. Messengers to and from SBM are handled by a small work boat.
BERTHING: SBM of standard type with 2 moorings. Two floating hoses attached with 12 in. manifold connection. Hoses are handled by ship's crew under the supervision of the loading master. Maximum discharge pressure 125 lbs/sq. in.
REPAIRS: None available.
GENERAL: No navigational hazards approaching Punta Palenque from the South. SBM shows on radar at a distance of about 11 miles.
Reference: B.A. charts 3689, 471; West Indies Pilot Volume 1, Supplement No. 3 1975.
Weather: Wind: N.E. Trades
Current: Predominating from East to West but sometimes shifting to opposite direction for short periods. Velocity about 1.5 knots.
Services: Fresh water, provisions, fuel oil and diesel oil not available. No medical assistance. Shore leave not permitted, repatriation not possible.
Master's Remarks: When approaching from the South, the coast of Dominican Republic gives a good radar target. SBM could be picked up at about 11 miles distance, however, the red flashing light of SBM is very poor. Punta Palenque Pilot could be contacted at a distance of 30 miles.
Authorities: After vessel is moored Pilot acts as Agent together with a senior Custom Officer who came on board with the Pilot. Two junior Custom Officers will stay on board during the stay in port, also Loading Master and/or his assistant. Pilot delivers outward clearance.

PUERTO PLATA: 19.49 N. 70.41 W.

See "General" before first port.
PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738 and 2638. Pilot boards 0.5 miles from port entrance. Pilot also on VHF Channel 16.
ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.
RESTRICTIONS: Night entry not recommended.
Depth at entrance 42 ft., depth on bar 37 ft. H.W. and 34 ft. L.W. Depth in harbour 30 ft. to 35 ft.
MAX. SIZE: 500 ft. length, 28 ft. draft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: When within range Santo Domingo Radio.
TUGS: Small Navy tugs available.
BERTHING: One wharf 30 ft. alongside. Pier 496 ft. long, 135 ft. wide. Facilities include water, electricity, cranes, warehouses. New pier recently constructed is 934 ft. long, with depth alongside 35 ft., also 144 ft. wide.
STEVEDORES: ETAs required 24 and 12 hours before arrival to arrange gangs.
MEDICAL: Medical attention can be arranged after vessel is cleared preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: Berth at molasses/petroleum berth.
DENSITY: Salt water inside harbour.
FRESH WATER: Pipe-line at wharves. Ship's hoses used.
FUEL: Small amounts of diesel available by truck from Santo Domingo.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.
CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Minor repairs only.
REPATRIATION: Can be arranged.
AIRPORT: Distance 250 km.
POLICE/FIRE/AMBULANCE: At Santo Domingo.
TELEPHONES: Nearest in Customs House alongside wharves.
SHORE LEAVE: Allowed.
GENERAL: No boats to be lowered without official permission.
AUTHORITY: Comandante de Puerto.
AGENTS: See "Santo Domingo".

RIO HAINA: 18.25 N. 70.01 W.

See "General" before first port.
PILOTAGE: Pilot boards from small boat flying a flag with a white "P" on a black background, about 1.0 mile from harbour entrance. Contact Pilot on 2738 or 2638 and Channel 16 VHF.
RESTRICTIONS: It is recommended to sail during daylight only.
TUGS: 2 tugs, 1,200 h.p. and 850 h.p.
MAX. SIZE: Draft about 29 ft. Length about 600 ft. for sugar berth.
BERTHING: Vessels going to load sugar swing inside the harbour with the aid of a tug, and berth starboard side to the quay. Ship's gangway is recommended. There is sometimes quite a swell running inside the harbour. The port anchor is used for berthing and unberthing.
LOADING: Sugar is loaded by 3 mechanical loaders which are fixed so that large vessels are required to shift along the quay to load in end hatches. Loading rate is quoted as being 350 t.p.h. Cargo quantities are given in short tons.

At least one beam has to be removed from each hatchway to allow loader to enter.

Possible to load 8,500 ton vessel within 24 hours.
SPECIALISED CARGO HANDLING FACILITIES: Roll-on/Roll-off facilities on East bank of river. Container gantry crane available.
FUEL: Fuel oil, diesel and intermediate fuels available from bunker barge.
REPAIRS: Minor repairs in Santo Domingo.
AUTHORITY: Commander of the port and Collector of Customs.

SAN PEDRO DE MACORIS: 18.30 N. 69.12 W.

See "General" before first port.
PILOTAGE: ETA required 24 hours before arrival. Pilot meets vessels 0.5 mile from buoy. Pilot Radio Station frequency is 2738 and 2638 also VHF Channel 16. In the event of bad weather vessel should remain 3 miles South of the buoy. Pilot boards from small unmarked motor boat.
ANCHORAGE: One mile South of the lighthouse; depth 60 ft.
RESTRICTIONS: Channel depth 30 ft. Up to 350 ft. length, no restrictions. Larger vessels enter in daylight only.
MAX. SIZE: Vessels of 600 ft. length have berthed alongside. Draft up to 26 ft. maximum.

Larger vessels leaving port after loading may require to use port anchor to manoeuvre around sharp bend in buoyed channels just inside harbour entrance.
HEALTH: In case of illness or death on board, send a cable before arrival; doctors available.
RADIO: Radio Station, frequency 2738, call Radio Pilot de San Pedro de Macoris.
TUGS: Compulsory. Tug joins vessels inside the port – 150 ft. from the quay. One tug 500 hp.
BERTHING: Quay No. 1, – 900 ft. long, 25 ft. depth; Quay No. 2, 600 ft. long, 25 ft. depth; Quay No. 3, 600 ft. long 24 ft. depth.

Large vessels arriving to load swing inside the harbour using starboard anchor and berth port side to quay. At a later date barges are placed between the ship and quay, to permit greater draft, and Pilot receives extra payment for doing so. Use of gangway is recommended.
LOADING: Vessels loading sugar use ship's gear and ship has to supply rope slings. The chains on the centre sections of MacGregor hatches are broken, and a gap of about 2 ft. made, through which the bags of sugar are bled into the holds at the rate of about 220 tons per gang per day. Only 6 bags per sling are lifted at a time. Stevedores cover hatch openings with tarpaulins when loading is completed for the day. They will make up any extra slings that are required if ship supplies rope.
TANKERS: Oil line diameter 8 in. Max. pressure 60 lb. per square inch.
FRESH WATER: Available.
FUEL: Supplied by truck.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Crew.
CUSTOMS ALLOWANCES: Only sufficient for port consumption. Allowed take only 2 open packets cigarettes ashore.
IDENTIFICATION CARDS: Required.
CONSULS: Great Britain Vice-Consul only. Others at Santo Domingo.
REPAIRS: Minor repairs only.
AIRPORT: Airport is located at 40 km. distance.
TELEPHONES: No telephones on board.
REGULATIONS: Rat guards to be fitted on all ropes. No boats to be lowered without official permission.
REPATRIATION: Can be arranged.

SHORE LEAVE: Allowed.
DEVELOPMENTS: Harbour being dredged to 30 ft. alongside the wharves.
AUTHORITY: Comandante de Puerto.
AGENT: See "Santo Domingo".

SANTO DOMINGO: 18.28 N. 69.53 W.

See "General" before first port.
PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738, 2182, and 2638 kHz. Pilot boards 1.5 miles off breakwaters. Pilot also on VHF Channels 12 and 16.
ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.
RESTRICTIONS: If draft over 24 ft., Master should advise Agent before arrival. Berthing after dark not advisable for petroleum and grain berths.
MAX. SIZE: Length over 650 ft. inadvisable. Max. draft 29 ft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: When within range, Santo Domingo Radio.
TUGS: Join vessel inside port. Ship's lines used. 2 tugs available, 1,200 h.p. and 800 h.p.
BERTHING: Daylight berthing only for vessels proceeding to private Tallow/Soda terminal and Cement Wharf.
BRIDGES: Vessels proceeding up river, height limited to 95 ft. above waterline.
STEVEDORES: ETA's required 24 and 12 hours before arrival to arrange gangs.
MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore.
TANKERS: One berth, draft 29 ft., at Sans Souci.
DENSITY: Brackish inside harbour. Effect of tide negligible.
FRESH WATER: Pipe-line alongside berths. Ship's hoses used.
FUEL: Fuel and diesel available ex-tanker berth. At other berths by bunker barge.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Performed by crew or stevedores.
CUSTOMS ALLOWANCES: Bond not sealed.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Minor repairs only.
DRY DOCK: Can accept vessels up to 320 ft. long, 50 ft. beam, 17 ft. draft.
REPATRIATION: Can be arranged.
AIRPORT: Distance, 26 km.; served by regular airlines with numerous flights daily.
POLICE/FIRE/AMBULANCE: Police, San Domingo 682-3000; Ambulance, San Domingo 682-4288; Fire, San Domingo 682-2000.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed.
GENERAL: No boats to be lowered without official permission.
AUTHORITY: Comandante de Puerto.
AGENTS: Baez & Rannick S.A., Edificio La Cumbre, Central Commercial NACO, Apartado 1221, Santo Domingo. Cables: "Tatem Santodomingord". Telex: ITT 3460034, RCA 326178. Tel. 565-6661.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Ecuador

GENERAL

DOCUMENTS: Apart from the usual ships papers the following documents are required by the Port Authorities using Standard ALALC forms.

1 Health Declaration and Annex.
2 Voyage Memorandum.
1 Crew List, with vaccination dates.
6 Crew List.
6 Passenger List (or negative).
6 Passenger List (in transit).
2 Crews Personal Effects.
3 Passenger Baggage.
3 Mail List (or negative).
4 Store List.
3 Cargo Manifest (in transit).
3 Cargo Manifest (for port).
1 Bills of Lading for the Port.

The ship's Agents may also require copies of these forms.

Consular documents must be delivered to the Customs Authorities as follows:–

From each port where cargo was loaded for Ecuador
1 Consular Manifest (legalised).
1 Parcel List, if any (legalised).
4 envelopes addressed to the Custom's Administrator, the Director General of Customs, The Controller General of the Nation, and the Ministry of Finance.

Notice of Arrival, and intended sailing date must be given to the Port Authorities, via the Agent, at least 3 days prior to arrival.

PRATIQUE: Radio Pratique is not normally granted. Notice of arrival should be given at least 24 hours prior to arrival to Radio Naval Guayaquil, call sign HCG. Listens on 500 kc/s. 8,385 kc/s. 8,320 kc/s. Answers back on 8,472 kc/s. 8,475 kc/s.

The message should read as follows:–

CAPUERTO
MEDICO SANIDAD
ADMINISTRADOR ADUANA followed by name of port
IMMIGRATION
"vapor ...1... ...2... procedente ...3... no enfermos abordo, no explosivos no pasajeros para ...4... pasajeros en transito ...5... tons carga para descargar ...6... sacos correo para descargar eta boya ...7... agencia ...8... ...9... Capitan. or in translation (original must be sent in Spanish).
SS ...1... ...2... from ...3... no sick on board, no explosives no passengers for Guayaquil (or name of port) ...4... passengers in transit ...5... tons cargo to discharge ...6... bags of mail to unload ETA sea buoy ...7... agency ...8... ...9... Captain.

1. being name of the vessel.
2. nationality of the vessel.
3. last port and port of call.
4. number of passengers in transit (logically, if there are passengers for the port call, instead of saying (no pasajeros para .. the correct number would be indicated).
5. number of weight tons of cargo for the port.
6. number of bags of mail.
7. estimated hour of arrival at sea buoy, or buoy No. 1 off Data.
8. Agent's name.
9. Master's name.

The same message should be sent to the ship's Agent.

When quoting arrival times use GMT or Ecuadorian Time (GMT minus 5 hours). Summer time is not kept.

The boarding party usually arrives on berthing.

The Vaccination Certificates should be ready in the same order as the Crew Lists.

FLAG: The national flag has yellow, blue and red horizontal stripes. The yellow is twice the width of the others. Government vessels show the national Arms in the centre of the flag.

All foreign vessels will fly the flag from the highest mast.

PILOTAGE: Pilotage is compulsory for all vessels over 500 tons gross. Vessels should await the Pilot off the sea buoy at all ports unless instructed to the contrary. The Pilot must be requested by the Agent at least 12 hours in advance. They are available 24 hours a day, every day of the year.

STEVEDORES: The stevedores are drawn from the 4 respective unions in rota. The foremen are generally selected by the Agent. The same gang will work the ship until completion, working around the clock if necessary. Gangs will start work at virtually any hour.

Opening and closing of ships hatches is undertaken by the stevedores and also the rigging of gear. Even though the stevedores receive payment for rigging anyway, it is advisable to use the ships crew.

Cold Fresh water and lavatories must be made available to the stevedores.

Tally clerks are selected in a smiliar way to the stevedores.

WATCHMEN: 1 or 2 Customs guards will remain on duty, nevertheless the use of watchmen is advised.

GARBAGE: Before docking all vessels should cover all discharge points to prevent material or water being deposited on the quayside. The dumping of any waste is strictly forbidden except in an emergency. No oil may be dumped within 50 miles of the coast, and Ecuador strictly enforces the Anti-Pollution laws.

RAT GUARDS: There must be placed on all mooring lines while the vessel is in port. This rule is strictly enforced.

FIRE DRILL: Periodical fire drills are held. The signal is 6 short blasts. Smoking on dock is prohibited, and cigarettes must not be thrown through port holes.

CREW: Shore leave is permitted except at the Tanker berths. Each man must carry an identity card. It is difficult to sign on a foreign crew member in Ecuador, unless he has been left behind by another company vessel. A visa is not required for replacements arriving from abroad, but the crew member must have a passport or seaman's book, together with a letter from the ship operator stating name of vessel to be joined.

In declaring personal effects, all new purchases must be listed, as well as electrical devices, typrewriters, sextants, etc.

The master has the right to issue or annul boarding passes if he has the approval of the Port Authority.

As a rule visitors are not allowed entry to the Port Area, although special permits are given to certain vendors. They may come on board solely at the discretion of the Master.

BALAO TERMINAL (ESMERALDAS): 01.02 N. 79.44 W.

OPERATORS: Texaco-Gulf.

LOCATION: Sea terminal berth X (SBM-W) for vessels up to 100,000 d.w.t. is off the mouth of the Esmeraldas River in position Lat. 01° 02′ 03″ N. Long. 79° 42′ 57″ W. and has a minimum depth of 120 ft. at LWS. Berth Y (SBM-E), also for 100,000 d.w.t. vessels, is situated 3.3 miles from the shore and 1 mile distant on true bearing 081°. From berth X in position Lat. 01° 02′ 12″ N. Long. 79° 41′ 51″ W. and has a minimum depth of 120 ft. at LWS.

Berth X (SBM-W): *Lights:* green – blue, flash 1.2 secs., eclipse 6.8 secs., range 5.3 miles, fitted with radar reflector.

Berth Y (SBM-E): *Lights:* green – blue, flash 0.3 secs., eclipse 0.7 secs., range 5.3 miles, fitted with radar reflector.

DOCUMENTS: The following documents are required for the Port Officials who will board any time after arrival, usually during mooring operations.

8 Crew Lists.
6 Passengers List.
4 Cargo Manifest (1 visaed).
2 Bills of Lading.
8 Stores Lists.
6 Copies of List of Personal Effects of Crew.
6 Copies of Voyage Memorandum.
1 Copy of Health Patient Certificate.
2 sets Consular Papers to be obtained at the Ecuadorian Consulate at last port. If no Consul available or by other reason, this matter will be arranged and settled by Ship's Agency in Esmeralda.

Consular papers may be obtained by the Agents of ship at last port, however they MUST arrive to Esmeraldas no later than 4 days after the vessel has left Balao. Otherwise agency will arrange locally and pay dues in Esmeraldas.

PILOTAGE: Pilotage is compulsory and Masters of vessels are reminded of their obligations to comply with statutory rules and are requested to comply with the following:

1. The Watchkeeping Officer of the ship must be responsible for the boarding and dispatching of the Harbour Pilot.
2. The ladder should be properly secured.
3. The pilot ladder and immediate areas must be adequately illuminated at night.
4. The upper part of the ladder should be safe and secure to enable the Pilot to pass to the ship's deck.
5. The ladder should be in good condition and its treads should remain horizontal throughout the boarding or dispatching.
6. The length of the ladder should not exceed 30 ft. Whenever the distance from sea level to the point of access is more than 30 ft., a combination accommodation ladder/pilot ladder, or other equally safe and convenient unit for boarding or dispatching should be used.
7. The ladder should be rigged in such a manner that each step rests firmly on the ship's side, and spreaders should be placed at intervals of no more than 10 ft. to prevent the ladder twisting.
8. Nylon pilot ladders must not be used.

Pilotage zone: This zone must be considered within the following co-ordinates:

01° 00′ N.
01° 04′ N.
79° 40′ W.
79° 46′ W.

In this zone are included the Pilot boarding, anchoring and mooring areas.

Pilot boarding area: The Pilot boarding area is in a position approximately 1.5 miles N.W. of berth Y (SBM-E) between the parallels of 1° 04′ and 1° 03′ N. and meridians of 79° 40′ W. and 79° 43′ W.

ANCHORAGE: Vessels required to anchor on arrival will anchor in a position approx. 1.5 miles S.W. of the berth X (SBM-W) in an area between the parallel of 1° 02′ N. and 1° 00′ 30″ N. and the meridians 79° 44′ W. and 79° 46′ W.

RADIO: Vessels bound for Balao must advise their ETA to Superintendencia Naval, Esmeraldas, 72 hours and 24 hours before arrival. Message must contain vessel's name, ETA, Master's name. A 24 hour watch is maintained on HF-SSB-2182 – 2136.3 kHz call frequency, and 4139-6210 kHz working frequency and VHF Channel 16. Vessels are usually able to make contact on this channel at a distance of 20-30 miles on the seaward side of the berth operation. Channel 14 will be used for contact between ships and the

Superintendencia Naval before the port arrival. Channel 12 is used for internal traffic, loading, unloading and ships berthing operations.

TUGS: 3 line boats available, 560 h.p. each.

BERTHING: The mooring area is situated between the parallels of 01° 03′ N. and 01° 00′ N. and the meridian 79° 40′ W. and 79° 44′ W. Mooring operation will be undertaken by day under normal weather conditions (0500 – 1700 hrs.). Unmooring operation will be undertaken by day and night without restrictions.

In this area the traffic of small craft such as fishing vessels, coasting vessels engaged in cabotage is absolutely prohibited with the sole exception of small craft used in the reception and mooring of tankers.

Mooring Turn (Arrival): Arrival time is considered the time the vessel reaches the anchorage vicinities or the time the Pilot boards the vessel, whichever occurs first. In any case, the Terminal will give priority to the ship that arrived first.

Mooring information: When a vessel is within reasonable distance of the buoy, two ship's lines will be carried by the mooring tug to the floating buoy lines and secured to same. These lines will then be heaved aboard. As the buoy ropes come clear of the water, it will be noted that chains are attached to them. These chains are to be secured to the bitts in such a manner that the nylon is outside of the external length of the ship so the chains absorb any chafing if the buoy lines cross the bow. There are two buoy lines. Power must be available at all times on all deck winches and windlass while the vessel is at the berth.

A mooring line must be available aft, secured to the bitt and of sufficient length to enable a tug boat to pick up the eye and tow off if necessary.

Unmooring: The Mooring Master will advise to Texaco Control the estimated time for the completion of loading and will ask for Official Pilot. Then, hose disconnecting operation is undertaken aboard ship. After the unmooring takes place, the tug boat comes alongside the ship to transfer all material and personnel that have been used during the operation. Then the vessel will be ready to leave the Terminal after receiving the respective documents.

Average Operation Time: Subject to different characteristics of each ship, it can be considered as reference, the following rates:

(a) Approaching the SBM from Anchor Area, or	50 minutes
(b) Approaching the SBM from Pilot Boarding Area	30 minutes
(c) Putting mooring and connection equipment aboard ship	30 minutes
(d) Mooring	30 minutes
(e) Hose lifting and hose connection	80 minutes
(f) Hose disconnecting	40 minutes
(g) Unmooring	10 minutes
(h) Removal of Personnel and Equipment	25 minutes
(i) Maximum flow rate	4,200 t.p.h.

HOSE HANDLING: *Buoys "X" and "Y".* Lifting, connecting, disconnecting, lowering and other operations will be performed by a special team from shore under the Loading Master's orders with assistance of the ship's deck Officer. Port derrick must be rigged and ready for use on arrival and vessels should be warned that the weight of each hose is at least of 5 tons under favourable conditions. Members of the ship's crew will be required to operate the winch or winches.

Particular care should be taken during the hose handling operation in order to avoid serious damage to the hoses, the plastic floats and buoys on the plate edges, rails, etc.

LOADING: Loading is through SBMs which are 49.5 ft. in diameter and held, each one in position by fixed chains secured to piles sunk into the sea bed. Buoy X is equipped with 810 ft. length and 24-inch self-float loading hose which is manifolded to two 105 ft. length and 12 in. tail hoses. Buoy Y is equipped with a 20 in. self-float loading hose manifolded to two 12 in. tail hoses. Each buoy is equipped with a 810 ft. length and 20 in. floating string reduced to 12 in. tail hoses for deballasting. Standard loading rate is about 30,000 b.p.h.

Potential Loading Rate:
Berth X 38,000 b.p.h.
Berth Y 36,000 b.p.h.
Max. Pressure allowed: 225 p.s.i.
Booster pump: none.

DEBALLASTING: The load on top system is accepted at this terminal and vessels are requested to arrive with slop tanks "settled out" as far as possible. At the present time the terminal is not able to handle slops and until such time as the terminal is able to receive slops, shore discharge is prohibited.

All clean ballast must be pumped ashore, with the exception of vessels especially equipped with clean segregated systems – which are reserved for ballast only. Vessels so equipped will be permitted to pump segregated ballast overboard after being accepted and approved by shore inspectors.

For the water processing of ballasted tankers, the Balao Terminal has an adequate system that starts in the hoses of the buoys and passes through a submarine pipe going to a preseparator, where it hits and separates: first the water of the hydrocarbons, then goes to a decantation pool, where it stays 48 hours and after goes to a final separator in which are collected the last traces of hydrocarbons and finally the clean water is drained to the sea.

Vessels going to Balao to load crude oil must arrive with sufficient ballast for safe manoeuvring, that is, should be 25 to 30% of the capacity of the ship (Deadweight tonnage) and 10 ft. trim or less.

After the ballast tanks have been inspected and found satisfactory, deballasting will commence on the advice of the Company representative. When the ballast has been discharged, the tanks will again be inspected and if ready for cargo, a Dry Certificate will be signed by the Company representative. In any case cargo will be loaded when both ship and shore are ready to commence operations. Under no circumstances will the vessel be expected to load at a faster rate than that requested by the Master. It is the ship's responsibility to check that the requested loading rate is not being exceeded. The Company for their part, will make every effort to maintain the requested rate and will advise of any alteration in the loading rate immediately.

POLLUTION: The Ecuadorian Government have very strong views on pollution and vessels are warned that a very careful watch is kept at all times to ensure that pollution does not take place – or that if pollution does occur it is controlled as quickly as possible. Masters are advised that it is against the law to pollute the waters and coast of this Country and severe penalties are imposed for such offences.

During the hours of darkness it is requested that searchlights from bridge wings and approved floodlights are used to illuminate surrounding waters to facilitate detection of oil and assist generally in loading operations. Vessels are advised that failure to supply sufficient lighting could result in cargo operations not being allowed during the hours of darkness. Such delays would be for vessel's account.

SHIP'S OBLIGATIONS IN PORT:

(a) It is the obligation of the ship's Master or his representative to receive the official Pilot at the gangway and provide him with all information required.

(b) Ship's Master must delegate the First Officer or any other responsible officer as his representative for receiving Official Authorities at the gangway and provide them with documents and information while remaining on board.

(c) Ship's Master is obliged to present to the Superintendencia Balao Insurance Certificate against pollution issued by Tovalop, Ship's Register and all ship's documents that might be required.

(d) Accommodation and meals must be provided for Ecuadorian Guard personnel, such as naval personnel and others as required.

(e) Accommodation and meals must be provided for Watch Mooring Master.

(f) Meals must be provided for official Pilots if they are on board at meal times.

(g) Facilities and personal assistance must be provided for Government officials representing the Natural Resources Ministry who will board the vessel to perform tank inspections and loading control.

WEATHER AND CURRENT: Wind and swell are mostly from S.W. direction. During the wet season (December to May approximately) wind and current are from a N.E. direction. The currents vary frequently, sometimes reverse direction from the wind causing the vessel to yaw heavily at the berth. Nevertheless, in general, the weather the whole year is good. Sometimes, however, during the dry season (June-November) mooring operations are limited to wind intensity.

DENSITY: 1025.

FRESH WATER: Available but limited.

MEDICAL: Hospital and clinic available.

FUEL: Not available.

TIME: GMT – minus 5 hours throughout the year.

PROVISIONS: Available.

REPAIRS: No facilities of any kind are available at this port.

DIRTY BALLAST: Dirty ballast facilities are available except slops.

REPATRIATION: Only if the person concerned holds the necessary valid certificates and documents. For crew joining make Quito the disembarking airport.

CONSULS: Panama, all other consuls in Quito.

SHORE LEAVE: Possible, two radio-equipped launches provide service day and night.

GENERAL INFORMATION: Yagua Shipping Agency has its installations on the Oceanfront side of Esmeraldas, Ecuador, and dedicated exclusively to attend to handling and protecting Agents on behalf of Owners, Charterers and Operators for crude oil tankers arriving at this port. They are also Agents of Texaco-Gulf consortium for their individual and chartered vessels as well as handling of documents and export policy of every particular crude shipment.

They are also attending the vessels which carry shipments of the Ecuadorian Government on behalf of the Operators.

AGENTS: In Quito: Yagua General Services Ltd. P.O. Box 69, Quito-Ecuador, Portoviejo No. 442, Fifth floor. Cable: Yagua Quito. Telex No.: 2220 Yagua Ed. Phones: 524–816 and 521–706.

In Esmeraldas: Yagua Shipping Agency, PO Box 266, Kennedy No. 1100 Avenue, Esmeraldas-Ecuador. Cable: Yagua Esmeraldas. Phones: 710–370 and 711–180.

Also on VHF Channels 16, 6, 12 and 71.

GUAYAQUIL: 02.12 S. 79.52 W.

DOCUMENTS:

Port Doctor:
Derat Certificate.
Maritime Declaration of Health.
Crew Roll with dates of vaccination against smallpox for each member.
Same for each passenger.
Passenger List.
Passenger List in Transit.

Harbour Master's Office:
Voyage Report.
Clearance from last port.
Crew Roll with original visa from Ecuador Consul in first port of voyage (3 copies).
Passenger List with original visa from Ecuador Consul in embarking port, or declaration that they have no visa, signed by Captain (2 copies).
Passenger List in transit signed by Captain or declaration that they have no passengers in transit (2 copies).
Provisions List, Stock and Medicines on ship (3 copies).
Cargo Manifest in transit (1 copy).
Combustible or inflammable Cargo (1 copy).

Customs:
8 copies of Manifest.
Sealed envelope of Manifests, consular and commercial invoices and non negotiable vouchers.
Cargo index and copy of Cargo Manifest in direct transit (8 copies).
A Register (8 copies) of spare parts for vessel and provisions.
Crew Roll and detailed list (8 copies) of personal belongings of officers and crew.
Passenger List, with indication of their suitcases and list of suitcases that travel without their owners; in this case should be specified the port where they were put on board and personal declaration of each passenger (8 copies).
If the vessel with ballast, Master will be obliged to produce (besides the ballast certificate) documents already mentioned in each respect. Master or Maritime Agency will produce a written statement to Customs within 12 hours from arrival of vessel whether they decide to take any cargo for exporting. If not loading vessel must leave within the following 24 hours.

Immigration:
Crew List signed by Master.
Passenger List of those who disembark there or a declaration of none for this port, signed by Master.
Passenger List in transit, or a negative declaration signed by Master.
In case of having passengers to disembark in this port, Master should produce passports and visas.
Crew identification cards or similar documents.
Inspection of ship by Authorities will be done (compulsory) within 3 hours of arrival, usually as soon as ship berths, or in quarantine.

PILOTAGE: Vessels approaching port to notify their arrival by Naval Radio Station HCG, 24-hour service, frequency 8476 kc/s. and 500 kc/s. Traffic list broadcast every hour on 8476 kc/s.

Advance notice of not less than 12 hours required, addressed to Capuerto Aportuaria Agencia in either English or Spanish with the following details: date, and time of ETA, destination (whether Buoy No. 1 or Puna), maximum draft, cargo details, details of passengers or mail, and if Pilot required.

Pilot Station for Puerto Maritime: Situated in position 02° 43′ 18″ S. 80° 17′ 30″ W. Pilot boat needs 1 hour to go from Pilot station to Buoy No. 1. Contact by VHF Channel 16, 24-hour service. Pilot boat is wooden, 45 ft. long, black hull, white cabin, with letter "P" on sides. During day carries blue flag with letter "P" and by night has regulation pilot lights.

Pilot Station for River Guayas: Situated in village of Puna. Pilot boat requires a minimum of 30 minutes to move from Pilot station to vessel. Vessels requiring Pilot signal Morse letter "X" by lamp or sound.

Pilot boat has grey iron hull, white cabin with Lancha de Practicos written on both sides. By day carries blue flag with letter "P". By night regulation pilot lights.

ANCHORAGES: *Puerto Maritime:* 1 mile South and 2 miles West of sea buoy in position 2° 44′ 26″ S. 80° 24′ 44″ W. Min. depth in the area is 35 ft.

Guayas River: Inside area between bearings 180° and 135° from the lighthouse of Punta Mandinga at Puna, 1 mile from the lighthouse.

MAX. SIZE: Max. length for ships entering Puerto Maritime is 650 ft., with a max. draft of 33 ft. Vessels of deepest draft should begin to enter 1 hour before high tide. For Guayas River max. length 600 ft., max. draft 23 ft. 6 in.

HEALTH: Procedure to obtain free pratique is to produce health certificates to port doctor upon arrival. To get free pratique by radio, ship must radio to port doctor any changes in health situation on board since leaving last port.

TUGS: Normally join vessel beyond Buoy No. 80. Tugs are compulsory, also use of their lines is compulsory. Cost of both services is included in total cost of port duties.

BRIDGES: No bridges that restrict traffic either in Estero Salado nor in Guayas River, but ships that are to berth in village of Eloy Alfaro (Duran) should take into consideration height of telephone lines between Guayaquil and El Islote, min. height 48 ft.

STEVEDORES: Radio message to ship's Agent will give agency enough data to make all arrangements required for operations of loading/discharging. In Maritime Terminal an average discharge/loading rate of 25 metric t.p.h. per hook.

MEDICAL: If ship requires medical attention, a notice of 12 hours should be given to Agents. Guayaquil Hospital and clinics are available. Vaccination supplied by Health Authorities against smallpox.

TANKERS: Discharge asphalt in Guayas River at a special quay, max. draft 23 ft. 6 in. Discharge of petrol for aviation in Puerto Maritime is to lighters, max. draft permitted is 33 ft.

DENSITY: 1012.

FRESH WATER: Available. Three pipes at each berth delivering at a rate of about 20 metric t.p.h. each.

FUEL: None available.

DEVELOPMENTS: Building of 2 more landing places with a total area of 1,000 sq. m.

GANGWAY/DECK WATCHMEN: Capitania del Puerto provides members of the Policia Maritima. Ships should supply watchmen with food.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES: All ship's certificates required.

CUSTOMS ALLOWANCE: Each member of crew allowed 600 cigarettes. Each crew member or passenger allowed 1 litre of wine and 1 litre of spirits.

IDENTIFICATION CARDS: Not required.

CONSULS:

Western Germany	Guatemala
Argentina	Haiti
Belgium	Netherlands
Bolivia	Honduras
Brazil	Israel
Great Britain	Italy
Columbia	Japan
Costa Rica	Lebanon
Chile	Mexico
Nationalist China	Nicaragua
Denmark	Norway
Dominican Republic	Panama
Salvador	Paraguay
Spain	Peru
U.S.A.	Portugal
Philippine Republic	Sweden
Finland	Uruguay
France	Venezuela
Greece	

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: Dry dock with capacity of 3,600 metric tons.

REPATRIATION: Facilities for effecting crew changes and arranging any necessary repatriation.

AIRPORT: Airport is 8 miles from Maritime Terminal and has scheduled flights to everywhere.

TIME: Local time is GMT minus 5 hours. There are no alterations during year.

HOLIDAYS: 1st January; Good Friday, 1st and 24th May; 24th and 25th July; 10th August; 9th and 12th October; 2nd and 3rd November; 25th December. But only on the 1st January and 25th December is there no working in port.

POLICE/AMBULANCE/FIRE: For any of these services call 211 (interno del Puerto).

TELEPHONES: Arrangements for placing telephone on board ships on request.

SHORE LEAVE: Allowed.

PURSER'S REPORT: (March 1975)
The government have now issued their own set of papers. These must be made out is sets of seven (7) ie:— Seven Crew Lists. Seven Passenger Lists, Seven Crew Customs Declaration Forms, Seven Cargo Manifests, Seven Dangerous Cargo Manifests (if carried), Seven Lists of Mail (if none – nil returns on sheet), Seven General Declarations. One (1) Maritime Health Form, Seven Stores List.

All Forms should be certified by Ecuadorian consul or friendly Nation at Port of departure.

AUTHORITY: Capitan del Puerto de Guayaquil, Puerto Maritimo.

LA LIBERTAD: 02.12 S. 80.85 W.

DOCUMENTS: Port clearance is effected at Salinas, 3 miles West of La Libertad.
The following papers must be ready for presentation to the authorities on arrival:
1 Bili of Health signed by the Master and visaed by the Ecuadorian Consul at port of departure.
1 Ballast Certificate visaed by Ecuadorian Consul at port of departure.
6 copies of Cargo Manifest (if any cargo for the port).
6 copies Bills of Lading.
9 Crew Lists (original visaed by Ecuadorian Consul at port of departure).
9 Passenger Lists for the port (if no passengers state "without passengers"). If applicable, the list should show names, sex, age, nationality, port of embarkation, occupation and whether married or single. Passengers must make a declaration of their luggage on Ecuadorian Form No. 94.
9 Stores Lists.
5 Lists of Crew's personal effects (new articles only).
4 Lists of unaccompanied baggage (if none, state "without them").
4 Lists of Encomiendas (list of small private parcels to be landed in Ecuador – if none, state "without them").
4 Lists of Mail (if none, state "without them").

If there is no Ecuadorian Consul at the port of departure, the documents must be visaed by the Consul of a friendly nation.

PILOTAGE: Compulsory. Pilots boarding in position 2° 00′ S., 80° 54.5′ W. ETA should be given to port 12 hours before arrival. Open roadstead.

ANCHORAGE: No limitations except depth 36 ft.

Vessels proceeding to oil terminal should anchor about 1 mile

N.N.E. of the mooring buoys (which are about 15,000 ft. off-shore) where the Port Authorities and Mooring Master board. The anchorage is an open roadstead with sandy bottom.

MAX. SIZE: *Tankers* – LOA 650 ft.
Beam 84 ft.
Loaded draft 34 ft. 6 in. max.
Depth MLWS at mooring is 43 ft.

RADIO: ETA messages may be sent by radio to Radio Naval, HCG Guayaquil Radio, 8476 kc/s., 500 kc/s. Radio Naval would then repeat the message to the Naval Station in Salinas, or to the Telegraph Office. Radio Naval have no VHF/RT or Telex.

HEALTH: Vessels arriving from foreign ports should fly appropriate International Code signals to advise state of health and request free pratique. Vessels put in quarantine required to fly signal QL all the time they are in port until Port Health Authority advises to the contrary.

RADIO: Radio Naval – HCG – 8476 kc/s. and 500 kc/s.

TUGS: Only tankers require tugs to berth at the buoys. Other vessels work cargo at anchor.

BERTHING: No wharves for large vessels, only for coasters.

STEVEDORES: Arranged by Agent; separate ETA not required.

MEDICAL: If urgent medical attention required, Master should radio details in advance. All facilities available.

TANKERS: The Anglo-Ecuadorian Oil Fields Terminal is located in Santa Eleana Bay. Four small marker buoys indicate the seaward end of the submarine pipe-line. An Easterly current usually prevails, rate being from 0.5 to 1.5 knots. There is one 14 in. submarine pipe-line fitted with two 10 in. flexible hoses for connecting to ship. Max. loading rate is about 450 t.p.h, and max. pressure is about 150 p.s.i.

Mooring Master assists in berthing vessels. Vessels are moored port side to, using starboard anchor off the starboard bow and mooring buoys for lines to the port bow and astern. Vessels moored during daylight hours only; however, they may unmoor at any hour of the day or night. Recommended that at least 1 tank of clean ballast be retained on board vessels until mooring has been completed. Ballast will then be pumped overboard. Vessels should be equipped with three 9.5 in. or 10 in. (circ.) – 200 fathom hawsers for use in mooring to and 7 rope stoppers each at least 3 fathoms long. The following signals are used in connection with the loading of cargo. A submarine telephone is picked up with loading hoses and affords direct communication to shore.

By day: Start loading 2 long blasts of vessel's whistle or siren, 1 red flag hoisted; stop loading 4 long blasts of vessel's whistle or siren, flag hauled down.

By night: Start loading, 2 long blasts of vessel's whistle or siren, 1 red light hoisted; stop loading, 4 long blasts of vessel's whistle or siren, 1 red light hauled down.

To summon the launch, 3 long blasts are to be blown on the vessel's whistle.

DENSITY: 1028

FRESH WATER: Not available.

FUEL: Bunkers are not available. The nearest bunkering port is Talara, Peru, or Balboa, Panama.

MEDICAL: Medical treatment is available at Ancon Clinic.

CONSULS: There is no consular representation of any country at La Libertad. The nearest are at Guayaquil and include the U.K., U.S.A., Norway, Sweden, Denmark, Greece and Panama.

GANGWAY/DECK WATCHMEN: Available, but not compulsory.

OPENING/CLOSING HATCHES: Can be done by the crew or stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes and one bottle wine/spirits per man.

IDENTIFICATION CARDS: Not required.

REPAIRS: Anglo-Ecuadorian Oil Fields Company can effect small repairs.

REPATRIATION: Can be effected from port of Guayaquil.

AIRPORT: At Guayaquil, 130 km. away, served by regular airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: January 1st; Carnival; Good Thursday; Good Friday; May 1st; May 20th; July 24th; August 10th; October 9th; October 12th; November 1st; November 3rd; December 6th; December 25th.

TELEPHONES: No connections to vessels possible, except at tanker moorings which is direct to loading installation only.

SHORE LEAVE: Permitted.

AUTHORITY: Capitania del Puerto de Salinas.

MANTA: 00.56 S. 80.43 W. (See Plan)

DOCUMENTS:

A. List of documents, 2 copies (Port Authority 1, the latter will sign a copy for Purser).
B. Sailing Permit from last port. 1 copy for Port Authority representative, who will copy the permit and give original to Captain of Port.
C. General Declaration, 5 copies – Health Department 1, Captain of Port 1, Immigration 1, Custom House 1, and Port Authority 1. The document will contain (see Note No. 4 below):
   1. General data on ship, voyage, cargo and passengers.
   2. Health Declaration.
   3. Stores Declaration.
   4. Under remarks – any pertinent item.

   Should be signed by Master and ship's Doctor or, if no doctor aboard, by Purser. For further details, see Note No. 3 at end of this Article.
D. List of passengers destination Manta, including list of their baggage, 4 copies – Customs 1, Immigration 2, Port Authority 1.
E. List of Passengers in transit, 3 copies – Immigration 2, Port Authority 1.
F. Crew List (including and indicating any members leaving vessel at Manta), 4 copies – Customs 1, Immigration 1, Captain of Port 1, Port Authority 1.
G. Manifest of Cargo for discharge at Manta including transhipment 4 copies – Customs original and copy, Port Authority 2.
H. Unaccompanied Baggage List including baggage for any member of the crew, who may disembark, 3 copies – Customs 2, Port Authority 1.
I. Mail Manifest, 2 copies – Post Office 1, Port Authority 1.
J. Checking Books, 5 copies, plus one copy for each point of possible discharge of cargo from vessels for Port Authority.
K. Bills of Lading, 1 complete set for Port Authority.
L. List of vessel supplies including liquors, cigars, cigarettes, other tobacco products, matches, lighters, clothes, novelties, and provisions will be maintained in Purser's office for review by Custom House.
M. Tissue Manifest, hatch list and cargo plan. 1 copy of each for Port Authority prior to arrival of vessels. These papers to be sent by air mail as per regulations.
N. Ballast Certificates will be used instead of manifests when vessels do not carry any cargo.
O. General Manifest. This manifest will include all cargo loaded during voyage which will include all cargo in transit – 1 copy. General manifest will be maintained in Purser's office for review by Custom House, and be accessible for customs at all times.

Note No. 1: All papers (items A to K) will be delivered to representative of Port Authority who will check them against list of documents to be receipted for Purser. Port Authority will subsequently distribute documents to interested parties as indicated above.

Note No. 2: Port Authority reserves the right to refuse berthing facilities until all documents received. Of course, this authority will be handled with discretion to avoid unnecessary or unwarranted delay to vessels, passengers, and cargo.

Note No. 3: All ship's papers will be filed in Port Authority office, and authorities noted herein are welcome to inspect them whenever they wish to do so.

Note No. 4: General Declaration should contain the following:
   A. Name of vessel, length and registered tonnage.
   B. Owners.
   C. Voyage number and ports of call on voyage.
   D. Total number of passengers aboard.
   E. Total tonnage (of 1,000 kilos) of cargo aboard.
   F. Total number of passengers for Manta.
   G. Total tonnage (of 1,000 kilos) of cargo for Manta.
   H. Health Declaration.
   I. Stores Declaration that ship's consumable foodstuffs and consumable supplies are under lock and key; that the slop chest, bazaar, and store-rooms containing liquors, cigars, cigarettes, other tobaccos, matches, lighters, clothes, novelties, sports material, toilet articles, cosmetics, medicines, etc. have been locked and sealed with metallic non re-usable seals with . . . . serial numbers. The seals are identifiable by their non-repeat numbers.

      All vessels should have these seals aboard and should equip doors and door frames with suitable secure hardware through which seals can be passed. (Model of the form for the above document may be obtained from the Port Authority).

Note No. 5: Baggage listed as cargo should not also be listed as baggage or vice versa.

PILOTAGE: Compulsory. Pilot boat by day will show blue flag at mast head; by night red light 2 ft. 6 in. below mast head light, both visible around the horizon.

Pilot will board at point located at distance of half a mile, 045 degrees from Manta lighthouse (Lat. 00° 56′ 20″ S. Long. 80° 43′ 02″ W.). He will immediately proceed to conduct ship to inner harbour and dock at assigned pier or anchor in assigned anchorage.

Vessels will not have to anchor, but will reduce speed to steerageway and stop propeller. Lower Jacob's ladder so Pilot may board safely. Pilot will act as Representative of Port Authority. Other officials and Representative of steamship Agency will embark once ship has tied up.

Pilotage compulsory for all foreign vessels over 500 tons, with following exceptions:

(1) Fishing craft, yachts, tugs, barges and other craft of less than 500 tons total displacement whose handlers are suitably licensed by Captain of the Port of Manta.

(2) Vessels of the Ecuadorian Navy.

Note: Masters of large vessels and handlers of small craft who do not follow all rules of safety, including Rules of the Road may lose their right to navigate within jurisdiction of the Port Authority and may be subject to additional sanctions.

ANCHORAGES: Free anchorage area located around a point 1 mile from Manta lighthouse (Lat. 00° 56′ 03″ S., Long. 80° 43′ 01″ W.). Depth 45 ft. Anchorage inside breakwater will be assigned by Pilot.

RESTRICTIONS: No restrictions upon entry. Vessels up to 32 ft. draft may enter at any time of day or night.

MAX. SIZE: Max. permissible length 600 ft.; breadth 60 ft. draft 32 ft.

HEALTH: Radio pratique granted all ships in accordance with International Sanitary Regulations. Health documents will be delivered to boarding officer of Port Authority. When pratique granted by radio, not necessary for port doctor to board vessel.

In request by radio for pratique, vessels should give following data 12 to 24 hours before arrival.

A. Date and hour of expected arrival.
B. Number of Ecuadorian passengers.
C. Number of alien passengers.
D. Statement regarding existence or non-existence of communicable diseases aboard.

RADIO: Manta HCM 8372 kc/s. Radio telephone 2182 kc/s. VHF Channels 6, 16 and 26.
TUGS: A 1,200 h.p. tug, joins vessel in vicinity of pier. Ship's lines usually used. Use of tug for docking and undocking is at discretion of Port Authority.
BERTHING: Berth will be assigned by Pilot at boarding time.
STEVEDORES: Arrangement for stevedores made by ship's Agent prior arrival.
FRESH WATER: Fresh water available in small quantities.
FUEL: Diesel oil available in small quantities by truck.
FIRE PRECAUTIONS: Regular fire precautions should be taken by all ships. Smoking should be prohibited in any section of the ship used for cargo. No smoking on the weather deck, cargo decks, and the ship's holds, whether cargo being worked or not. Smoking around hatches or at cargo winches must be prevented.

Smoking should be restricted to the passenger section of vessels, and to officers' and crew's quarters where suitable receptacles are available.

Persons including officials can be fined or refused entrance to terminal at discretion of Port Authority for careless or intentional disregard of reasonable fire prevention precautions.

Port Authority reserves right to inspect cargo working sections of vessel, to check precautions against fire, and to determine whether there are any undue accumulations of combustible materials.

Pumps and other fire fighting equipment aboard should be maintained in a state of readiness as long as vessels are in the terminal.

DEVELOPMENTS: By February, 1977 there will be a new Roll-on/Roll-off ramp. In December, 1977 there will be additional open storage of 55,000 sq.m.
GANGWAY/DECK WATCHMEN: Custom police keep watch at the gangway.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCES: Tobacco, small amounts for personal use while in port. Wine and/or Spirits, wines and liquors by the glass for consumption on board while in port.
CARGO GEAR: Ship should have cargo nets, but Port Authority can provide cargo nets at extra cost.
IDENTIFICATION CARDS: Crew members should have identification cards while ashore at all times.
CONSULS:
Germany: Mr. Jorge Appenzauser, Tel. 611-169.
Colombia: Dr. Anibal Ramirez Angel, Tel 610-989.–Malecon.
Chile: Mr. Marino Concha Richards, Manuel J. Calle 200, Tel. 610-151.
Panama: Dagoberto Santana. Morona.
Italy: Romulo Massari P. P.O. Box 4847.Tel. 610-395.
REPAIRS: No repair facilities available.
REPATRIATION: Repatriation of crew members through Port of Guayaquil.
AIRPORT: Airport with 2,500 m. runway. Flights to Quito at 10.50 hrs. on Monday, Wednesday, Friday. From Portoviejo (36 kms.) flights to Quito on Tuesday, Thursday, and Saturday. Air taxis on request.
TIME: Local time GMT minus 5 hours.
HOLIDAYS: No movement of cargo within the terminal on Christmas Day, or after 2000 hrs. on the 31st December, or on New Year's Day.
POLICE/AMBULANCE/FIRE: Police 610-900; Ambulance 612-014; Fire 610-100.
TELEPHONES: Telephone service can be obtained at Terminal Office, at same rate as public telephones.
SHORE LEAVE: Crew members are welcome ashore.
AUTHORITY: Autoridad Portuaria de Manta.

PUERTO BOLIVAR: 03.14 S. 80.01 W.

DOCUMENTS:
3 Voyage Memorandums.
2 Maritime Health Declarations.
1 Consular Despatch.
1 Port of Origin Certificate.
10 Crew Lists.
8 Stores Lists.
3 Individual Declaration List for each member of the crew.
8 Lists Passengers Disembarking at this port.
8 Lists Passengers in transit.
4 Luggage, Mail and Commissions Lists.
4 Manifest of Cargo Lists.

Documents for Port's Authority should be supplied by Agents:

1. General Cargo Manifest in complete sets (Importation in triplicate, Exportation one set).
2. Bill of Lading, complete sets: Importation (one set), Exportation (one set) at time of sailing.
3. Export Customs House Clearance Document (one set). This document is replaced by the Bill of Lading.
4. Certificate of Ballasting.
5. Request for Mooring Berth.
6. Stevedore's cargo plan per hatch.
7. Muster-roll of cargo.
8. Tally books: 15 copies in Spanish. These must be in accordance with the current Tally Law.

PILOTAGE: Send ETA through Radio Naval of Guayaquil 24 hours before arrival. Pilot will board vessel on the port side 1 mile from the sea buoy on arrival and disembark on the starboard side. In case Pilot not available it is recommended to anchor 1 mile from "Punta Jambeli" between the buoy and the lighthouse of Lambeli. Pilot boat is steel, black hull and white cabin, it carries pilot signals in accordance with International Regulations. Service available 24 hours a day. Pilotage is compulsory.
ANCHORAGES: Pilot will indicate recommended anchorage.
RESTRICTIONS: Depths 30 ft. at low water, from 0600 to 1800 hrs. draft allowable 30 ft. From 1800 to 0600 hrs. draft allowable 27 ft.
MAX. SIZE: At Espigon Quay depths alongside 30 ft. inner end to 36 ft. at quay head.
HEALTH: On the arrival of vessel the authorities come on board. If there are no illnesses aboard, the doctor gives free pratique. In case of any illness, Master should advise by radio and the vessel waits in quarantine for the visit of Port Health Doctor.
RADIO: Radio Naval of Guayaquil, Radio Naval of Puerto Bolivar VHF available call pilot station on Channel 16, effective reception 30 miles.
TUGS: 2 tugs available one at 1,200 h.p. and one of 500 h.p. Usually, ship's lines – are used. This service is free.
BERTHING: At Espigon Quay should be carried out within 1 hour before or after slack water. Tidal currents of 1–3 knots in dry season and 3–5 knots in Winter are at right angles to berthing face of the quay.

Wind: From 000° in the morning, speed 3 to 5 knots. From 210° in the afternoon and night, speed 3 to 5 knots.

STEVEDORES: Agents take charge of gangs.
MEDICAL: Hospitals, clinics and dental surgery in Machala, 6 km. from the port. There is also a medical service for vaccination.
DENSITY: Salt water.
FRESH WATER: Only available by tanker truck, capacity 7 tons.
FUEL: No fuel in this port. In case required one has to contact Guayaquil and they send it by small tankers.
GANGWAY/DECK WATCHMEN: The Agent names 1 or 2 watchmen for the vessel besides the maritime police and coast guard.
OPENING/CLOSING HATCHES: Carried out by shore gang supervised by someone on board.
CERTIFICATES: Vessel's Register and Tonnage Declaration required.
CUSTOMS ALLOWANCES: 100 cigarettes per person and 1 bottle wine or spirits per person.
IDENTIFICATION CARDS: Not necessary.
CONSULS: Consul of Peru, tel. 920608.
REPAIRS: There are no facilities in this port.
REPATRIATIONS: The Immigration Office can arrange.
AIRPORT: Distance to the airport is 6 km. It has 6 daily flights in connection with Guayaquil.
TIME: GMT minus 5 hours; there is no change.
HOLIDAYS: No work from 1700 hrs. on 24th December till 0800 hrs. on 26th December, and 1700 hrs. on 31st December till 0800 hrs. on 2nd January; Carnival; Maundy Thursday; Good Friday and Saturday; 1st May; 24th and 25th July; 9th October.
POLICE/AMBULANCE/FIRE: There are services.
TELEPHONES: Can be connected to the vessel.
DEVELOPMENTS: A marginal pier for general cargo is being built, and expected to be completed in 15 months. Length of pier 360 m.
GENERAL: When the vessel is anchored, landing service is done by launches. They are called by one long whistle and two short ones. This service works 24 hours a day.

At night: A flashing light is to be used to call launches and not the whistle.

SHORE LEAVE: Passengers or crew do not need any special permit to land.
PURSER'S REPORT: See "Quayaquil".
AUTHORITY: Port Captain.

Egypt, Arab Republic of

ALEXANDRIA: 31.09 N. 29.53 E. (See Plan)

DOCUMENTS:

4 copies of Crew List.
Complete set of Manifests covering all cargo on board showing names of shippers and consignees.
4 copies List of passengers in transit.
Landing cards for passengers landing finally in A.R.E. and for those landing in A.R.E. in transit.
4 copies List of passengers finally landing in A.R.E. (if any) together with their addresses in A.R.E.
Deck log books showing date of last call at a A.R.E. port, completed up to the time of arrival.

For Quarantine: Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.
Deratisation Certificate should be handy for inspection.
Clearance from Last Port.

For Immigration Officer:

Arrival Immigration form, duly completed.
1 Passenger List.
List of Passengers finally landing, in duplicate.
Crew List.

Valid passport with entry visa is required for landing in A.R.E. for passengers landing. Emergency visa can be granted on arrival if so required.

For Customs Use:

Bonded Store List, in duplicate.
Crew List and passengers' List in duplicate, showing rate of consumption of each.

PILOTAGE: Compulsory. Pilot boards off harbour entrance. International code signals used.

RESTRICTIONS: Entrance channels 36 ft. depth, being dredged to 50 ft. Arriving vessels should keep 50 miles offshore between sunset and sunrise.

MAX. SIZE: Up to 35 ft. draft.

RADIO: Alexandria Radio, call sign SUH, operating 24 hours daily on 444, 500 and 8578 kHz and between 0600 to 1800 GMT on 12,974 kHz. Also harbour VHF Channel 16.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor. The Quarantine Doctor meets ships whilst entering the port and ships are boarded in turn.

In the event of a vessel arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of the ship's arrival at an A.R.E. port, the vessel is put under compulsory Quarantine, moored at an isolated berth and no shore contact is allowed. Nevertheless the ship can still carry out her normal operations on condition that all shore personnel are holding valid vaccination and/or inoculation certificates issued by the Quarantine Administration. The ship's personnel should also carry International Vaccination and/or Inoculation Certificates. Final landing passengers, not carrying such certificates, will be landed under Quarantine supervision and will be kept isolated at the lazarette until incubation period is over.

Pratique may be granted prior to ship's arrival provided the following conditions are adhered to:

(1) The vessel must be a regular liner known to the Quarantine Authorities and have a doctor on board.
(2) Details shown on the Quarantine Statement should be wirelessed to the Quarantine Authorities 24 hours prior to ship's arrival.
(3) Captains of vessels must declare before their arrival any accidents, which might have taken place on board prior to the arrival in port.
(4) The ship must not have called at any infected port.

TUGS: 5 tugs available up to 1,200 h.p.

BERTHING: Alongside quays in depths up to 35 ft.

TANKERS: Petroleum Basin: in West part of outer harbour, Berths 3 and 4, depth alongside 38 ft., max. length 700 ft., draft 35 ft. Berths 3 and 4: in East part of outer harbour. Stern to moorings.

It has been reported that tankers are required to take on ballast in excess of that deemed to be necessary by the Master, even in fine weather. One Master was ordered to bring his forward draft to 21 ft. Once the vessel was alongside a charge was made for deballasting the vessel.

FRESH WATER: Available by barge, and alongside most quays.

FUEL: Available by barge.

MEDICAL: All facilities available. International vaccination certificates required.

REPAIRS: *Ships Officers Report:*

Alexandria Shipyard: Builds vessels up to 40,000 tons. One drydock capacity 85,000 d.w.t., cranes with up to 30 tons capacity. One drydock capacity 20,000 d.w.t., cranes with capacity up to 30 tons. Fully equipped engineering workshops capable of carrying out extensive repairs alongside quays length 1,200 m. Depth alongside 11 m.

Alexandria Ship Repair Co: Ship repairs including engine repairs and boiler repair. Fully equipped workshops.

TIME: Winter: from 1st October to 30th April, local time 2 hours ahead GMT. Summer: from 1st May to 30th September, local time 3 hours ahead GMT.

HOLIDAYS: The following are the public holidays in the A.R.E.:

1st and 2nd Day of Ramadan Bairam
Courban Bairam Eve
} changeable dates

1st and end day of Courban Bairam
Mohamedan New Year's day
Prophet's Birthday (Mewlid El-Nabi)
} as based on Moslem Calendar

Eastern Monday (Sham El Nassim) (changeable); Evacuation Day (18th June); Revolution Day (23rd July); Victory Day (23rd December).

SHIPMASTER'S REPORT: *February 1976*

Approaches: Ships making the passage from Port Said to Alexandria are obliged to keep to the route laid down by the Egyptian authorities. The coastline is rather featureless and a good operational radar is invaluable. Radar conspicuous objects were found to be – Ras el Barr Lighthouse and fort, forts numbers 2 & 4, the forts and lighthouses at Brulos and at Rosetta Mouth and also Nelson Island.

The anchorage can be identified from a considerable distance by the number of ships at anchor off the port – often more than fifty. The prohibited area marked on Chart No. 243 to the East of Great Pass is ignored and ships anchor as convenient but as near to the Pilot ground as possible. Ras el Tin lighthouse, Great Pass beacon and the Minaret (248) were found to be good marks. There is a latticed beacon to the West of Great Pass Beacon which should not be confused with the latter. The new beacon is not marked on the chart and was stated by the Pilot to be for a new channel which is being constructed.

Arrival Procedure: It is important to register one's arrival with the Alexandria Port Control as soon as possible. This is done by means of VHF

At 1100 hrs. (approx.) a traffic list is broadcast and ships mentioned should contact Port Control and obtain berthing instructions. They will probably be told to move in to the Pilot boarding ground 2 miles N.W. of Great Pass Beacon. When there, they should anchor again and await either further instructions or the unannounced arrival of the Pilot.

Berthage is decided at a meeting held around Noon so there may be a supplementary traffic list around 1400 hrs. In any case, it is a good idea to call Port Control at least once a day to remind them that you are still awaiting a berth.

A Pilot will take the ship into the anchorage in the Outer Harbour where Health, Immigration etc. officials board and clearance given. The Agent may also board. The main radio transmitter is sealed at this time. The ship will then await allocation of a berth.

Anchorages: At the anchorage outside the port depths vary from 20 to 30 fathoms but the holding ground seems to be good. This ship lay comfortably with seven shackles of cable out. Ships usually leave each other ample room in case of bad weather. There are good anchor bearings.

The anchorages inside the Outer and Inner Harbours are very congested and the holding ground (said to be sand) is not good. Time spent at anchor here can be a very anxious period.

The ship was anchored in the Inner Harbour just off the end of the Passenger Quay. When it was pointed out to the Pilot that, in the Master's opinion, she was too close to the 3 fathoms line at the old Aircraft Moorings, the Pilot stated that it would be all right because the ship wouldn't swing that way. If the vessel had swung the other way she would have gone aground.

At 0300 hrs. the following morning the ship began to swing onto the sand bank. Fortunately there was no wind and it was possible to turn her, weigh anchor and find another anchorage. A call to Port Control on VHF was made for a tug and Pilot but was not acknowledged.

The main engine should be kept at very short notice when at anchor inside the harbour.

The accommodation ladder should never be left down while at anchor but should be raised and lowered as required.

It is usually an easy matter to hail a passing boat and bargain for a trip either ashore or to another ship. However, all ship movements and boatwork are officially prohibited after dark.

Pilotage: The pilot launches are Fairmiles (ex H.D.M.L's.) painted light blue with white wheelhouses and the word 'Pilot' in black on the side of the bridge.

All the Pilots employed spoke good English and were competent. They board at any time during the day and often without the slightest warning. They order tugs as they think necessary.

The beacons and leading marks in the Great Pass were good but the fairway buoy at the outer end of the channel is no longer there. Most of the mooring buoys marked on chart number 3119 have either been removed or changed.

As a result of experience, the Pilots have considerable skill in handling ships in very congested situations and they are to be relied upon.

Arrival Formalities: These are carried out at the Outer Harbour Anchorage. A list of documents required follows.

Documents:

2 Health Declaration*
1 Crew Customs Manifest
1 Arrival Form†
1 Stores List
1 Bond Stores List
8 Crew Lists‡

* Supplied by Quarantine Officers
† Brought out by Agent.
‡ This is the minimum number required.

Notes:— Customs manifests, stores lists and crew lists should be typed out on plain paper – there does not appear to be any proper forms.

Immigration officers wish to see all Dis 'A' Books and will then issue Shore Passes which will have to be filled in by the ship. On departure, the officials ask for the passes but, if they have not been collected will only request that they be destroyed when the ship sails.

Berthage: Every foot of wharfage is used and space is at a premium. This ship lay at Berths 16 to 20 and in both cases had ships ahead and astern with very little room between.

Berth 16 has unequal but good fendering, Berth 20 has none at all. Both are concrete wharves. There are an adequate number of bollards.

Berths 16 and 20 are both at the Passenger Quay and the soundings obtained by hand lead are shown on the plan. In theory, telephones are available at both berths. Water is laid on but the pipe is of small bore and delivery is slow (about 8.5 t.p.h.). Arrangements should be made through the Agent.

Berthage is said to be under the sole control of the Harbour Master. Ships may be ordered to berth, shift or move out to anchor without any warning. It should be noted that the Pilots always insist that Agents are told of a move the day before. In no case did this ship receive official notice. It is wise to hand a written notice to the Agent informing him of the time required to prepare the main engine for a move. However, in our case, the Agent did not bother to forward the information to the Harbour Master.

Being at the Passenger Terminal means that a cargo vessel has to move out to anchor frequently to allow passenger ships to berth. Unfortunately there seems to be only one other berth with enough water alongside for a fully loaded ship such as our vessel.

Repairs: Repair firms are available. There is a shipbuilding yard and graving and floating docks. Radio and radar servicing as well as gyro are available. There is a Lloyds Register surveyor.

There is an abundance of small firms offering to do scaling and painting quite cheaply.

Medical: The Agent will arrange for a doctor to visit the ship if required. Unless special equipment and/or facilities are necessary, this is the best arrangement.

Repatriation: Apparently available via Cairo Airport.

Stores: Only small quantities of fresh fruit and vegetables were bought and these were good and cheap but the Catering Officer should be prepared to bargain.

Bunkers: The barges arrived alongside without any warning. There were seperate barges for D.O. and I.F.O. The pumping rate for D.O. was 75 t.p.h. and for I.F.O., 143 t.p.h. It is reported that it is advisable to check the viscosity of fuel.

Communications: While at anchor outside the port, the ship's radio station is available and is by far the best means of communication.

Port Control, Pilots and launches all use Channel 16 both for calling and working. Making contact with Port Control to report arrival or request information is a matter of perseverance.

Agents: Memphis Shipping Agencies.

There is a main office in the city (Sesostris St.) to which the Master must go to draw money. Two hours will be needed for this plus an hour for travelling. In addition there are two offices in the Main Hall of the Passenger Terminal between Berths 16 and 20.

The Agents will arrange for doctor, waterman and watchmen. They will advance cash to the Master.

Garbage: Subject to negotiations with a private company. An old lighter will be moored alongside while the ship is in port. All garbage should be thrown into it. It is completely uncovered and after a while, in Summer time, would probably become highly offensive.

Fresh Water: Although there was no reason to suspect the water supply, Stabochlor was added as a precaution. As the ship may be sent out to anchor without notice for an unspecified time, it is wise to keep the water tank topped up.

Watchmen: The civilian watchmen employed were obtained through the Agent.

Two uniformed guards are put aboard by one or other of the authorities. Both the official and civilian guards will stop and search stevedores and take from them the cargo they have taken.

Tugs: These are arranged by the Pilot. There are several ranging from old coal burners to fairly modern diesels and they are well handled and efficient.

Cargo Work: It is supposed to be against the law to work frozen cargo during daylight hours. Therefore work was mainly carried on between 1700 and 0500 hrs. with a break about 2300 hrs., the same labour working through.

A gang consists of a total of 20 men. There is a foreman, two winchmen and eight stevedores in the hatch. The rest work ashore and on the lorries. The men in the hatch 'spell' each other and this is a major cause of lost time.

The butter and cheese was loaded onto pallets which were landed on the lorries and the cargo transferred. There are three pallets per gang but shortages often occur and the gear is not very good, two of the pallets breaking under load.

Crane and Velle derrick drivers were generally competent.

Lloyds Agency was asked to appoint a surveyor to witness the opening of the hatches and later to conduct a continuous survey during discharge. The surveyor was particularly helpful at the commencement of discharge. His firm asked for and received an advance of one hundred Egyptian pounds in cash from the ship because payment through the Agent was said to be slow.

Miscellaneous: Photography is forbidden within the port area and a permit must be obtained to take a camera ashore.

It is important to fit rat guards. a fine of £20 may be imposed for each one not fitted.

There is at least one floating crane with a SWL of 150 tons.

The Port Surveyor will ask to see the Suez Canal Certificate. If this has been retained by the Canal Authorities, he will require a signed statement to that effect.

Departure: The Agent will inform the various authorities of the expected time of departure.

Immigration officers will board to check any changes in the crew.

The Agent will put aboard the clearance and the sanitary clearance and the senior official guard will demand a written statement that all crew are aboard.

The sea Pilot will board with the harbour Pilot. The latter disembarks into a motor boat as soon as the ship is clear of the berth, the former when she is clear of the Great Pass. If the weather is rough, a pilot ladder will be required outside instead of the accommodation ladder.

AUTHORITY: Alexandria Port Authority.

MARSA AL HAMRA (El Alamein): 30.59 N. 28.52 E.

WEPCO Terminal

The Mono Mooring Buoy is in an open and unsheltered roadstead. The mooring buoy is located at Lat. 30° 58'.7 N. Long. 28° 52'.2 E. It is 53 miles on a bearing of 255° from Ras-el-Tin lighthouse, Alexandria, and 3 miles off shore in approximately 66 ft. of water.

DOCUMENTS:

4 copies Crew List.

Deck log books showing date of last call at a U.A.R. port, completed up to the time of arrival.

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

Deratisation Certificate should be handy for inspection.

Clearance from Last Port.

Bonded Store List, in duplicate.

Crew List and Passengers' List in duplicate, showing rate of consumption of each.

PILOTAGE: The S.-S.W.-W. quandrant from the buoy is prohibited anchorage area, Gebisa Reef is at Lat. 30° 58' 30" N., Long. 28° 49' 10" E., at 2.7 miles on a bearing of 260° from the buoy.

The mooring buoy carries a light, flashing 6 times per minute, and visible all round to a distance of 4.5—5 miles in clear tropical weather.

Surface current sets East at 10 miles offshore at the rate of 1 knot. Maximum rise and fall of tide in the mooring area is 2 ft.

Vessel arriving should approach to within 2 miles North of the buoy, where they will be met by the Harbour Master or Pilot who will advise the ship's Master on approaches to the mooring buoy, mooring and unmooring.

RESTRICTIONS: Normally vessels are moored during daylight hours only, but permission can be obtained to sail at night. arriving vessels should keep 50 miles off shore between sunset and sunrise.

HEALTH: Hoist International Code Quarantine signals when entering. Any sickness must be reported to local authorities.

RADIO: The commercial radio station at Alexandria will handle WEPCO radio traffic. Alexandria Coast Radio Station (call sign SUH) operates 24 hours a day on 444, 500 and 8,578 kHz, and between 0600 hrs. and 1800 hrs. GMT on 12,974 kHz.

Ships nearing Al Hamra Terminal may contact the terminal by FM/VHF radio on 156.70 mHz or 2182 kHz.

While at the mooring, ship-to-shore communication is by portable VHF radio-telephone units, under the direct charge of the Mooring Master.

TUGS: Not available and not required.

BERTHING: 2 good lines must be ready on the forecastle to be sent to the buoy plus a further 2 lines for use as messengers. Ship's lifting gear must be ready near the port manifold for lifting and connecting 2×12-in. hoses, with proper reducers if the manifold does not fit 12 in. hose with 150 ASA standard flanges. The total weight per hose assembly is approximately 5 tons. Maximum loading rate is 3,700 t.p.h.

A pilot ladder must be safely rigged for immediate use and long enough to reach the Mooring Master's launch. At night adequate lighting must be rigged overside to enable the Mooring Master to approach and board the ship safely, and searchlights should be rigged on both sides of the bridge to assist in running lines to the buoy.

BALLAST: No dirty ballast may be pumped overboard, and it is the ship's Master's responsibility to ensure that no oil – whether crude, diesel, bunker or bilge – is pumped or spilled into the waters of and surrounding the Terminal. Ballast can be pumped ashore through one or both of the floating hoses direct to disposal facilities on shore.

CUSTOMS ALLOWANCE: Present regulations at El Alamein allow each seaman to retain in his possession a maximum of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines. There must be no items aboard of Israeli origin.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: Nearest hospital facilities are at Alexandria, at least 90 minutes drive from the terminal.

TIME: From 1st October to 30th April, local time 2 hours ahead of GMT. From 1st May to 30th September, local time 3 hours ahead of GMT.
AUTHORITY: Western Desert Petroleum Company.

RAS GHARIB: 28.21 N. 33.06 E.

A natural port at the Western side of Suez Gulf sheltered by the Cape and a chain of reefs.
DOCUMENTS:
4 copies Crew List.
Deck log books showing date of last call at an A.R.E. port, completed up to the time of arrival.
Deratisation Certificate should be handy for inspection.
Clearance from Last Port.
Bonded Store List, in duplicate.
Crew List and Passengers' List in duplicate, showing rate of consumption of each.
Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.
PILOTAGE: Compulsory. International Pilot flag must be hoisted and Pilot will board vessel on arrival. Vessels should approach the anchorage from South-eastward and wait Southward of the prohibited anchorage until boarded by the Harbour Master who will pilot them either to moorings or to an anchorage clear of the prohibited area of the pipe-lines.

2 pairs of leading beacons stand about 4 and 5.5 cables, beside 3 others that stand about 12 cables Southward of Ras Gharib light-structure. About 2 cables further Southward are 2 leading beacons. All the above beacons are difficult to identify until close inshore.
ANCHORAGE: Ras Gharib anchorage, South-westward of the cape, affords some shelter, but a moderate swell round the cape is experienced on most days. Vessels can obtain anchorage in depths of about 5 fathoms.

During most of the year there are Northerly winds, force 3–5, but in December and January there are occasionally calms. On very rare occasions, there are Southerly gales of short duration which make the anchorage untenable.

The Northerly wind causes some swell in the anchorage, but it is not normally severe enough to interfere with the working of lighters or boats of moderate size. It is, however, unpleasant for small boats, except alongside the piers, which are well protected.

Except in the vicinity of the piers, there is usually some swell on the beaches. There is practically no rainfall and sand storms occur only very occasionally and they do not interfere with work in the anchorage.

Anchorage is prohibited, owing to the existence of pipe-lines, within an area indicated by pecked lines on the chart.
HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor, specially when it is presumed that the sick will be hospitalised.

The vessel's personnel should carry international vaccination and/or inoculation certificates.

MAX. SIZE:

	Northern Pier No. 1	*Southern Pier No. 2*	*New pier No. 3*
Depth at the pier	27 ft.	36 ft.	78 ft.
Max. permissible draft	24 ft.	32 ft.	55 ft.
Max. length for tanker	450 ft.	600 ft.	980 ft.
Min. length for tanker	350 ft.	500 ft.	600 ft.
Diameter of crude hose	18 in.	18 in.	30 in.
Diameter of water hose	10 in.	12 in.	18 in.
Min. capacity of tanker's derrick	5 tons	5 tons	5 tons
Loading capacity	650 t.p.h.	1200 t.p.h.	2000 t.p.h.
Max. permissible load	6,000 tons	30,000 tons	100,000 tons

SUPPLIES: Transit and fresh provisions as well as deck and engine stores provided by the United Arab Contracting and Marine Supply Company.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCE: Present regulations allow each seaman to retain in his possession a max. of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines. There must be no items aboard of Israeli origin.
TIME: *Winter:* from 1st October to 30th April, local time 2 hours ahead GMT. *Summer:* from 1st May to 30th September, local time 3 hours ahead GMT.
AGENT: Canal Shipping Agencies Co. Through its 4 branches, Asswan, Assuit, Damanhour and El Menia Shipping Agency. Cable address 'Canaship". Telex 2275. Agency UN, Cairo.

RAS SHUKHEIR: 28.08 N. 33.17 E.

ADVICE OF ARRIVAL: It is important that ships establish radio contact with "GUPCO" (Gulf of Suez Petroleum Co.) when 3 days distant from Terminal and maintain this contact until just previous to arrival at the Terminal. All ships should send a 72-hour ETA message to "Panintoil Cairo" giving the best estimate of ship's arrival time at the Terminal. This ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to "Panintoil Cairo" when the vessel is 24 hours and 12 hours distant from Ras Shukheir and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding ship's readiness to load on arrival and the number of hours that will be required to discharge ballast after ship is berthed in mooring.

6 hours before arrival, tankers should call Ras Shukheir on VHF Channel 16 to be advised if berthing is available or not, also to be advised of the approximate time for berthing.
DOCUMENTS:
4 copies Crew List.
Deck log books showing date of last call at an A.R.E. port, completed up to the time of arrival.
Deratisation Certificate should be handy for inspection.
Clearance from Last Port.
Bonded Store List, in duplicate.
Crew List and Passengers' List in duplicate, showing rate of consumption of each.
Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.
PILOTAGE: Compulsory. International pilot flag must be hoisted and Pilot will board vessel on arrival. Ras Shukheir lighthouse is located in Lat. 28° 08′ 15″ North, and Long. 33° 16′ 20″ East. It is a white flashing light, flashing every 3 seconds and visible for 10 miles.

Gebal Gharib, situated about 18 miles South-westward, 5,742 ft. high. It makes a nearly perfect equilateral triangle with Ras Shukheir and Ras Gharib Lighthouse. Ras Gharib Lighthouse is an excellent landmark whether by day or night for vessels approaching from North, but cuution should be exercised since this Light is obscured from 308° to the Westward. The sea-berth buoys are unlighted.

The company's Mooring Master will meet all incoming tankers about 2 miles from Ras Shukheir Terminal on a bearing of 290/300 degrees from Ras Shukheir Lighthouse and will advise ship's personnel in mooring and unmooring, raising and lowering of hoses.

Vessels are requested to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch. If at night, adequate lighting must be rigged overside for the Mooring Master to approach the side and climb the ladder safely.
ANCHORAGE: There are a number of oil well installations, structures and submarine pipelines located in the Gulf of Suez opposite to Ras Shukheir Terminal and approaching vessels are warned of these obstacles in manoeuvring and anchoring. Vessels should approach from the Eastward and if necessary anchor S.E. of the sea berth. *Never anchor North of the sea berth.*

Tankers should not anchor except in Ras Shukheir anchorage area which is located as follows:
Lat. 28° 04′ 30″ N.
Long. 33° 22′ 30″ E.
RESTRICTIONS: The Ras Shukheir Terminal operates 24 hours per day, 7 days a week. Ships are loaded and unmoored at any hour, weather and other circumstances permitting. Vessels are moored during daylight hours only, however, an exception may be made at the discretion of the Terminal.
HEALTH: The vessel's personnel should carry international vaccination and/or inoculation certificates.
RADIO: The Alexandria or Port Said coast radio stations will handle GUPCO radio traffic. Ships may contact GUPCO through their cable address "Gupcoil Cairo". The message will be received on their Cairo Radio Telegraph Office local teleprinter circuit. Tape perforated and relayed to the Ras Shukheir Terminal.

Cables from Ras Shukheir Terminal to the ships would be handled in the same manner. The Alexandria or Port Said coast radio stations transmit traffic lists at regular intervals listing the call signs of all ships for which they have traffic on hand. Thus any ship hearing its call sign in the traffic list of the coast station would call the coast station immediately after the traffic list.
VHF: When ships are near Ras Shukheir Terminal, they may use their FM/VHF radios to contact the Terminal using 160.70 mc/s or 160.80 mc/s.
MAX. SIZE:

	Pier No. 1	*Pier No. 2*	*Pier No. 3*
Depth at the pier	60 ft.	95 ft.	90 ft.
Max. permissible draft	45 ft.	55 ft.	58 ft.
Max. length for tanker	800 ft.	1200 ft.	800 ft.
Min. length for tanker	600 ft.	750 ft.	600 ft.
Diameter of crude hose	36 in.	36 in.	36 in.
Diameter of water hose	16 in.	16 in.	18 in.
Min. capacity of tanker's derrick	5 tons	5 tons	5 tons
Loading capacity	4000 t.p.h.	4000 t.p.h.	4000 t.p.h.
Max. permissible load	60,000 tons	200,000 tons	70,000 tons

SUPPLIES: Transit and fresh provisions as well as deck and engine stores provided by United Arab Contracting and Marine Supply Co.
SUBMARINE HOSE LOADING BERTH: Tanker is loaded by means of submarine pipelines to which are attached 2 hoses for oil loading and 1 hose for discharging ballast water. A 36 in. line transports the oil and a 16 in. line, the ballast water. The loading berth is located approx. 940 m. (3080 ft.) offshore in a water depth of approx. 60 feet (10 fathoms). The loading and ballast lines are laid in the same trench and run in a direction N. 55° 00′ E. The mooring buoys are

numbered 1, 2, 3, 4 and 5 starting with No. 1 North of the mooring and running consecutively in a clockwise direction.

LOADING READINESS AND ARRIVAL TIME: The company will make every effort to load vessels upon arrival or as promptly as berth is available, weather permitting. Notice of Readiness will not be accepted as at time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered as the time the Mooring Master boards the vessel or the time that vessel anchors, whichever occurs first.

FRESH WATER: Not available.

FUEL: Not available.

REPATRIATION: Not recommended.

CUSTOMS ALLOWANCE: Present regulations allow each seaman to retain in his possession a max. of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines. There must be no items aboard of Israeli origin.

TIME: Winter: from 1st October to 30th April, local time 2 hours ahead GMT. Summer: from 1st May to 30th September, local time 3 hours ahead GMT.

AGENT: Canal Shipping Agencies Co. Through its 4 branches, Asswan, Assuit, Damanhour and El Menia Shipping Agency. Cable address "Canaship". Telex 2275. Agency UN, Cairo.

SAFAGA: 26.46 N. 34.00 E.

DOCUMENTS: The following documents are required on arrival Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.
Deratisation Certificate should be handy for inspection.
Clearance from Last Port.
Complete set of Manifests covering all cargo on board showing names of shippers and consignees.
4 copies List of Passengers in Transit.
4 copies Crew List.
Deck log books showing date of last call at an A.R.E. port, completed up to the time of arrival at Port Said or Suez.

PILOTAGE: Compulsory. International pilot flag must be hoisted and Pilot will board vessel on arrival. Masters should endeavour to arrive at the N. end of the island by sunrise, at Safaga Port by early morning; the light behind them will show up the reefs clearly. Wind, light in the morning, gains strength during the day, making tying up more difficult. A beacon (Morewood Beacon), visible a mile off, is erected on the Southern spit of the island. After rounding the spit, Masters keep 5 cables clear of visible reefs and enter the harbour keeping the 2 large beacons to the North of the pier in line. Anchorage is then indicated by a small red or white flag. The Manager or his representative, of the Safaga Phosphate Company will meet ships in launch with instructions on berthing.

MAX. SIZE: Safe draft in the fairway, over reefs and alongside pier: 27 ft. 6 in.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor especially when it is presumed that the sick will be hospitalised.

The vessel's personnel should carry international vaccination and/or inoculation certificates.

BERTHING: There are 2 mooring buoys marked B and C and 2 mooring posts marked A and D.

(1) The anchor position is marked by a small red or white flag. When mooring, manilla ropes only should be used, as wire ropes can be run out afterwards when ship is alongside.

(2) Due to rocky nature of sea bottom, it is very desirable that ship in coming into berth, does not override her anchor, as, if this happens, chain is apt to foul coral bottom and cause trouble later on.

(3) Endeavour to have all way off ship when anchor position is reached. Drop anchor as close to flag as convenient and go astern. If necessary check cable when 2 shackles have been paid out.

(4) Run rope to Buoy C, run rope to Buoy B, run rope to Post D, then run rope to Post A. Run Spring to S1, S2, S3, and pull alongside. Company's launches will run all ropes.

(5) If wind is blowing strongly off shore, a Spring to S3, may be run immediately a good rope to Buoy B is made fast.

(6) The best way to reach the anchor position is to steer straight for same, keeping Buoy C on port side. This will keep vessel clear of Buoy C and when anchor is dropped, the stern should swing clear of this Buoy. If it does not, a rope can be run to S3 and the stern pulled in before falling back on pier.

(7) With anchor dropped as shown, 6 shackles should see No. 1 hatch at the pier, but if chain is slackened carelessly, it may foul bottom and be insufficient to reach pier.

If visibility is very good, a course can be made between the Hyndman and Cannon Reefs, and altered to bring the beacons referred to into line. Rock phosphate and ground phosphate are loaded at this port for shipment all over the world. The mines are situated some 30 km. away and are connected by company's own railway. Rock phosphate loaded (200 t.p.h.) from elevator and phosphate in bags by ship's gear. No water or stores.

Cargo vessels can berth alongside a new quay of 600 m. with a draft of 27 ft.

TIME: *Winter:* from 1st October to 30th April, local time 2 hours ahead GMT. *Summer:* from 1st May to 30th September, local time 3 hours ahead GMT.

HOLIDAYS: The following are the public holidays in the A.R.E.:

1st and 2nd day of Ramadan Bairam Courban Bairam Eve	changeable dates
1st and end day of Courban Bairam Mohamedan New Year's day Prophet's Birthday (Mewlid El-Nabi)	as based on Moslem Calendar

Eastern Monday (Sham El Nassim (changeable); Evacuation Day (18th June); Revolution Day (23rd July); Victory Day (23rd December). Friday is the Sabbath day.

AUTHORITY: Ports and Lights administration.

AGENT: Canal Shipping Agencies Co. Through its 4 branches, Asswan, Assuit, Damanhour and El Menia Shipping Agency. Cable address "Canaship". Telex 2275. Agency UN, Cairo.

SUEZ CANAL (including Port Said and Suez):

DOCUMENTS:

Also see "Restrictions".

The following documents are required on arrival;
4 copies Crew List.
Ship's Register and Suez Canal Special Tonnage Certificate.
General arrangement and capacity plans of the vessel, if transitting the Suez Canal for the first time, or, undergone any alterations.
Suez Canal Authority's double bottom tanks capacity form.
Navigability form.
Complete set of Manifests covering all cargo on board showing names of shippers and consignees.
4 copies List of Passengers in Transit.
Landing cards for passengers landing finally in the A.R.E. and for those landing in the A.R.E. in transit.
4 copies List of passengers finally landing in the A.R.E. (if any) together with their addresses in the A.R.E.
Deck Log Books showing date of last call at an A.R.E. port, completed up to the time of arrival at Port Said or Suez.
Mail Waybills for ports beyond Suez Canal ports and alternatively, a document from the Master is required (cargo and passenger ships only).
Quantity of bunkers, water and cargo on board.
Free Pratique Certificates issued by the local Quarantine Doctor.

In case of a Northbound vessel loading or discharging alongside quay staying more than 24 hours in Suez, the following documents should also be presented.

(1) Load Line Certificate.
(2) Safety Equipment Certificate.
(3) Radio Safety Certificate.
(4) Documents covering names and ratings of ship's officers and their diplomas.

For Pilot's Use:

(1) Arrival form of the Suez Canal Authority.
(2) Declaration "E" form for dangerous cargo on board in transit.
(3) Any other documents relating to shipments of dangerous cargo, radio-active or fissile.

N.B. Plain Suez Canal Forms are normally handed to Master by Pilots or ship's Agents, to be filled on arrival and also for use on consequent voyages.

Quarantine Authorities:

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.
Deratisation Certificate should be handy for inspection.
Clearance from last port.

Passports:

For Immigration Officer the following documents are required on arrival:

Arrival Immigration form, duly completed.
1 Passenger List.
List of Passengers finally landing, in duplicate.
Crew List.
Valid passport with entry visa is required for landing in U.A.R. for passengers landing. Emergency visa can be granted on arrival if so required.

For Customs Use:

(1) Bonded Store List, in duplicate.
(2) Crew List and Passengers' list in duplicate, showing rate of consumption of each.

PILOTAGE: *Port Said:* On arrival at the Pilot station at Port Said, vessels should contact the pilot boat announcing their arrival and to receive the necessary instructions for either: *(a)* to stop in order to receive a Pilot; *(b)* to anchor at the waiting area; *(c)* to proceed to the channel where the Pilot boards.

Vessels arriving from sea can contact the Canal Authority by wireless on the following frequencies:

Port Said: Port Office freq. 2182 kc/s. Calling Port Said 1; freq. 156.35 mc/s. Calling Port Said 7; VHF can also be used on Channel 16.

Pilot boat: freq. 156.3 mc/s. Calling Pilot boat at a range of 20 km. Call sign 4.

Vessels transitting canal can also contact S.U.Q. at Ismailia by

wireless, on the following frequencies: freq. 454 kc/s., 425 kc/s., 468 kc/s.

Waiting area at Port Said:

The waiting area where vessels anchor waiting for Port Pilots, is situated to the West of a line joining the West buoy of the first pair of light buoys and the fairway buoy, and South of the parallel of latitude passing through the fairway buoys. All ships waiting to enter Port Said Channel, have to anchor at this area. It is of great importance that a vessel should announce its arrival immediately on reaching the Pilot station for 2 reasons:

(a) To avoid delay in entering the harbour, as vessels are piloted in accordance with their turn in contacting the pilot boat.

(b) The arrival of a vessel is immediately transmitted to the Suez Canal Authority's Office, thus enabling the Agent to declare the ship in time, even before she enters the harbour and ensure her transit with the appropriate convoy. Such registration cannot be done if the vessel does not adopt the above procedure. Passenger vessels are given priority in turn, in entering the harbour.

Notice is hereby given that the entrance channel to Port Said harbour is buoyed as follows:

(a) A Fairway light buoy painted with white vertical stripes showing a white flashing light every 5 seconds approx. fitted with radar reflector and surmounted by a top mark resembling St. Andrew's Cross.

(b) *Position of buoy;* 032° 40′ – 6.04 miles from Port Said lighthouse.

(c) The first pair of light buoys indicates the entrance of the channel. The West buoy is painted black and surmounted by a conical superstructure giving a flashing green light.

(d) *Position of buoys:* 037° 03′ at a distance of 5.13 miles from Port Said lighthouse.

(e) The East buoy is painted red and surmounted by a cylindrical superstructure giving a flashing red light.

(f) *Position of buoy:* 127° 40′ from the West buoy at a distance of 1,969 ft. from the West buoy.

(g) Several other pairs of lights indicate the limits of the channel to the East and West. The East buoys are painted red and show a fixed red light and the West buoys are painted black and show a fixed green light.

(h) A fixed red light on a pylon on the North quay of Abbas Basin in line with an occulting red light on a pylon West of the fuel oil tanks at Raswa, indicates the axis of the entrance channel to the harbour.

Pilotage is compulsory on entering or departing Port Said Harbour as well as in the Canal and it is free of charge for vessels transitting the Canal except when shifting or changing berth. Vessels not transitting the Canal are subject to the payment of these charges both at Port Said and Suez. Vessels under 300 tons Suez Canal net tonnage are allowed to transit the Canal from any direction with a *Patron* (instead of Pilot) without being compelled to attend to convoy timings and after authority had been granted by the Suez Canal Authority.

In view of the continuous expansion in the sizes of vessels, with the consequent increase in the height of the hull, it is becoming very difficult for the roads Pilot to board vessels by using the customary rope ladder without causing him considerable fatigue. Therefore, it is recommended that Owners and Masters of large size tankers instal on their vessels a mechanical hoist for Pilot, and that one of the ship's officers be present to ensure its correct use, for the safety of the Pilots and to avoid accidents.

It is also recommended that the Mechanical Hoist be installed at a convenient distance from the effect of the propeller and away from the vessel's stern.

Suez:

As regards Suez Bay, it is sheltered from all points except from South. Very occasionally during Southerly gales (period December to April) motor-launches and boats are unable to communicate with ships in the roads.

Newport Rock lighthouse marks the Southern extremity and ships usually anchor opposite the entrance to the Suez Canal. All ships entering the port of Suez have to anchor in the pilotage zone which is limited by the imaginary line which extends from Ras Adabiya to Eyoun Moussa and comprises the coastal zone North of this line up to the Suez Canal entrance.

The town stands on a spit of the desert projecting Eastward with the Bay of Suez on its Southern side, Lat. 29° 58′ N., Long. 32° 10′ E.

Pilotage in the port of Suez is compulsory for all vessels entering, moving within or leaving the port.

Naval ships and vessels whose Suez Canal net tonnage is less than 300 tons are exempted from pilotage, but they have to contact the pilot boat for orders prior to making any movement. Vessels exempted from pilotage may have a Pilot if so required.

Pilotage Waiting Area at Suez: The boundaries of the pilotage waiting area for ships arriving at Suez from South have been limited as follows:

Northerly: Lat. 29° 52.16′ N.
Southerly: Lat. 29° 51.73′ N.
Easterly: Long. 32° 34.5′ E.
Westerly: Line joining Newport Rock and Buoy No. 3.

The area East to Long. 32° 33.93′ E. is allowed for ships drawing less than 25 ft. The area West 32° 33.93′ E. is for ships drawing more than 25 ft.

The pilot boat is normally stationed at the proximity of green buoy No. 1 South of Newport Rock.

When entering the pilotage waiting area, the following signals should be hoisted: Pilot – Vessel's signal letters. Quarantine – Nature of dangerous cargo (if any).

Vessels have to contact the pilot boat for instructions, reduce speed and have the pilot ladder ready.

Vessels wishing to anchor in Suez roads on their exit from Canal for the purpose of carrying out repairs, cargo operations, replenishment of bunkers, water, etc., should when ready to sail hoist the pilot signal and send the following message to S.U.Q. *Ismailia:* "Vessel's Name in Suez Roads ready to sail Please send Pilot thanks". In case of rough weather, the pilot boat leaves its station.

ANCHORAGE: Anchorage in the Port of Suez:

	Bearing of ship from Green Island Light	*Bearing of Green Island Light from ship*	*Distance from Green Island Light* (cables)	*Maximum Length of ship* (m.)	(ft.)	*Maximum draft* (ft.)
		Group "A"				
1 A	128	308	6.1	182.88	600	38
2 A	153	333	7.2	182.88	600	38
3 A	154.5	334.5	4.2	182.88	600	38
4 A	178	358	6.4	182.88	600	38
5 A	198	18	3.9	182.88	600	38
6 A	203	23	7.1	182.88	600	38
7 A	228	48	5.8	182.88	600	38
8 A	221.5	41.5	8.9	182.88	600	38
9 A	241.5	61.5	8.2	182.88	600	38
10 A	263	83	7.2	182.88	600	38
		Group "B"				
1 B	281.5	101.5	14.4	198.12	650	38
2 B	272.5	92.5	12.1	198.12	650	38
3 B	258	79	12.4	198.12	650	38
4 B	244	64	13.9	259.08	850	38
5 B	270	80	15.2	198.12	650	38
6 B	278	98	17.25	198.12	650	38
7 B	251.5	71.5	17.2	259.08	850	38
8 B	275	95	20.2	198.12	650	35
9 B	266	86	20.3	198.12	650	38
10 B	259.5	79.5	15.1	137.16	450	38
11 B	269.5	89.5	17.9	131.06	430	38
12 B	270.5	90.5	22.2	131.06	430	35
13 B	258	78	19.3	137.16	450	38
		Group "C"				
1 C	40	220	11.8	137.16	450	25
2 C	28.5	208.5	11.5	137.16	450	25
3 C	7.5	187.5	11.2	137.16	450	25
4 C	55	235	8.5	213.36	700	30
5 C	34.5	214.5	8.1	161.54	530	25
6 C	350.5	170.5	9.4	121.92	400	25
7 C	341	161	10.6	121.92	400	25
8 C	338	158	8.55	137.16	450	30
9 C	322	142	9.3	161.92	400	30
10 C	323	143	12.3	121.92	400	25
11 C	313.5	133.5	12.0	121.92	400	25
12 C	324	144	6.58	161.54	530	35
13 C	301.5	121.5	6.5	121.92	400	35
14 C	284	104	6.7	121.92	400	35
15 C	277	97	5.7	121.92	400	25
16 C	253.5	73.5	4.8	121.92	400	35
		Group "H"				
1 H	118	298	12.0	182.88	600	38
2 H	128	308	14.3	182.88	600	38
Adabiya Anchorage						
1	239	59	28.3	164.59	540	38
2	234	54	28.8	164.59	540	38

Radii of the turning circles of the Anchorages:

	Radius (m.)	(ft.)		*Radius* (m.)	(ft.)
			Group "A"		
1 A	274.32	900	6 A	274.32	900
2 A	274.32	900	7 A	274.32	900
3 A	274.32	900	8 A	274.32	900
4 A	274.32	900	9 A	274.32	900
5 A	274.32	900	10 A	274.32	900
			Group "B"		
1 B	289.56	950	8 B	289.56	950
2 B	289.56	950	9 B	289.56	950
3 B	289.56	950	10 B	213.36	700
4 B	350.52	1,150	11 B	198.12	650
5 B	289.56	950	12 B	198.12	650
6 B	289.56	950	13 B	213.36	700
7 B	350.52	1,150			
			Group "C"		
1 C	213.36	700	9 C	243.80	800
2 C	213.36	700	10 C	182.88	600
3 C	213.36	700	11 C	182.88	600
4 C	304.80	1,000	12 C	243.80	800
5 C	243.84	800	13 C	182.88	600
6 C	182.88	600	14 C	182.88	600
7 C	182.88	600	15 C	182.88	600
8 C	213.36	700	16 C	182.88	600
			Group "H"		
1 H	274.32	900	2 H	274.32	900
Anchorage for ships waiting to enter Adabiya:					
1	213.36	700	2	213.36	700

RESTRICTIONS: We reproduce hereunder Suez Canal Authority Circular No. 1/3T1-425004 dated 1st October, 1976 and updated by Circular No. 4751/T76 dated 13th October, 1976.

FIRST: Convoy Times:

(1) **From North:**

First Convoy N 1 Starts at 0200 hrs. and ends at 0600 hrs., direct to Bitter Lakes.

Second Convoy N 2 Starts at 0930 hrs. and ends at 1130 hrs. This convoy is to be moored at El Ballah Western Cut.

Vessels permitted to Join the second convoy:

Vessels up to 10,000 tons

Maximum draft 8.85 m. (29 ft.)

Maximum breadth for ships and floating units 30 m. (98 ft.)

Slow or damaged ships are to join this convoy providing their dimensions are within the limit shown above.

Number of vessels in this convoy are limited to the number of mooring berths available in El Ballah.

(2) **From South:**

One convoy starts at 0600 hrs. and ends at 1000 hrs.

SECOND: Following details and documents are required to be submitted:

(1) Masters are requested to *wire* at least 48 hours before vessel's arrival giving the following details:

- ✓ Gross and net tonnage with date of last Suez Canal Tonnage Certificate.
- ✓ Gross and net tonnage and date of last Registry.
- ✓ Nationality, Owner's name, previous name if any, and category of vessel according to its registry, i.e. Cargo, Containers Ship, Lash vessel, Ro/Ro.
- ✓ Has the vessel transitted the Canal before.
- ✓ Has there been any damages in the ship. If no alteration the following message is to be sent "PARTICULARS NO CHANGE".
- ✓ Documents must be submitted in any case.

N.B. – Huge vessels which their transit necessitate the employment of tug escort, Suez Canal Authority must be advised at least 4 days before their arrival by telex, No. Sucan UN 2153.

(2) *Documents*

(a) Suez Canal Special tonnage Certificate.
(b) Ship's Registry.
(c) Statistical Declaration.
(d) Information concerning a ship extracted from its official documents and its load of containers or barges.
(e) Declaration of Double Bottom Tanks.
(f) Declaration concerning vessels in ballast.
(g) Declaration of Navigability.

THIRD: Conditions for vessels to join the convoys, times for registration and submission of documents:

(1) **From Port Said:**

First South Bound Convoy N1

(a) Vessel *in Port* and requires to transit the Canal must adhere to the following:—

Called the Pilot (by hoisting the Pilot Signal)

Having registered for transitting at the measurement office.

The required documents were submitted latest at:

2200 hrs. for vessels not previously transitted or have previously transitted, but due to alteration must be remeasured.

2300 hrs. for vessels previously transitted.

(b) Vessels entering the Canal directly from Sea must:

Arrive at the waiting area at Port Said anchorage not later than 2000 hrs. for New V/L's., 2200 hrs. for vessels which have previously transitted.

Have called the Pilot.

It is permitted for these vessels to be registered preliminary in the Measurement Office without submitting the documents from the time of her arrival at Port Said anchorage till 2100 hrs. for new vessels or in such condition.

2300 hrs. for vessels which have previously transitted, provided that these documents are submitted before the vessel passes in front of the Suez Canal Authority's building.

(c) Latest permissible time to hoist the Pilot Signal:

Whenever the vessel is berthing is 2300 hrs.

Second Southbound Convoy N2

(a) (1)Vessel *in Port* must:–

Have called the Pilot,

Have been registered in the Measurement Office,

Have submitted the documents latest:

At 0530 hrs. for new vessels or in such condition

At 0630 hrs. for vessels which have previously transitted.

(2) Vessels are considered in Port and can join the convoy:

Vessels arrived at the waiting area at Port Said anchorage.

Before 0330 hrs. vessels which have not transitted the Canal before or in such condition.

Before 0530 hrs. for vessels transitted before.

These vessels will enter the Port when traffic permits.

It is permitted to register these vessels preliminary at the Measurement Office, without submitting the documents from the time of her anchoring at Port Said anchorage till the latest permissible time:

0330 hrs. for new vessels or such vessels.

0530 hrs. for vessels transitted before, provided that documents are submitted within one hour and half from the official time the vessel entered the outer harbour limited by Hectometer 22, otherwise the application for transitting will be cancelled and the vessel will be delayed from the convoy.

(b) Vessels which are allowed to enter the Canal from Sea direct without stopping in Port must:

Arrive at the waiting area at Port Said anchorage not later than

0330 hrs. for new vessels or in such condition.

0530 hrs. for vessels which have previously transitted.

Application for transitting the Canal should be registered not later than:

0430 hrs. for new vessels or in such condition.

0630 hrs. for vessels which have previously transitted and documents submitted before the vessel passes in front of the Suez Canal Authority's building.

(c) Latest time permitted to hoist the Pilot Signal wherever the vessel is berthed is 0630 hrs.

(2) **From Suez:**

Conditions to join the Northbound Convoy:

(a) Latest time permitted to arrive at the waiting area at Suez anchorage:

Tankers group, and the following are considered as such:

(1) Car carriers
(2) Ro/Ro
(3) Containers
(4) Lash vessels
(5) Ordinary vessels with 35 ft. draft.

By 0000 hrs. for tankers not transitted before,
0100 hrs. for tankers transitted before.

Other Vessels:

0130 hrs. for vessels not transitted before, 0230 hrs. for vessels transitted before.

(b) Registering of application of transit at the Measurement Office:

Submitting the documents: Short time after anchoring of the tankers or other vessels.

Without submitting the documents: As stated above in Para *(a)*.

(c) Latest time permitted to hoist the Pilot Signal: As stated above in Para *(a)*.

MAX. SIZE: We reproduce here under Suez Canal Authority Circular No. 2/6B5–422432. Dated 1st November, 1975.

Maximum dimensions and conditions of ships authorized to transit the Canal:

General:

(a) Maximum length of ships authorized to transit 1100 ft. (by length of ship it is meant the underwater length including bulbous bow).
(b) Maximum breadth 160.5 ft.
(c) The enclosed tables indicate the maximum draft authorized relative to the breadth of ship, speed and direction of transit. (See below).
(d) Ships transitting the Canal according to the the terms of this circular are required to fulfill the following conditions:

(1) The ship's loadline for tropical zones must be apparent and in compliance with the provisions of International Convention regarding loadlines.
(2) The ship's draft marks fore, aft and amidships will be existent on port and starboard sides.

(e) All ships have to conform to the Suez Canal Rules of Navigation and its Appendix for dangerous cargo.
(f) This circular cancels and replaces our previous circulars concerning the maximum dimensions of ships authorized to transit the Canal, and our circular No. 2/6B5 – 422174 issued 23.6.1975 concerning transit of ships at a draft of 38 ft.

Escorting by Suez Canal tugs:

(a) Ships with length less than 1000 ft. and breadth less than 147 ft. can transit the Canal without escort tugs.
(b) Ships with a draft not exceeding 37 ft. fore, aft and amidships can transit the Canal without escort tugs.
(c) Ships with length less than 1000 ft. but breadth from 147 ft. to the maximum of 160.5 ft. are to be escorted by 1 tug during the first transit of Canal. If this transit proves successful the following transits will be without escort tugs.
(d) If draft exceeds 37 ft. and up to the limit draft of 38 ft. (fore, aft and amidships), the ship will be escorted by 1 tug for her first transit. If this transit proves successful the following transits will be without escort tugs.
(e) Ships with length of 1000 ft. and up to the maximum limit of 1100 ft. are to be escorted during the first transit by 2 tugs. If this transit proves successful the ship will be escorted by 1 tug only during the following transits.
(f) Sisterships are not to get benefit of authorisation granted to a particular ship of the group.
(g) Ships which are to be escorted by 1 or 2 tugs according this circular have to notify Suez Canal Authority at least 4 days prior to arrival to Canal zone.

Draft for large ships in ballast:

The recommended draft for large ships in ballast is to be 25 ft. forward and 29 ft. aft. This draft may be amended to give the best view from the bridge, or better steering, but must not depass the maximum authorized draft according to the attached tables, and transit will be effected in good weather conditions.

Tables indicating the maximum draft for different breadths and speeds for ships:

Speed not exceeding 14 Km./H (From North or South):

Breadth (ft.)	113	116	119	123	126	130	133	138	143	148	153
Draft (ft.)	38	37	36	35	34	33	32	31	30	29	28

Speed not exceeding 13 Km./h. (From North or South):

Breadth (ft.)	120	123	127	130	134	137	142	147	150	157	160.5
Draft (ft.)	38	37	36	35	34	33	32	31	30	29	28

Special Transit

Speed not exceeding 13 Km./H. (From South):

Breadth (ft.)	128	131	134
Draft (ft.)	38	37	36

Exceptional Transit

Speed not exceeding 12 Km./H.

Breadth (ft.)	160.5
Draft (ft.)	29

We reproduce hereunder Suez Canal Authority circular No. 2237/T76 dated 31st March, 1976.

Recommended drafts for tankers in ballast when transitting the Suez Canal are as shown below:—

Tonnage S.D.W. From	To	Draft Forward (ft.)	Aft (ft.)
120,000	230.000	25	29
100,000	120,000	24	28
80,000	100,000	23	27
65,000	80,000	22	26
50,000	65,000	21	25
32,000	50,000	20	24
23,000	32,000	18	22
15,000	23,000	15	19

N.B. These drafts may be amended, when necessary, to give better steering.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor specially when it is presumed that the sick will be hospitalised. The Quarantine doctor meets the ships whilst entering the port and the ships are boarded in turn. To get a quick clearance and not to be left for later attendance, Masters are requested to receive the doctors as soon as they board and to have the following documents ready:

Quarantine Forms in Duplicate: When inserting the ship's register net tonnage special care should be taken in indicating same on the 2 quarantine forms (Form No. 15 Q.A.) as the dues are calculated on that tonnage, as incorrect information may cause complications.

Deratisation Certificate should be handy for inspection.

Clearance from Last Port should also be handy.

All ports at which the vessel has called as well as dates of sailings for the last 30 days should be inserted in the form.

Quarantine Signals:

By day: "Q" flag (signifying vessel healthy). *"Q" Over first substituted (QQ).* (Vessels have cases of infectious diseases more than 5 days ago, and there have been unusual mortality among the ratings or crew on board.) *"Q" over L flag (QL)* signifying (vessel is infected and has cases of infectious diseases less than 5 days ago.)

By night: red light over white: The flags and lights must remain hoisted until free pratique is granted. Ships in transit under Quarantine through the Suez Canal will use the same signals until they clear the other end of the Canal.

Important: In the event of a vessel arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of the ship's arrival at a U.A.R. port the vessel is put under compulsory Quarantine, moored at an isolated berth and no shore contact is allowed. Nevertheless, the ship can still carry out her normal operations on condition that all shore personnel are holding valid vaccination and/or inoculation certificates issued by the Quarantine Administration. The ship's personnel should also carry International Vaccination and/or Inoculation Certificates. Final landing passengers, not carrying such certificates, will be landed under Quarantine supervision and will be kept isolated at the lazarette until incubation period is over.

Pratique granted by radio: Pratique may be granted prior to ship's arrival provided the following conditions are adhered to:

(1) The vessel must be a regular liner to the Quarantine Authorities and has a doctor on board.
(2) Details shown on the Quarantine Statement should be radioed to the Quarantine Authorities 24 hours prior to ship's arrival.
(3) Captains of vessels must declare before their arrival any accidents, which might have taken place on board prior to the arrival in port.
(4) The ship must not have called at any infected port.

RADIO: ETA messages can be transmitted to Agent and Suez Canal Authority through Port Said Radio and/or Alexandria Radio for vessels calling at Port Said. The same procedure can also be adopted for vessels calling at Suez through Kosseir Radio.

As a rule, Masters should send their ETA not less than 48 hours before ship's arrival. In addition to the ETA, all requirements should be included in the wireless message as well as detailed information regarding cargo operations, draft, number of passengers disembarking, details of their baggage and crew changes, if any. If the ship is operating a tour in the town and/or a quick trip to Cairo, numbers of participants must also be contained in the same wireless message. Number of bags of mail to be discharged, if any, should also be included.

This is to enable the ship's Agent to notify, in good time, the parties concerned, to prepare in advance the necessary custom permits, and to ensure all requirements to be supplied without delay.

Vessels transitting the Canal for the first time, should also include in the ETA message, whether fitted with a projector or not and if in the affirmative to state number electricians required, thus enabling the Agent to make the necessary arrangements and avoid any delay.

In accordance with the Suez Canal Authority's instructions and in order to avoid delaying vessels from joining the respective convoys, vessels transitting the Canal for the first time are required to include the following information in their ETA message:

Suez Canal gross and nett tonnages and date of last Suez Canal Special Tonnage Certificate.

Registered gross and net tonnages and date of last register. Ship's nationality and Owner's name.

If the ship has previously transitted the Canal, the following information should be included in the ETA message:

Whether there have been any constructional changes. If no changes have taken place, the following message should be sent: "Particulars no change navigable".

RADAR/VHF: There is no radar service at either Port Said or Suez, but VHF can be used with the Suez Canal Authority on Channel 16. Transit vessels can also contact S.U.Q. at Ismailia by wireless on the following frequencies: Freq. 454 kc/s., 425 kc/s., 468 kc/s.

TUGS: Highly qualified crew are available on board several tugs owned by the Suez Canal Authority in Port Said, Suez and in all Suez Canal stations. These tugs assist vessels to berth in Port Said harbour as well as in Canal if a case arises. It is left solely to the Canal Authority to decide whether more than 1 tug is needed (free of charge) to assist any ship to moor in the Port Said harbour, but if a Master of a vessel finds it necessary to employ an extra tug for berthing or if he needs a tug for any other reason, such an operation will then be charged against the vessel.

Salvage tug boats:

(1) 3,000 h.p. *Mounir.*
(2) From 3,500 to 5,000 h.p. *Antar.*
(3) 6,500 h.p. *Mared, Shahm.*

Harbour tug boats:

(1) 800 h.p. *Moein, Monkez, Montasser.*
(2) 1,600 h.p. *Bori, Wakar, Chadid, Hout, Kirsh, Morgan.*

General conditions:

(1) Hire is reckoned from the time of starting to raise steam and ceases when the tug returns to its depot.
(2) The charges for "waiting" will not apply while the tug has to remain under full steam either for a long or short period, ready to proceed. These charges only apply while waiting for a long period and when the tug is able to bank fires while at the disposal of the client.
(3) Fractions of hour will be reckoned as full hour.
(4) Hire charges are increased by 10% when tug is used after official office hours, on Fridays or on public holidays.
(5) Hire charges are increased by 50% when tug is used outside Canal waters.
(6) Towing charges outside the territorial waters are agreed upon with the Authority.
(7) This tariff may be revised every 3 months without notice.

BERTHING: *Port Said:*

Places or Names	*Number*	*Nos.*	*Length of berth* (m.)	(ft.)	*Length of vessel* (m.)	(ft.)	*Observations*
Black Berths	7	1 N	220	721	72	563	On the Eastern side of the channel
		2 N	190	623	152	465	
		3 N	270	886	216	709	
		4 N	205	672	157	515	
		5 N	220	721	172	563	
		6 N	225	728	172	580	
		7 N	230	754	182	596	
Navy House	6	1			61	200	
		2			61	200	
		3			101	330	
		4			168	550	
		5			168	550	
		6			168	550	
Cherif Basin	10				134	440	6 vessels West
					168	550	4 vessels West of the Navy House
Abbas Basin	10				122	400	North of the basin
					183	600	South of the basin
Hussein Basin	17				91	300	South of the
					to	to	inflection point
					180	620	North of the inflection point
E Berths (1)	4	1 E	325	1,066	268	879	
		2 E	280	919	226	742	
		3 E	250	820	202	662	
		4 E	220	721	172	563	
Isolated Berths	5	11	280	919	226	742	
		21	250	820	202	662	
		51	315	1,050	259	833	
North Basin	2	1 A	260	853	209	686	
		2 A	280	919	226	742	
Outer Harbour Basin	7	3 A	without limitation				Vessel heading 270°
		4 A					
		5 A					
		6 A					
		7 A					
		8 A.N.					
		8 A.S.					
	5	3 A			28	270	Vessel heading 090°
	5	4 A					
		5 A					
		6 A			107	350	Vessel heading 090°
		8 A.S.					
Blocks Basin	10				122	400	Max. draft 9 m.
Red Berths	7	0 N	140	459	92	301	On the Western side of channel
		1 R	245	804	195	642	
		2 R	229	755	184	592	
		3 R	273	896	219.5	720	
		4 R	295	968	239	785	
		5 R	284	813	198	850	
		6 R	280	919	226	742	

Note: In good weather the length on buoys may be increased from 3 to 9 m. according to the length of the berth and height of the vessel.

Quays at Port Said: The Suez Canal Authority had built new quays to enable vessels to berth alongside at Cheriff and Abbas Basins. Length about 1300 m. Height about 2 m. from sea level. Also 14 cranes of 3 tons lifting capacity each, running on rails have been installed. Maximum draft allowed is 27 ft. The best part of these quays is ready and vessels with full cargo for discharge, are now berthing alongside. Vessels drawing more than 27 ft. have to lighten their cargo into lighters to that draft before berthing.

The distance between Bollards 23 and 24 South of deep Abbas Quay (30 m.) has been reserved for the berthing of one Ro/Ro vessel by the stern, within the present allowed draft (27 ft.).

Height of quay from sea level: 2 m.
Average tide all year: from 40 to 50 cms.
Thickness of fender: about 50 cms.
Breadth of quay edge: from 50 to 60 cms.

Suez:

Port Ibrahim: Port Ibrahim is the port of Suez. It consists of North and South basins.

North Quay: The North basin has, on the North side, a quay length of 2,415 ft. a total breadth of 975 ft. and depth of 26 ft. 06 in. at high tide. Quay is connected with the railway which runs the whole length of this quay and which can accommodate 4 large ships.

Berths 4 and 5 where stores are available are suitable for loading and discharging cement in big quantities.

Khedivial Quay: Berths Nos. 9, 10 and 11, length 119 ft., depth 24 ft. at high tide.

N.B. No cranes are allocated to these quays but mobile cranes (5-15 tons) only can be used.

Pilgrim's Quay: (Pontoon Berth) No. 6, 1 berth, length 500 ft., depth 24 ft. at high tide.

Adabiya Quay: This quay is situated on the Western shore of the Suez Bay, and is under the control of the Naval Authorities. The max. draft is 26 ft. 06 in. and can accommodate 4 large vessels. Quay is equipped with an electric crane, capacity 15 tons, max. length of vessel allowed to berth alongside quay 425 ft.

Marakib Quay: Situated at the entrance of the Canal depth 28 ft.; can accommodate passenger and cargo vessels.

Storage Capacity at Suez:

North Quay	40,150 sq. ft.
Pilgrims Quay	20,952 sq. ft.
Khedivial Quay	8,448 sq. ft.
	69,550 sq. ft.

While stacking spaces on the quays are: 332,050 sq. ft.

STEVEDORES: As stated in the ETA messages, Masters are advised to include in their messages details of cargo to be discharged in either Port Said or Suez, hatch by hatch and gangways required, if possible. All loading and discharging operations in Port Said harbour and Suez Roads are effected by lighters. There are steel lighters, wooden barges and self-propelled barges available for this purpose that will allow rapid work to be carried out. At Port Said several frozen cargo ships are provided with flat floating pontoons to facilitate discharge of cargo. At Port Said the draft of water does not allow ships to be berthed alongside quays to carry out cargo operations except in Cherif and Abbas Quays which accommodate vessels up to 27 ft. and consequently same are carried out also from and into lighters which are brought alongside the vessels whilst at anchor.

MEDICAL: It is very essential for Agent to receive advance notice of required medical attendance at least 24 hours prior to ship's arrival. All ordinary medical supplies are available and prescriptions are executed at any time at moderate prices and delivered during ship's stay in port. Medical assistance at Port Said and Suez is available. Consultations on board could be arranged through ship's Agent at any time by day or night. Reliable dentists are available at Port Said and could be consulted on board, if necessary, and during the following period at their clinics: From 0900 to 1300 hrs. and from 1600 to 1900 hrs.

Occulists are available for consultations at town clinics in Port Said during usual working hours. Opticians are also available at Port Said. The following hospitals are available with ample first, second and third class accommodation, accepting patients irrespective of nationality at reasonable charges:

At Port Said	*At Suez*
Al Mabarra Hospital	Al Helal Hospital
Notre Dame de la Deliverande Hospital	Abou El-Azayem Hospital
Two General Government Hospitals	General Government Hospital
T.B. Hospital	Isolation Hospital
Isolation Hospital	Ophthalmic Hospital
Ophthalmic Hospital	

Ship's personnel should carry international vaccination and/or inoculation certificates if a vessel is arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of arrival.

TANKERS: There is a bunkering station at Port Said harbour which can accommodate 4 tankers with not more than 38 ft. for the purpose of discharging their cargo of fuel or diesel oil to the different oil bunkering companies, but the petroleum basins for tankers at Port Said is as follows:

7 jetties can accommodate vessels with max. length of 555 ft., loaded with draft of 26 ft. 6 in.

If jetties 2 and 4 are occupied by large tankers, then No. 3 would have to be used by a small tanker.

Oil Storage: There is ample tank storage for bulk petroleum products.

New Suez Terminal: The terminal is situated in Suez Roads.

(1) Presently one berth has been reconstructed and is used by tankers chartered by EGPC.
(2) Minimum depth of water at L.W.O.S.T. in the approach Channel is 38 ft.
(3) Minimum depth of water at L.W.O.S.T. alongside each berth is 38 ft.
(4) Maximum safe length of tanker applicable 750 ft.
(5) Has six pipe lines each berth:–
    4 lines × 20 ins.
    2 lines × 16 ins.
    1 line × 4 ins. (fresh water)
(6) All types of oil products can be handled at this berth.
(7) No facilities are available at present for reception of ballast.

FRESH WATER: Is available for supply ex self-propelled barges to any quantity required at all times with a min. supply of 50 tons.

FUEL: Different grades of fuel oil are available from different firms. It is customary that the Master should advise in his ETA message of the vessel's requirements, fuel or diesel oil, at least 24 hours prior to ship's arrival into port. Bunkering is by contract between the Owners and the different bunkering firms, and nominations should be arranged for each vessel separately between the Owners and Head Office of the bunkering firm abroad, and for which payment is also effected abroad. Only the Compagnie Orientale des Petroles accepts payment in cash out of Shipping Account No. 2 for supplies effected by them and in which case a nomination is not required. Vessels can be berthed in the oil installation and thus can effect their bunkering requirements through pipe-lines. Tankers which are not gas-free, cargo vessels carrying dangerous materials and passenger vessels, which are moored opposite the town, can be supplied with requirements of fuel and diesel oil ex self-propelled barges with max. capacity of 700 tons.

FIRE PRECAUTIONS: In accordance with the Suez Canal Authority's regulations, tankers and vessels carrying dangerous materials must comply with their requirements, concerning fire regulations.

GANGWAY/DECK WATCHMEN: In both basins Cherif and Abbas at Port Said, where cargo vessels are normally berthed, ships' gangways can be used for disembarkation and embarkation. Passenger vessels are moored in special berths, i.e. Red Buoys, opposite the town, and can be supplied with 1 or 2 floating bridges (snake pontoon) which can connect the ship with the shore to enable the transit passengers and members of crew to proceed ashore. Cargo ships and other vessels mooring at the different buoys must lower their gangway to facilitate disembarkation and embarkation of ship's personnel as well as different officials. As far as Suez is concerned, all vessels must lower their gangway for the same purpose stated above. A deck watchman is recommended.

OPENING/CLOSING HATCHES: In accordance with Charter Parties, the opening and closing of hatches are dealt with as instructed in this Agreement, but for vessels carrying out minor cargo operations, it is customary that stevedores open and close ships' hatches against ships' account. To expedite vessel's transit, it is always recommended that ship's crew, during vessel's entering into the harbour should open the hatches and rig ship's derricks in order that they may be ready for cargo operations immediately upon ship's arrival at either Port Said or Suez.

CERTIFICATES:

Ship's Register.
Suez Canal Special Tonnage Certificate.
General Arrangement and Capacity Plans.
Load Line Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Documents covering names and ratings of ship's officer and their diplomas.

CUSTOMS ALLOWANCE: Every member of crew is entitled to have 1 carton of cigarettes, 8 ounces of tobacco, and 1 bottle of spirits for his own consumption during ship's stay in Port Said, Suez Canal transit, until vessel exits the Canal or vice-versa. Same applies to passengers, and a limited quantity of bonded stores can be permitted in public rooms and bars on passenger ships. Crew and passenger list, in duplicate, showing the amount in possession of each must be ready on vessel's arrival for submission to the Customs Representatives who normally proceed on board on arrival to seal up the Bonded Stores.

CARGO GEAR: These are normally supplied by the stevedores to comply with the nature of cargo discharged or loaded from cargo ships. Rope lengths and other cargo gear may be additionally required to expedite ship's discharge.

IDENTIFICATION CARDS: Every member of crew must have a seaman's book deposited with the Officer in charge for inspection, if so required by the Immigration Authorities. If a vessel is stopping in Port Said or Suez for a lengthy time, these seamen's books are normally taken off the ship by the said Authorities and kept in their departing office pending ship's sailing day when they are placed on board by the proper officer on a previous advice. Identity cards are also needed if a crew member wishes to proceed ashore for a short visit to the town or for proceeding to any excursion inland.

CONSULS: The following countries have Consulates or Consular Agencies in Port Said:

U.S.S.R.	Panama	Finland
U.S.A.	Republic of China	Sweden
Italy	Holland	Spain
Greece	Norway	U.K.
West Germany	Demark	

REPAIRS: Most types of repairs whether temporary or permanent can be carried out here by the Suez Canal Authority's shipyard or its

subsidiary companies, under the supervision of the appropriate surveyors, if necessary. Suez workshops are well equipped for undertaking all kinds of marine repairs to hull, main and auxiliary engines, boilers, navigation aids, radar and cooling, and installations.

Vessels carrying explosives are not allowed to carry out repairs. Tankers loaded or in ballast but not gas free are not allowed to carry out repairs, except in cases of force majeure of which the Canal Authority is sole judge. Gas-free tankers must present Gas-free Certificate before they are allowed to carry out any repairs. If unavailable, a chemist approved by the Suez Canal Authority can be appointed for testing the tanks and issuing the Gas-free Certificate. The aforementioned restrictions are applicable at Port Said only and not at Suez where vessels anchor at roads and are of no danger.

Other Repairs Facilities: Exist at Port Said for air conditioning, wireless telegraphy, radar, course and rudder recorder, refrigerators, and refrigerating units.

All kinds of repairs to echo sounding devices are carried out at Port Said by experienced specialists at reasonable charge, for the different types and dealt with by the Port Said Engineering Works with the exception of Raytheon radar, B.T.H. radar and Cossor radar which are represented by the Eastern Electronics.

DRY DOCKS: A floating dock of 25,000 tons, capable of docking vessels up to 50,000 d.w.t., is available at Port Said as well as a dry dock at Suez. Sufficient notice is required to book the date for either the floating or the dry dock.

Repair facilities are available at Suez, where a dry dock is suitable to accommodate vessels up to 8,000 d.w.t.

Dimensions:

Extreme length to inner sill	464 ft.
Breadth at entrance	73 ft.
Height of water over keel blocks:	
at Spring tide	22 ft., for., 26 ft. 3 in. aft
at Neap tide	19 ft., for., 23 ft. 3 in. aft

The max. draft at wnich a vessel can use the dry dock is 17 ft. for. and 20 ft. aft. Deeper drafts may be arranged with the management.

The Suez Canal Authority's Floating Dock and Shipyard is situated at the Northern entrance of the Suez Canal, opposite to Port Said lighthouse.

Ships up to 50,000 d.w.t. may undergo all kind of repairs in the shortest possible time. Tankers, by gas-freeing during their voyage from their home harbour to Port Said, will save at least 4 days if they carry out their repairs in our dock.

REPATRIATION: It is quite common that crew changes can be effected without any hinderance. As regards "signing off" members of crew, necessary facilities are given by the Immigration Authorities for their landing by granting them emergency visas and thus their repatriation arrangement by sea or by air can be effected easily. The "signing on" of foreign seamen is subject to the following regulations:

(a) A seaman and/or officer (non-residents) must be of the same nationality of the ship when arriving from abroad for this purpose.

(b) If a ship requires any rating, priority to engage Egyptian crew is given, unless indicated otherwise by means of a telegram or a letter from the ship's Owners abroad.

AIRPORT: The distance between the international airport at Cairo and Port Said or Suez is normally 2.5 hours. International airlines serve this airport. Cairo Shipping Agency is on constant contact with Agent for the necessary instructions.

In the interest of all and in order not to lose any time and to avoid any restrictions when sending crew members by plane to join their respective vessels, it is essential that the Agent concerned should notify by cable in good time the flight number as well as the time and date of the arrival in Cairo, thus enabling the Agent to notify Cairo Shipping Agency for the necessary clearance and as to whether they should be sent to join their vessels.

TIME: Local time is 2 hours ahead of GMT.

HOLIDAYS:

General Holidays Year: 1977

Date and Month	Name of Holiday
February 22	Unity Day
March 2	Mouled el Nabi (Birth of the Prophet)
March 8	Syria-Revolution Day
April 11	Sham el Nessim
May 1	Labour Day
June 18	Evacuation Day
July 23	Revolution Day
September 1	Libya – Revolution Day
September 14/17	Ramadan Bairam
October 6	Armed Forces Day
November 20/24	Courban Bairam
December 12	Mohammedan New Year

The Dates of the Islamic holidays are stated approximately. Working hours: 06.00–1800 hrs. Overtime: 18.00–06.00 hrs. Friday is the weekly day of rest but it does not affect labour.

If a holiday falls on a Friday it is possible that the following working day will be decreed a holiday also.

Ramadan: Thirty days' fast and how it affects labour; Cargo operations can be carried out at night and on Fridays and General Holidays against payment of overtime rates. Arrangements should be made on the previous working day to enable Customs to delegate the necessary personnel in time.

Local Holiday

Port Said:

December 23 ..... Port Said Day

Suez:

October 24 ..... Suez Day

POLICE/AMBULANCE/FIRE: Vessels which are moored in the harbour either in Port Said or Suez requiring assistance from the Port Police, should hoist the International Code Signal (Y.M.). There is always a police guard appointed by these Authorities on each ship in either Port Said or Suez harbour. First-aid assistance can provide ambulances at a request through the Agent. In case of fire on board when in port, the Captain must inform the Port Authorities (the Suez Canal Authority) immediately and at the same time give a general warning by means of a long blast of whistle or siren and be prepared to move his ship to another berth if so required. The Suez Canal Authority own 7 tugs and other craft distributed in various points of the Canal with individual output from 10 to 950 t.p.h. well equipped with fire-fighting appliances, ready for use at any moment.

TELEPHONES: There are no telephone facilities available in Port Said except at berth No. 4 Red where passenger ships are normally berthed, and this can be connected when snake pontoon is fixed with ship's gangway.

SERVICES: Port Said and Suez being situated at a middle point between the East and the West, have become an ideal centre for replenishing stores and provisions which can be obtained in bond or from town. The chandling firms attending to all ships calling at A.R.E. ports are:

(a) The United Arab Marine Contracting & Supply Co., (cable address: "Consup").

(b) The International Marine Services Co. (cable address: "Marinco").

Delivery of provisions and stores is effected 24 hours a day at Port Said and Suez.

It is recommended that Masters should order their requirements prior to their arrival with a view to avoiding any delay specially for ships joining the 0700 hours convoy Southbound.

Deck and engine stores are ample and are also available and sold at (in bond) prices.

Paints: All kinds (bottom, boot-top, topside, enamel, engine ready mixed, heat resisting, varnishes) are also available at "in bond" prices. Painting of ships or undertaking any maintenance work on board is permitted while ship is in port waiting to join the North or the Southbound convoys as well as while transitting the Suez Canal.

The following companies are represented here:

International Marine Paint	Represented by The United Arab Contracting Co. (cable address: "Consup")
Hamples Marine Paint	Represented by The International Marine Services Co. (cable address: "Marinco")
Campex Marine Paint	
Wiederhol Marine Paint	

Chemicals: The following chemical firms are represented in Port Said and Suez:

Gemlen & Co.	Represented by The United Arab Contracting Co. (cable address: "Consup")
Bird Archer/Norus (Tommons & Chartes) Chemicals.	Represented by The International Marine Services Co. (cable address: "Marinco")
Drew Chemicals Cameroid Products.	
Paroline Chemicals Cameroid Products.	
Walker Bow.	

Grease and lubrication oils. Available from:

Esso Petroleum Co.	Wisure Oil Co.
Misr Petroleum Co. (ex Shell)	Fina Oil Co.
Mobile Oil Co.	Gulf Oil Co.
Caitex Oil Co.	Castrol Burma Oil.
Ocean Oil Co.	

An advance notice of 48 hours is necessary to arrange for lubricating oils and/or bunkers required.

Charts: Admiralty Charts are available at Port Said only from the United Arab Marine Contracting & Supply Co. If any order has to be supplied at Suez, arrangements can be made for the required charts to be sent there.

Cigarettes: American and British cigarettes are available "in bond".

Technical Gases: Technical gases are also available at Port Said and Suez, and empty containers can be exchanged.

Fish: Bream, prawns, crab, rock fish available throughout the year; Mullet available June/February; Slip soles available November/March.

Vegetables: Beans, beetroots, cauliflower, cabbages, carrots, eggplant, endive, garlic, herbs, lettuce, marrows, parsley, radishes, spinach, tomatoes, turnips, escarole, onions, potatoes: *available throughout the year.*

Green peas, celery, pumpkins: *available January/March.*

Artichokes: *available October/April.*

Parsnips, spring onions: *available November/May.*

Green pepper, mint, lady's finger: *available June/September.*

Capsicum: *available May/December.*

Cucumber: *available February/December.*

Lemons, limes: *available throughout the year.*

Fresh figs, fresh dates: *available August/October.*

Bananas: *available October/June.*

Grapefruits, oranges, tangerines, *available October/May.* (When out of season import citrus are available).

Apricots: available May/June.

Water melons, sweet melons: *available May/October.*

Grapes: *available June/October.*
Plums, peaches: *available June/October.*
Mangoes: *available August/September.*
Pears: *available August/October.*
Apples: *available November/February* (also imported the whole year).

Eggs: Eggs are available throughout the year.

Meat: Fresh meat is only supplied to vessels having a Mohammedan Crew after permission is obtained from the Customs. Other vessels are supplied with "frozen" in bond.

Laundry: Well equipped, reliable and fast services are available at Port Said, through the ship's contractor. Ship's laundry is usually delivered within 24 hours. For vessels remaining a few hours in Port Said and transitting the Canal, their laundry could be collected, washed and ironed and then transported to Suez by special car or lorry for delivery to them there.

Garbage: No refuse or ashes are allowed to be thrown whilst ships are moored in Port Said, transitting the Canal or in Suez Roads. Small barges are available in Port Said and Suez for disposal of garbage or ashes, which craft can be obtained at a reasonable hire.

Motor Launches and Tugs Hire: Motor launches and tugs required for extra service are charged for as under:

At Port Said:

Motor launches per hour at day time, pt. 60 each; night-time, pt. 75 each; motor launches per day, pt. 300 each; night, pt. 450 each.

At Suez:

Motor launches per hour, pt. 1,250 each; tugs per hour, pt. 5,000 each.

Divers: Suez Canal Authority's Divers as well as other Contractors' experienced divers are available, capable of carrying out any kind of underwater repairs including welding and fees are subject to the kind of job to be performed. Anchors and other articles left behind by any ship in Canal waters are retrieved on no cure no pay basis.

SHORE LEAVE: Crew members are allowed ashore provided that they obtain a shore leave pass issued by the Immigration Authorities through the local Agent. They can proceed ashore by means of motor launches or rowing boats at their own expense. For vessels mooring opposite the town and connected with the shore by snake pontoon. Crew, together with passengers, can proceed ashore free of charge.

REGULATIONS: As Port Said and Suez are considered the leading ports to the Suez Canal, the Suez Canal Authority has established a convoy system for vessels transitting the Suez Canal.

It is important that the timings indicated are to be complied with. However, it is recommended that Masters arrive half an hour earlier to eliminate the possibility of their vessels being delayed on account of alleged late arrival at the pilot station or being considered as having anchored at an area away from the pilot station.

Conditions of Transit: Each vessel must be provided with a projector, either its own which should be in compliance with the Canal Authority's regulations, or a hired one obtainable from the Suez Canal Light Company. In case of hire, 2 electricians will be provided and the vessel is to supply them with food and accommodation.

2 or more mooring boats will be provided with a crew consisting of 3 men for each, to assist the vessel in mooring in the Canal when required. A sheltered place or accommodation, as well as food has to be provided by the ship.

Connecting links made fast to bitts or clinched on board should be hung over the vessel's side.

Wireless watch should be kept in accordance with the indication of the Pilot. The Authority's station S.U.Q. transmits on a frequency of 420 kc/s. (714 m.) Vessels communicating with S.U.Q. must transmit on a frequency of 425 kc/s. (841 m.).

Canal Pilots will be supplied with a wireless telephone to facilitate the despatch or receipt of messages. These sets require a direct current of 6 volts and special sockets according to the dimensions stated below, and which should be installed on the bridge within reach of the Pilot. The potential difference at the socket must not be less than 6 volts. The socket must withstand a current of 5 amps.

The socket's dimensions are as follows:

Diameter of each female	4 mm.
Length of each female	18 mm.
Distance between the two females	12 mm.

In the event of such sockets and/or the required current not being available, the telephone will be accompanied by a battery, at vessel's expense. Each vessel should be equipped with: (*a*) Rudder Angle Indicator, (*b*) R.P.M. Indicator.

According to Article 15 para. 2a of the Suez Canal Rules of Navigation, the above appliances must be fitted on the bridge in such a position that the Pilot may read both, without having to move away from his situation. An exemption to the above requirements is granted to vessels having a Suez Canal gross tonnage of less than 2,500 tons (excluding spaces not permanently added to the gross tonnage) and to ships not passing through the Canal more than 3 times a year.

Pilot Signals:

By Day: International Code Flag "G" under a black ball, (for entrance in Suez Basin, only "G" flag).

By Night: 3 white lights vertically hoisted, which must be clearly visible from the watch tower of the Suez Canal Authority's offices.

DEVELOPMENTS: Since the nationalisation in 1956 of the former Suez Canal Company, several improvements have taken place to facilitate transit and to accommodate larger ships. A by-pass between Kantara and Ferdan of about 9 km. in length exists to enable Northbound vessels to pass Southbound ships. The max. draft allowed presently in the Canal is 38 ft. for Northbound vessels only. The Suez Canal Authority is undertaking a project to be accomplished by 1978 aiming at increasing the Canal cross sectional area to 2,500 sq. m., so as to allow the transit of vessels with a draft of 48/50 ft. and a beam of about 135 ft. Same draft will be applicable to both Port Said and Suez and at the same time, as the project is being accomplished.

Plans have been confirmed to extend the capacity of the Canal to accommodate tankers of up to 150,000 d.w.t. Completion date of the work involved is presently uncertain. Additional plans call for further extension allowing transit of loaded tankers up to 300,000 d.w.t.

SHIPMASTER'S REPORT No. 1: *Suez Canal Transit (South/North) (January 1976)*

C. Guardafui light was clearly seen and identified at a range of 39 miles.

There was an oil rig operating Southwards of the Cape in approximate position 11° 44′ N.: 51° 21′ E.

The Straits of Bab El Mandeb were congested but the traffic separation scheme seems to be satisfactory. The passage of the Red Sea does not seem to be any different from the past.

When passing Aden, a preliminary message was sent to the Suez agent. This was of doubtful value but it is advisable to send a message addressed to 'Port Authorities Suez', via station SUK, giving the following information:–

Ship's name and flag.
Whether transit of canal is desired.
Destination.
Where from.
Cargo aboard.
Whether any dangerous cargo carried.
Draft
ETA at – 23° North, Straits of Gubal, Suez.

All radio messages through the Egyptian radio stations must have a signature, i.e. 'Master'.

The ETA's can be updated as necessary. The message to the Port Authorities is mandatory.

Approaches: The Gulf of Suez is congested by oil rigs – particularly in the vicinity of Ras Shakheir and the Ramadan and July oil fields where there are many rigs and flares and supply vessels crossing the Gulf. One oil rig was working in the middle of the fairway East of Ras Dib. With poor visibility, if a Southbound convoy were to be met in this region, it might be wise to proceed at manoeuvring speed.

Most of the lights in the Gulf are extinguished but Newport Rock lighthouse, the buoys and other lights in Suez Bay are working and are efficient.

A pilot cutter operates just South of the waiting area but an approaching ship will be called by signal lamp from ashore, asking for the ship's name and making "VHF". Contact is then established on Channel 16, changing to 6 when the ship will be told whether to anchor in the waiting area or remain under weigh until the Pilot boards.

Pilotage: The Pilot boards from a launch by means of the accommodation ladder (which should be lowered to within 3 ft. of the water) and takes the ship to her designated anchorage in Suez Bay.

Arrival Formalities: Quarantine and Customs authorities (about 8 people) board the ship at the anchorage together with the Agent. The accommodation ladder is used for all boarding and disembarkation within the canal. It should be raised when not actually in use otherwise the ship will be boarded by numerous "Businessmen".

A list of forms required is listed below but there are others which the various authorities bring with them and some are presented for filling in more than once and by different officials. This ship's transit was delayed because the Agents had not received funds from London. Deck log books for the past six months have to be landed.

The Suez Canal Cargo Declaration Form (in duplicate) is handed to the Pilot who disembarks at Ismailia.

At Anchor: With 3 shackles out, this ship lay comfortably at A8 berth. Some difficulty, however, was found in reconciling the various anchor bearings with the chart.

A bumboatman will seek permission to set up shop aboard. Care should be taken to agree methods of payment beforehand.

A listening watch should be kept for Suez Control on Channel 6. Water can be ordered through the Control and will be delivered in a large water boat carrying about 300–400 tonnes. Rate of delivery is about 50 t.p.h.

Convoy lists are made out at about 0300 hrs. and ships can call Suez Control soon after that to learn their convoy number and time of Pilot boarding. Convoys can start as early as 0500 hrs. This vessel was number 10 and hove up at 0830 hrs. Our searchlight was brought out at 1700 hrs. and the boats at 0500 hrs. We were asked to carry 4 extra boats but Pilots advise against this as the time taken to unload 6 boats can cause delay at the other end of the canal.

Transit: There seems to be no change in the transit of the canal. The Pilots change at Ismailia. The convoys cross in the Great Bitter Lake, anchoring as necessary. There is now one convoy from each end every day.

A Harbour Pilot takes over on reaching Port Said and, as soon as the searchlight and boats have been off-loaded and the ship has entered the approach channel, he disembarks.

The Agent will board at Port Said with yet another form to be filled in and he will return the log books.

Documentation:
2 Health Forms (Egyptian)
1 Passport Form (Egyptian)
1 D.B. Tank Statement (Egyptian)
1 Radio Frequencies Form
2 Cargo Declarations
*4 Cargo Manifests
8 Crew Lists
Plus several others which will be produced by the various officials.

* It was explained that our company's vessels do not carry cargo manifests but the Agent said that a typed statement of the amount of cargo aboard, destination and where loaded would suffice.

SHIPMASTER'S REPORT No. 2: *Suez Canal Transit (South/North) – (April 1976)*

After clearing Aden a radio message was sent to the Port Authorities Suez via Port Said Radio advising them of the following:—

Ship's name and flag.
Whether desire transit.
Destination and last port.
Cargo aboard total tonnage and type of cargo.
Whether dangerous or explosive cargo carried.
Draft.
British tonnages gross and nett.
Date Suez Canal Certificate issued.
Tonnages gross and nett from Suez Canal Certificate.
Advice as to whether searchlight required.
ETA's 23° North Straits of Gubal Suez.

During the passage in the Red Sea both Port Authorities and Agents received up-dated ETA messages. When using SUK radio to give up-dated ETA this station advised that a cable was necessary to be sent to Port Authorities Port Safaga via SUK giving ETA Strait of Gubal.

Navigation in the Red Sea does not seem to be any different from the past. The Traffic separation scheme in the Straits of Bab El Mandeb seems satisfactory.

Straits of Gubal and passage in the Gulf of Suez was in daylight. Especially in the Straits of Gubal very few seem to adhere to any form of traffic separation scheme. There is no doubt that if it were night time or poor visibility then it would be advisable to be on 'Stand-by'. There is now an oil rig 27° 57′ N., 38° 41.2′ E., or 349° 5.7 miles from Ashrafi Lt. Ho.

The Ramadan and July Oil Field area has many oil supply ships, most of the Southbound traffic was met in the Straits of Gubal thus further North it was very quiet.

The ship was anchored in the waiting area South of Newport Rock but alas this area shown as being to the East of the 2 green flash buoys is *now wrong!* The waiting area is to the S.E. of the most Southern Green flash buoy. About 1 mile South of the previous position. Evidently there is shoaling in the old area and ships have grounded.

On arrival at the waiting area the ship had to anchor as the Southbound convoy was clearing. A tug with Pilot Signal closed the ship to ask for information with regard to tonnages, cargo etc. After first vocal contact Channel 6 VHF was used. The ship was not called up by lamp nor did the Port Control answer any VHF requests etc. It would seem that if the Tug is on station advice is received from there. They did not, however, attempt to advise the ship that the waiting area had been altered.

As the ship anchored a boat came alongside with two watchmen but as I had not requested these and the visitors had not boarded they were sent ashore.

Later a Pilot boarded via the accommodation ladder to shift the ship from the waiting area to a designated anchorage, in our case '1B'. Ship was anchored in '1B' by 0030 hrs. on 12th, having arrived at the waiting area at 1947 hrs. on the 11th.

As the ship had some essential repairs to the main engine which would only take a short time, engines were immobilised. Pilot had advised that 0800 hrs. would be earliest time for transit. During the middle watch the area was hit by a fierce short lived blow from a Southerly direction. Although the vessel did not drag, ships close by did. It was necessary to pay out more cable to ensure a bulk carrier cleared us comfortably. During this time a ship called Port Control to say they had dragged some 3 to 5 cables.

As the weather for some 3 hours was considered bad for small boats the first of the visitors did not board until 0515 hrs.

The Canal Surveyor, who was the first to board was quite helpful and pleasant. He took the Suez Canal Tonnage Certificate for verification as the ship was making a first transit. This I have been informed will be returned to the Company in about 2 months.

Later other officials boarded about 0700 hrs. The Agent also came off with the mail. The 2 electricians for the searchlight insisted on being given a cabin or they would not remain on board. As there was no spare cabin, except one in the crew accommodation, I endeavoured to explain that a reasonable shelter had been built on the after end of No. 2 hatch. It transpired that in the end I moved a patient who had tonsilitis out of the hospital. Later the Canal Pilot informed me that the electricians can not be so demanding provided a reasonable shelter is provided.

Documentation was found to be as advised in the report above. One small difference is that the Cargo Declaration form is only required as 1 copy and is now in English with one form for South to North ship's and another for North to South ships.

At the moment there is only the 1 convoy each way per day. Hours of commencing transit seem a little doubtful. I gather that first Southbound ship leaves Port Said at 0200 hrs. while the first Northbound ship now leaves Suez at 0800 hrs.

Searchlight and 2 boats were brought alongside and loaded in ample time prior to the Canal Pilot boarding at 0909 hrs. I gather that because of the 'bad' weather for those few hours the delivery of searchlights and boats was delayed. Also no advice was obtainable on the VHF after 0300 hrs. with regard to convoy number or time of proceeding. About 20 minutes notice was given over the VHF.

The Transit was quite straight forward. Ship was anchored in the North Anchorage, Bitter Lakes for 3.5 hours, the Southbound convoy passing. Transit was commenced at 0947 hrs. At Ismailia the Pilot changed. He took the Cargo Declaration with him.

Port Said was reached at 0033 hrs. on the 13th. The Sea Pilot boarded here as did the Agents who returned the Ship's Register and Log Books which had been landed at Suez. The ship had to keep moving while the boats and searchlight and personnel were either off-loaded or disembarked. At night this is not easy and the whole crew are required to ensure a safe and quick operation. Once these matters were completed the Sea Pilot left well within the breakwater. Accommodation ladder was used at all times for Pilots, Officials and Agents boarding and disembarking. Fairway Buoy was abeam at 0148 hrs. on the 13th.

On the Eastern Banks of the Canal there is much work being done with levelling ground and widening the canal. Also in the Little Bitter Lake. *According to the Pilot 2 convoys from North will be put into operation in about 1 month.*

AUTHORITIES: The Suez Canal Authority is the Authority governing Port Said harbour as well as Suez Bay, as far as reception of ships and their transit of the Suez Canal. The Suez Canal Shipping Agencies Company is responsible for shipping companies in Canal Zone, Suez Gulf and A.R.E. Red Sea ports, through 4 branches at Port Said for each of which there is a branch at Suez and 1 in Cairo. Their names are:

Asswan Shipping Agency	tel. 5051 (7 lines)
Assiut Shipping Agency	tel. 2710 and 2722
Damanhour Shipping Agency	tel. 4231 and 2951 (3 lines) and 8606 (8 lines).
El Menia Shipping Agency	tel. 4462 and 3333 (3 lines). Telex No. 4187 Suezag.

There is also Cairo Shipping Agency, Tel. No. 77893, who looks after crew arrival and repatriation through Cairo Airport as well as receiving parcels for vessels calling at either Port Said or Suez.

WADI FIRAN: 28.44 N. 33.13 E.

An open anchorage on Sinai coast in the Gulf of Suez about 85 nautical miles South of Suez.

There are 6 large and conspicuous storage tanks in 2 parallel rows of 3 tanks each lined on shore near the pumping station and painted with aluminium.

PILOTAGE: Pilot boards each tanker at anchorage.

BERTHING: Tankers must approach berth from West, never from North, and must follow same track on their departure to be entirely clear of shallow water. Three berths: No.1, length 430 m., depth 17 m., for tankers of max. 47 ft. draft, 60,000 d.w.t., No. 2 length 430 m., depth 10.3 m. for tankers of max. 28 ft. (to be increased to 31 ft.) draft 25,000 d.w.t., No. 3 length 230 m., depth 6 m., for tankers (unloading only) of max. 17 ft., draft, 20,000 d.w.t. Tankers at berth will be connected to shore pumping station by submarine telephone cable. Mooring and unmooring operations normally take place in daylight.

AUTHORITY: Cie. Oriental des Petroles d'Egypt.

Eire

BANTRY BAY: 51.41 N. 09.27 W. (See Plan)

DOCUMENTS:
1 Crew List.
1 Stores List.
1 Crew Declaration.
1 Maritime Health Declaration.
Ship's Register (tonnage).
British Light Dues (receipts).
Clearance from Last Port.

APPROACHES: The approaches to the Bay are marked by the Sheep Head Light, visible 18 miles, Roancarrig More Light, visible 12 miles, and Whiddy Island Light, visible 3 miles.

The channel to the Gulf Oil Terminal is marked by radar reflecting buoys numbered 1 to 9, the starboard hand buoys having odd numbers.

The buoys marking the channel to the Inner Harbour do not have radar reflectors, but can easily be picked up on radar screens.

PILOTAGE: Pilot can be requested through Land's End Radio or Valentia Radio to "Harbour Master Bantry", giving 6 hours notice. Also through VHF Channels 11, 14 and 16 to Gulf Control when within 10 miles. Pilot boat blue and white fast motor launch (28 ft.) flying Pilot flag from stern.

For tankers of 250,000 tons and upwards, Pilot boards between No. 2 and No. 3 buoys.

For all other vessels, Pilot boards at West Ground Buoy.

ANCHORAGE: For tankers of 250,000 to 350,000 tons in vicinity of No. 2 Buoy.

For tankers of 45,000 tons in vicinity of No. 5 buoy.

All other large vessels, South of No. 5 buoy at mouth of Glengarritt Harbour. For smaller vessels, the East end of Whiddy Island (10 fathoms) and Bantry Harbour (25 ft. depth).

MAX. SIZE: (a) Oil Terminal – up to 500,000 tons with draft up to 96 ft.
(b) Bantry Harbour – draft not more than 25 ft.
(c) Bantry Pier – 150 ft. length with draft 12 ft.

HEALTH: All vessels must exhibit quarantine signals until quarantine formalities completed or free pratique granted. By day, International Code Flag "Q"; by night, red light over white light.

No person other than Pilot is allowed to board any vessel either alongside jetty or at anchorage until pratique has been granted. Pilot to be informed when any suspected disease or fever on board.

RADIO: Messages and ETAs through Valentia Radio, Land's End or any UK station. Port Operation (Gulf) Service, call sign "Gulf Control" (24 hours) VHF Channels 11, 14 and 16.

TUGS: Four tugs of 3,200 h.p. serve Oil Terminal. Two tugs of 300 h.p. available in Inner Harbour. Tugs' lines used.

BERTHING: Allowed at all stages of tide at Oil Terminal Jetty, depending on weather conditions.

Berthing at Bantry Pier depends on size of vessel and state of tide.

GULF OIL TERMINAL: Tankers berth alongside island jetty 1,600 ft. in length situated approximately 1,300 ft. offshore. The Island is comprised of a central loading platform with connected mooring dolphins. The outside berth designed for tankers up to 500,000 d.w.t. with max. draft of 96 ft. The inside (South) berth can accommodate vessels up to 85,000 d.w.t. with max. draft of 85 ft.

Outside berth fitted with 16-in. cargo lines.
Inside berth fitted with 12-in. cargo lines.
All bunker lines are 12-in. diameter.

BALLAST: There is strict enforcement of law against oil pollution. All ballast must be discharged ashore at terminal, where 16-in. ballast lines available to shore.

STEVEDORES: Available; 24 hour advance notice to Agent required.

MEDICAL: 24 hour standby launch available if vessel enters Bantry Bay for medical attention to crew. Vessels should give instructions whether doctor needed on board. Vessel should pass ETA through Valentia Radio to "Harbour Master Bantry". Or if in VHF range (50 miles) ETA to "Gulf Control" on Channel 14.

FRESH WATER: Available at Bantry Pier. At Oil Terminal Jetty or Harbour, water not available unless special arrangements made for barges.

FUEL: Gas oil and heavy fuel for tankers available at Oil Terminal. Gas oil and fuel available at Bantry Pier in road tenders of 20 tons.

REPAIRS: Local repair firms can undertake limited repairs, but nearest dockyard available for major repairs is at Cork.

DENSITY: 1025.

CUSTOMS ALLOWANCES: Tobacco: Depending on stay in port. Approximately 80 to 100 cigarettes per man for 2 to 3 days. Wine and/or Spirits: half litre per man.

IDENTIFICATION CARDS: Required.

REPATRIATION: There are facilities for crew repatriation.

CONSULS: No local representatives.

AIRPORT: Situated 48 miles away; 2 to 4 flights to London per day. Flights also to Paris twice a week.

TIME: GMT plus 1 hour during Summer months. GMT from October to March.

HOLIDAYS: Cargo work can be carried out on most holidays, except Christmas.

POLICE/AMBULANCE/FIRE: Call local exchange.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Permitted. Liberty launch available for tankers at 1 hour's notice.

SERVICES: Vessels requiring any of the following services should advise Agent prior to arrival, giving fullest possible details:

Divers: Services of divers available to vessels for inspection and freeing fouled propellers.

Provisions: Normal supplies of most categories available. Ample time should be given to ship chandler.

Laundry: Small laundry takes limited amount in Bantry (24 hrs.). Large amounts sent to Cork (24 hrs. return service), but rather expensive.

GENERAL: All vessels required to fly Irish Ensign on foremast during daylight hours. Irish territorial waters extend 12 miles seaward from mainland.

AUTHORITY: Harbour Master.

CASTLETOWNBERE: 51.41 N. 09.54 W.

DOCUMENTS:
Health Certificate.
Crew List.
List of Bonds.
Ship's Register.
Log Book.
Crew Passports.

PILOTAGE: No recognised Pilot; Pilot can be contacted through Harbour Master.

ANCHORAGE: See Charts: 13 ft. available at MLWST.

MAX. SIZE: Max. permissible draft 13 ft.

HEALTH: Customs give pratique if ship clear; if not, Doctor will be notified.

RADIO: Land's End and Valentia.

TUGS: No tugs.

BERTHING: In accordance with Harbour Master's instructions.

STEVEDORES: No stevedoring arrangements.

MEDICAL: No advance notice necessary. Hospital facilities available.

FRESH WATER: Available at quay.

FUEL: Diesel available at quay; no advance notice necessary.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Done by crew.

CUSTOMS ALLOWANCE: Tobacco: Captain 8 oz. Officers 6 oz. Crew 4 oz. Wine and/or Spirits: Captain: 1 gal. wine, 1 gal. beer and 1 pint spirits. Officers: 1 gal. wine, 1 gal. beer and 1 pint spirits. Crew: 1 gal. beer or 1 gal. wine and 1 pint spirits.

IDENTIFICATION CARDS: Required.

AIRPORT: 80 miles to Cork Airport, served by regular airlines.

TIME: GMT plus 1 hour. Reverting to GMT from October to March.

HOLIDAYS: Cargo work can be arranged on all holidays.

POLICE/AMBULANCE/FIRE: Police Castletownbere 2; Ambulance Castletownbere 4; Fire Castletownbere 49.

TELEPHONES: Not available for placing on board.

SHORE LEAVE: Allowed.

AUTHORITY: Ministry for Agriculture and Fisheries, Dublin.

CORK (including Cobh, Whitegate): 51.50 N. 08.17 W. (See Plan)

PORT LIMITS: Line joining Cork Head and Power Head.

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists.
1 Health Declaration.
3 Customs Manifests.
For shore formalities
Ship's Register.
Safety Equipment Certificate.
Safety Radio Certificate.
Load Line Certificate.
Light Dues Certificates.
Deratisation Certificate.

PILOTAGE. Minimum 24 hours notice of ETA and draft to Agent. Accurate ETA's are vital as Pilots only go afloat on this basis. When within VHF range, contact should be established through "Cork Harbour Radio" (see "Radio"). This station combines Port Operations and Information service and co-ordinates the pilotage service. The pilot launches are also fitted with VHF. Channels 6, 12 and 16.

For large deep-drafted vessels, Pilot usually boards up to 2 or 3 miles South of Roches Point. Compulsory river pilotage area extends upstream from Spit Bank Light.

ANCHORAGES: Safe deep-water anchorages as arranged with Pilots.

RESTRICTIONS: Navigation by night and day. Ships of 5.4 m. draft can make passage of river to Cork at any stage of tide.

MAX. SIZE: *Cork:* Max. length 152 m. extendable to 158 m. at discretion of Harbour Master. Draft fresh water on spring tides 8.7 m. on neap tides 7.8 m. *Whitegate:* Tankers up to 244 m. length. 11.6 m. draft. Max. draft 12 m. at highest tides.

HEALTH: Health Declaration form is presented to Customs Officer or Port Health Inspector and pratique issued without delay. in cases of disease on board notify Agents who inform Health Authorities.

RADIO: Coast Coast Station – Valentia Radio. W/T and R/T. R/T link call facilities available. Telex fitted. In U.K., Coast Stations also relay messages direct to Agents.

Harbour Radio: VHF Channels 12, 14 and 16, 24 hour watch maintained. Call sign "Cork Harbour Radio". A port operations and information service is provided and it is through this organisation that the requirements of the Harbour Master will be made known.

TUGS: Deep draft vessels take tug assistance from Horse Head to

Cork and vice versa. Tug's lines are used. Tankers use two to four tugs for berthing at Whitegate Terminal.

BERTHING: The quays at Cork afford good accommodation for vessels up to 152 m. LOA, on fresh water drafts of 7.8 m. on Mean Neap tides and 8.7 m. on Mean Spring tides with 9.1 m. alongside quay. The The Deep Water Quay at Cobh is 183 m. long and vessels of 5.5 m. draft can berth with safety.

SPECIAL CARGO FACILITIES:

Grain: Two mobile suction discharge plants, combined discharge rate up to 240 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft on spring tide. Storage capacity 80,000 tons.

Ore: One mobile loading conveyor, max. rate 250 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft on spring tides. Conveyor system used in conjunction with mobile cranes for discharging of vessel up to 5,000 d.w.t.

Coal/Fertilisers/Sulphur: Four 6 ton level luffing grab cranes combined discharge rate up to 360 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft.

Containers: 30 ton travelling transporter crane. Length of berth 122 m. Max. depth at LWOST 5.5 m.

Roll-on/Roll-off and Passenger Car Ferry Terminal: Max. height of link span 8.6 m. above LWOST. Min. height of link span 2.7 m. above LWOST. Max. loading 65 tons. Distance from side of berth to centre line of link span 11.4 m. Max. ship size 137 m. LOA. Berth dredged to 5.5 m. LWOST.

Livestock loading Ramp and Lairage: Max. ship size 106.7 m. plus LOA. Berth dredged to 5.5 m. LWOST.

Pfizer Jetty: Length between dolphins 259.2 m. Max. draft 10 m. on all tides.

Molasses discharge rate, 1,000 t.p.h.
Fuel Oil discharge rate, 600 t.p.h.
Sulphuric Acid discharge rate, 200 t.p.h.

STEVEDORES: Labour hiring times. Week-days 0800, 1000 and 1130 hrs. Gangs for week-end working must be hired at 1700 hours on Fridays. ETA advice could include number of gangs workable.

MEDICAL: All medical and hospital services available at short notice.

TANKERS: Irish Refining Co. Terminal at Whitegate is situated on East side of Lower Harbour. Two deep water berths for tankers. Max. size, 55,000 d.w.t. or 90,000 d.w.t. partly laden. Slop reception facilities available.

Length between dolphins, 366 m.
Crude discharge rate up to 4,000 t.p.h.
HOF loading rate up to 1,700 t.p.h.
Gas Oil loading rate up to 700 t.p.h.
Petrol loading rate up to 600 t.p.h.
LPG loading rate up to 20 t.p.h.

DENSITY: Average density of water in river 1008.

FESH WATER: Available at all quays ex hydrants – delivery rate 25 t.p.h.

FUEL: All fuels with exception marine diesel oil available. 24 hours notice required.

DEVELOPMENTS:

N.E.T. (Nitrigen Eireann Teo.). Jetty under construction in 1976/7 at Marino Point. Overall length dolphin to dolphin 375 m. Dredged to 10.6 m. to accommodate Ammonia tankers of up to 15,000 d.w.t. and bulk or general cargo vessels of up to 25,000 d.w.t. (Partly loaded). Vessels of up to 186 m. OAL and 9.5 m. draft will be acceptable.

Dredging: Dredging of Eastern entrance to a depth of 14.6 m. and a width of 152 m. is expected to be carried out in 1976. Dredging of Bar Rock Channel to a depth of 11.5 m. and a width of 240 m. is expected to be carried out in 1976.

WATCHMEN: Recommended but not compulsory.

OPENING/CLOSING HATCHES: Crew must perform this work as dockers decline to do it.

CUSTOMS ALLOWANCES: 200 cigarettes per man, and 1 bottle spirits per man.

CARGO GEAR: No special local requirements. Regulations similar to British Board of Trade safe working requirements.

IDENTIFICATION CARDS: Not required.

CONSULS: *France, Sweden, Norway, Netherlands:* B.A. Gotto, c/o James Scott & Co., Glanmire House, Lower Glanmire Road, Cork. Telephone No. 54200. *Finland, Denmark:* J. C. Hannigan, c/o James Scott & Co., Glanmire House, Lower Glanmire Road, Cork. 54200. *Belgium:* G. Jones, 33 St. Patrick's Quay, Cork. 54018. *Italy:* P. Cali, University College, Cork. 26871. *Germany:* T. J. Clifford, Cooper & Lybrand, South Mall, Cork. 21552.

REPAIRS: All types of deck and engine repair facilities available.

DRY DOCK: Verolme Cork dockyard main dry dock can take vessels up to 158.5 m. in length. Floating docks of 2,000 and 10,800 tons lifting capacity, also four 40 ton cranes. Able to carry out repairs to ships afloat of any tonnage using the port.

REPATRIATION: Can be carried out without difficulty.

AIRPORT: Five miles from city. Regular flights twice daily to London. Onward connections to all destinations.

TIME: GMT from 0200 hrs. on Sunday following 3rd Saturday in October to 0200 hrs. on Sunday following 3rd Saturday in March (unless latter is Easter Saturday, in which case to 0200 hrs. on Sunday following 2nd Saturday in March).

One hour ahead on GMT (i.e. Standard European time) for remainder of year.

HOLIDAYS: St. Patrick's Day (March 17th); Good Friday; Easter Monday; First Monday in June; First Monday in August; Christmas Day (December 25th); St. Stephen's Day (December 26th).

POLICE/AMBULANCE/FIRE: 999 is emergency number for all services. Actual: Police 23161; Fire 21107; Ambulance 21107.

SERVICES: All tanker services available at Whitegate. Otherwise, various general services required by ships available at Cork.

SHORE LEAVE: No restrictions on shore leave.

DELAYS: Except waiting for tide there are very few occasions on which entry to or departure from the port is subject to delay.

AUTHORITY: Cork Harbour Commissioners.

AGENT: James Scott & Co. (Cork) Ltd., Glanmire House, Lower Glanmire Road, Cork. Telephone No. 54200, and Yacht Club Building, Cobh. Telephone No. 811549, Telex 6120. Cables "Scott Cork".

DUBLIN: 53.21 N. 06.15 W. (See Plan)

PORT LIMITS: Port of Dublin includes all water between Rory O'More Bridge (over River Liffey) and imaginary line drawn from Martello Tower at Sutton on North side of Dublin Bay to Sorrento Point at Dalkey on South side, but excluding Dun Laoghaire Harbour.

DOCUMENTS:

Forms C. 1 or C. 2 Customs report form (actually a copy of Manifest).
Form CU. 35 Victualling Bill (note covering Bonded Stores to be loaded Dublin).
Form CU. 7 Entry Outwards in ballast (for vessels sailing light).
Form CU. 10 Entry Outwards with cargo.
Form CU. 25 Entry Outwards (details of previous and forthcoming voyages.
Health Form.
"Jerque" Note (list of bonded stores on board on arrival).
Crew List must also be presented with personal declarations of dutiable possessions (i.e. radios; T.V.s; record players, etc.).

PILOTAGE: Limits of Dublin Pilotage District are waters of River Liffey between Butt Bridge and of sea Westward of Sixth Meridian between parallels of latitude passing through Bailey Lighthouse on North and through Sorrento Point on South including all bays, creeks and harbours and all tidal and closed docks within such area. Following classes of ships exempted from compulsory pilotage if not carrying passengers:

(1) Ships trading coastwise of not more than 200 tons gross tonnage.
(2) Home trade ships (including ships trading coastwise), of not more than 450 tons gross tonnage, excluding ships carrying petroleum or explosive cargo.

Incoming Vessels: Pilots board incoming ships from black-hulled pilot cutter in Dublin Bay. Cutter only cruises when vessels are expected, and accurate ETA requested to avoid delay.

ETAs should be given 12 hours before arrival and amendments may be made up to 2 hours before original ETA.

ETAs and any subsequent amendments should be passed by radiotelephone (VHF Channel 16; call sign Dublin Harbour Office) or radiotelegram to "Harmaster Dublin".

Holders of Dublin Pilotage Certificates should indicate this by flashing single letter signal "C" when approaching pilotage area between sunset and sunrise.

Vessels Outward Bound or Shifting: Order for Pilot should be made early as possible through Harbour Office Tel. 748771 or Telex No. 5476 during office hours; and Tel. 48772 outside office hours. Following details should be given: name and situation of vessel, destination, draft, time of departure. It must be stressed that such orders must be made in sufficent time making due allowance, particularly at night, for accessibility of vessel.

ANCHORAGES: Scotch Bay – S.E. Dublin Bay and just East of Dun Laoghaire 6/10 fathoms at low water.

RESTRICTIONS: Draft restrictions: 30 ft. HW Neap Tides; 30 ft 6in. HW Normal Tides; 31 ft. 6 in. HW Spring Tides. Vessels less than 400 ft. overall, drawing 20 ft. 6 in. or less can enter at any state of tide.

ENTRANCE: Approach well lighted and easy of access. Inner Channel of Harbour, formed by almost straight channel of River Liffey from entrance at Poolbeg Lighthouse to Alexandra Basin, is 800 ft. wide for greater part of length and maintained at depth of 27 ft. LW. From Alexandra Basin entrance, River is quayed for a distance of nearly 2 miles to Butt Bridge in centre of City.

MAX. SIZE: State of tide governing max. draft, but no length or breadth restrictions.

HEALTH: Pratique automatic for movements Ireland/U.K. area. Maritime Declaration of Health indicates requirements. This declaration must be submitted on arrival by master of ship coming from foreign port. This requirement does not now normally apply to vessels trading *solely* between the Republic and ports in West Germany, Belgium and Netherlands, Atlantic and Mediterranean coast of France, Italy and Greece. Other requirements mentioned on Maritime Declaration of Health form still apply to such ships.

"Foreign Port" is port situated elsewhere than Eire, Northern Ireland, Great Britain, Isle of Man, or Channel Islands.

Master of foreign-going ship may be asked to produce valid Derating Certificate or Derating Exemption Certificate in respect of vessel. Travellers (passengers and crew) may be requested to produce valid certificates of vaccination against smallpox if from an infected local area, or if from countries in Africa, Asia, North and South America. This requirement does not apply to arrivals from Azores, Bermuda, Canada, Canary Islands, Madeira, French Guiana, Guadeloupe, Martinique, Greenland, Surinam, Netherlands – Antilles, United States of America. Ships may be subjected to sanitary inspection by inspectors of Port Health Service.

Swill must not be landed from vessels which trade outside Eire.

Granting of pratique by radio not practised at Dublin, But is under consideration at present.

RADIO: Valentia Radio, Ireland. Portishead Radio, U.K. Anglesea Radio, U.K.
TUGS: Normally meet vessels at North Bank Lighthouse (roughly half-way mark of main channel) 1 mile West of Poolbeg Lighthouse. Tugs rope optional.
BERTHING: Customs House Docks – from 2 hours to one half hour before high water. Otherwise no restrictions.
The area available for shipping extends from Eastern Breakwater to Butt Bridge and inclusive of Alexandra Basin, Alexandra Basin Extension, Custom House Docks and Grand Canal Docks; it is 227 acres in extent.

North Side of the River, from Butt Bridge to North Wall Light, available as berthage, 7,529 ft., depth LW 9 to 22 ft.

South Side of the River, from Butt Bridge to Ringsend Gut, available as berthage 5,728 ft., depth LW 16 to 22 ft.

South Bank Quay serving Electricity Supply Board's Ringsend Power Station, 700 ft., depth LW 28 ft. Two transporter cranes of 5 tons each for discharge of coal, and pipe-lines for discharge of oil.

Alexandra Basin. Quays on *South* and *West* sides 2,690 ft., depth LW 24 to 26 ft.

Alexandra Quay West on North side of Alexandra Basin, 1,230 ft., depth LW 32 ft.

Alexandra Quay East, 1,200 ft., depth LW 32 ft.

Alexandra Basin East comprises East side Ocean Pier, Alexandra Quay East and East and West Oil Jetties.

Fertilizer Jetty in Alexandra Basin has a main section of 750 ft. used for bulk cargoes, depth LW 31 ft. with provision for deepening, equipped with pipe-lines for liquid sulphur and ammonia; conveyor and 2 electric cranes of 10 tons each for rock phosphate and potash in bulk. 300 ft. long approach section leading to main jetty (with special facilities for working acids and ammonia and loading out grain) for accommodation of smaller bulk vessels.

Ocean Pier West at Eastern end of Alexandra Basin, 1,372 ft., depth LW 32 ft.

Ocean Pier South at Eastern side of Alexandra Basin entrance, 467 ft., depth LW 32 ft.

Ocean Pier East, 800 ft., depth LW 32 ft.

STEVEDORES: ETA required by Stevedores before 1500 hrs. Monday to Thursday for work the following day, and by 1500 hrs. Friday for work Saturday, Sunday or Monday.

Average discharge rates: *Grain:* 3,000 tons per day. *Timber:* 30 standards loose per gang/day. 120 standards packaged per gang/day. *General:* Bagged cargo and fast general, including paper, 250 tons per gang/day. *Other Generals:* 90 tons per gang/day.

TANKERS: No slop residue discharge facilities.

Tanker Berths	*Max. Draft*
No. 1, West Oil Jetty, West Side	31 ft.*
No. 2, West Oil Jetty, East Side	31 ft.*
No. 3, East Oil Jetty, West Side	31 ft.*
No. 4, East Oil Jetty, East Side	19 ft.
South Bank Quay (E.S.B.)	27 ft. 6 in.*
South Bank Quay (Poolbeg)	35 ft.*

*Time suitable for navigation in approaches – 1 hour before High Water.

Common User Oil Pipe-line System: This system provides 5 pipe-lines to Eastern Oil Jetty and 7 pipe-lines to Western Oil Jetty. Cargoes of tankers berthed at these jetties can be discharged to storage installations of any of the oil companies.

E.S.B. (Electricity Supply Board): At Poolbeg Jetty (formerly known as "Pigeon House 'B' Jetty"). Max. size 35,000 d.w.t. with the aid of tugs. Present depth sufficient for vessels of this size.

DENSITY: 1025 at all stages of tide.

FRESH WATER: Available at all berths by 2.5 in. hoseline – 8/10,000 gal. per hour per hydrant.

FUEL:

Grades of Fuel Oil	*Viscosities*
Heavy Fuel Oil	3,500 sec. max.
Inter. Fuel Oil	1,500 sec. max.
Medium Fuel Oil	950 sec. max.
Light Fuel Oil	200 sec max.

Advance Notice required. Bunkering by pipe-line depends on availability of Oil Berth. Bunkering by Oil Barge normally a.m. notice on day required. Bunkering by Road Tanker – 24 hours notice.

FIRE PRECAUTIONS: Port By-Laws; Harbour Master's orders/Letters to Masters. Ref.: Board of Trade "Carriage of Dangerous Goods in Ships" and Aeby "Dangerous Goods".

Packed Petroleum: Small consignments (7,000 gal. max.) Class A product – must be removed from port area ex-ship, or to special compound. Class B or Class C may be permitted on quays after check for leaks.

Fibrous Cargoes: See Directives No. 2 and 3 to Masters. Jute, hemp and sisal must be removed ex-ship from port area.

Cotton, cocoa fibre, kapok, etc., must be removed ex-ship to Hazardous Goods Shed.

General: Harbour Police-Watch obligatory during handling of all hazardous or inflamable cargoes, and on tankers during vessels' stay in port. No smoking permitted in Oil Zone, sheds, etc.

GANGWAY/DECK WATCHMEN: If no watchmen from crew, then shore watchman is recommended.

OPENING/CLOSING HATCHES: Patent hatches by crew; other hatches with some assistance from dockers.

CERTIFICATES:
Certificate of Registry.
Radio Safety Certificate.
Load Line Certificate.
Current Trinity House light bills.
Safety Equipment Certificate.

CUSTOMS ALLOWANCE: Tobacco per 8 days: 200 cigarettes – Master; 150 cigarettes – Officers; 100 cigarettes – Crew. Wine and/or Spirits: quarter pint per day per man.

CONSULS:
Brazil: P. J. Murphy, Honorary Consulate of Brazil, Shottery, Killiney, Co. Dublin. Tel. 851971.
Denmark: Office address, Royal Danish Consulate General, Hainault House, 69/71 St. Stephen's Green, Dublin 2. Tel. 760122.
Honorary Consul General: Jorgen H. Tholstrup.
Dominican Republic: 49 Upper Mount Street, Dublin 2.
Honorary Consul: Dr. J. I. Fitzpatrick
Finland: *Honorary Consul General:* John Donnelly, F.C.A., B.L., Gardner Donnelly and Co., 65 Fitzwilliam Square, Dublin 2. Tel. 765153.
Greece: North British and Mercantile Buildings, 32 Nassau Street, Dublin 2.
Honorary Consul: Cecil D. Mooney.
Honorary Vice-Consul: Douglas T. Figgis.
Iceland: *Honorary Consul General:* Thomas P. Hogan, 6 Monkstown Avenue, Co. Dublin. Tel. 808103.
Latvia: *Honorary Consul:* John F. Foley, 51 South Mall, Cork.
Mexico: *Honorary Consul:* Don McGreevy, Building Centre, 17 Lr. Baggot Street, Dublin 2. Tel. 762745.
Monaco: *Honorary Consul General:* The Lord Killanin, 30 Lansdowne Road, Dublin 4. Tel. 763362.
Honorary Consul: A. G. Quirke, Albest Lodge, Dublin 4.
Norway: *Honorary Consul:* John Guinness, 17 College Green, Dublin 2. Tel. 782444.
Panama: *Honorary Consul:* Gene Kruger, Gresham Hotel, Upper O'Connell Street, Dublin 1.
Honorary Vice-Consul: Paul J. Byrne, Panamanian Consulate, 20 Eden Quay, Dublin 1. Tel. 747867.
Peru: *Consul General:* D. T. Figgis, Peruvian Consulate General, Clyde House, Clyde Road, Dublin 4.
Philippines: W. Sandys, Consulate of the Philippines, 18/21 St. Stephen's Green, Dublin 2.
South Africa: *Honorary Trade Commissioner:* N. P. McEvoy, 4 Mary's Abbey, Dublin 7. Tel. 47372.
Turkey: *Honorary Consul General:* William Anderson, Turkish Consulate, 5 Clyde Road, Dublin 4. Tel. 758721.

REPAIRS: All classes of repairs carried out by Liffey Dockyard Ltd.

DRY DOCKS: Graving Dock No. 1: Length overall 412 ft.; width at entrance 70 ft.; depth over sill at HWOST 17 ft. 9 in., depth over blocks at HWOST 15 ft. 6 in. Equipment – one 6 ton EP crane.

Graving Dock No. 2: Inside length with caisson gate in: Extreme outer position 663 ft.; normal outer position 637 ft. Centre position 367 ft.; inner position 257 ft. Width at entrance 80 ft.; depth over sill at HWOST 25 ft. 6 in. Depth over blocks at HWOST 23 ft.

The intermediate positions for the caisson gates make it possible to operate inner section so as to accommodate a small or medium-size vessel independently of remainder of dock.

Equipment: One E.P. crane, 25 tons at 72 ft. radius to 5 tons at 100 ft. radius. Seven power capstans of 5, 10 and 15 tons pull. Fresh and salt water hydrants at dock sides.

Patent slips: No. 1 – Length of cradle 76 ft. for vessels up to 200 tons displacement. No. 2 – Length of cradle 106 ft. for vessels up to 900 tons displacement.

REPATRIATION: May be arranged by ship's Agent through Department of Justice.

AIRPORT: Dublin Airport, 6 miles North of city centre, served by regular services direct to U.K., Europe, U.S.A. and Canada.

TIME: GMT plus 1 hour. Reverting to GMT between October and March.

HOLIDAYS: New Year's Day (1st January); St. Patrick's Day (National Holiday) (17th March); Good Friday*; Easter Monday†; Spring Bank Holiday† (1st Monday in June); August Bank Holiday† (1st Monday in August); Christmas Eve, half holiday (24th December); Christmas Day (25th December); St. Stephen's Day (26th December).

*Not a port holiday, but all other offices closed.

†These days can be worked at Sunday rates and conditions.

POLICE/AMBULANCE/FIRE: Contact Harbour Police patrol or at Dock Gates, or dial 999 on public telephone for all emergency services.

TELEPHONES: Coin-box telephones available on request at Oil Berths. No rental charges; normal coin-box rates.

GENERAL: Masters' cash requirements for week-end must be notified to Agent by noon on Friday.

SERVICES: No facilities for tank cleaning or discharge of tank washings.

SHORE LEAVE: No port restriction on crew's shore leave.

AUTHORITY: Dublin Port and Docks Board.

DUN LAOGHAIRE: 53.18 N. 06.07 W.

PORT LIMITS: As defined by Dublin port and docks Board, as ships have to pass through their pilotage area. The limits of Dun Laoghaire Harbour are defined in its bye-laws as per its fairway extending beyond its pierheads.

DOCUMENTS: See "Dublin".

PILOTAGE: See "Dublin".

ANCHORAGES: See "Irish Coast Pilot".

RESTRICTIONS: See "Irish Coast Pilot".

MAX. SIZE: Fairway dredged to 5.2 m.

HEALTH: See "Dublin".

RADIO: See "Dublin".

VHF: British Rail operate channels 14 and 16 when their vessels approach the port. The Harbour Office does not have VHF.
TUGS: None.
BERTHING: Harbour formed by 2 breakwaters, East breakwater length 4,230 ft. West breakwater, length 5,080 ft. Width at entrance between breakwaters, 760 ft. Depth at entrance 22-28 ft. MLWS.

	Length ft.	*Depth MLWS* ft.
Mail Boat Pier, E. side	760	17–22
Mail Boat Pier, W. side	570	15–20
Car Ferry Pier, E. side	460	18
Car Ferry Pier, W. side	460	18
Traders Wharf, outside (Foal)	490	12
Traders Wharf, inside	430	12

CRANES: A 3.5 ton fixed electric crane on each side of the mail boat pier and one 2 ton and one 5 ton crane, available for fitting out yachts.
SPECIALISED CARGO HANDLING FACILITIES: Three Ro/Ro ramps. Ramps are to M.O.T. loading requirements, width of ramps – 3 m.
BRIDGES: None.
STEVEDORES: None. British Rail arrange gangs.
MEDICAL: See "Dublin".
DENSITY: 1025.
FRESH WATER: Available at all berths.
FUEL: Arranged by Agent.
FIRE PRECAUTIONS: Only usual non-smoking precautions.
CONSULS: See "Dublin".
REPAIRS: See "Dublin".
DRY DOCKS: See "Dublin".
SURVEYORS: As per Lloyd's Shipping Agents, Dublin.
GANGWAY/DOCK WATCHMEN: The ship's watch.
CUSTOMS ALLOWANCES: As per E.E.C. regulations.
REPATRIATION: See "Dublin".
AIRPORT: Dublin Airport, Collinstown, 20 km.
TIME: As United Kingdom.
HOLIDAYS: Seven (7) Bank Holidays each year.
POLICE/AMBULANCE/FIRE: Available locally. Police. Tel. 801285 Fire Brigade and Ambulance, Tel. 801903.
TELEPHONES: None on board visiting ships.
SERVICES: None.
SHORE LEAVE: Possible, Seamen's I.D. card sufficient, shore passes are not issued.
REGULATIONS: Nothing unusual.
DELAYS: There are no delays.
DEVELOPMENT: None in foreseeable future.
AUTHORITY: Commissioners of Public Works, Dublin 2.

GALWAY: 53.16 N. 09.03 W. (See Plan)

DOCUMENTS:
1 Crew List (official form).
1 Passenger List (official form).
1 List of Articles (dutiable) in Possession of Crew (official form).
1 Stores List (to include bonded surplus stores for seal, firearms, ammunition, animals, radio transmitting and receiving sets) (unofficial form).
Maritime Declaration of Health (official form).
Documents, etc., required by Agent for Customs Purposes:
Ship's Register.
Load Line and Safety Certificates, etc.
Receipt for previous payments of light dues if any.
PILOTAGE: Pilots board incoming vessels only at "tide times" (approx. 2.5 hours before HW until HW); vessels arriving at times outside this period should anchor and await Pilot. Safe anchorages at inner roadstead or near Margaretta Buoy according to tonnage and draft, Pilot will board at either. Application for Pilot should be to Agent with notice of ETA. International light and sound signals may be used.
ANCHORAGES: During S.W. gales safest anchorage is at Black Head.
RESTRICTIONS: Entry from 2 hours before HW until HW only.
MAX. SIZE: Governed by depth on sill of 28 ft. at springs and 24 ft. at neaps: width of dock gates, 65 ft. and length of turning area 480 ft.
HEALTH: Master of ship arriving from foreign port must deliver Maritime Declaration of Health in order to obtain Pratique. An oral Declaration will suffice for ships trading solely between Republic of Ireland and Belgium, Holland and European France. Pratique will be granted or withheld depending on answers given to questions put in Health Declaration.
In event of a suspected disease or fever on board, vessel is detained pending arrival of Medical Officers of Health. No unauthorised person is allowed to leave ship without authority of Chief Medical Officer.
Pratique is automatic when vessel arrives from ports in Great Britain, Isle of Man, Northern Ireland and Channel Islands or another port within Eire.
RADIO: ETA cables to Agents, etc., through Valentia Radio if approaching from South or Malin Head if from North. Valentia has telephone link service. Port VHF on Channel 16.
TUGS: No tugs available.
CARGO HANDLING FACILITIES: One 30-ton cantilever crane in operation at Dun Aengus South Quay. Grain, ore, coal, bulk fertilisers, etc. are all handled by grabs. Ore is loaded by special conveyors (200 t.p.h.).
STEVEDORES: Agents arrange after receipt of ETA.
MEDICAL: No special port medical requirements. Ships medical requirements should be included in ETA signal.
TANKERS: No special requirements. 1 berth.
DENSITY: 1012 (average).
FRESH WATER: Available by hose.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: (Open quays) watchmen recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Wine, Spirits and Tobacco: members of a crew who remain out on a vessel during her stay in port are allowed to retain in their own possession, under certain conditions, the following quantities of the undermentioned goods:

	Tobacco in any form (to cover 8 days)	*Spirits in any form* (to cover 4 days)	*Wine* (to cover 4 days)
The Master	8 oz.		
Officers (i.e., mates, engineers, wireless operators, ship's surgeons, pursers, chief stewards or serangs)	6 oz.	1 pint	1 gallon
Other Crew members	4 oz.	1 pint	

IDENTIFICATION CARDS: Not needed.
CONSULS: T. McDonogh & Sons Ltd., Merchant's Road, Consuls for France and Belgium only. No others in Galway.
REPAIRS: Deck and engine repairs carried out afloat.
DRY DOCKS: No dry dock.
REPATRIATION: Crew changes and repatriation can be effected.
AIRPORT: Dublin (140 miles) and Shannon (55 miles). Airports served by regular flights.
TIME: GMT plus 1 hour. Reverting to GMT from October to March.
HOLIDAYS: Christmas Day; St. Stephen's Day (26th December); St. Patrick's Day (17 March); Easter Monday; Whit Monday; First Monday in August.
POLICE/AMBULANCE/FIRE: Police 2121; Ambulance 4141; Fire 999.
TELEPHONES: No arrangements exist for placing telephones on board.
SERVICES: Compass adjusters available in Dublin. 24 hours notice to Agent.
SHORE LEAVE: Allowed.
DELAYS: Apart from tidal, none.
AUTHORITY: Galway Harbour Commissioners.

KILLYBEGS: 54.38 N. 08.26 W.

DOCUMENTS: See "Dublin".
PILOTAGE: No permanent Pilot but one can be acquired on request.
ANCHORAGE: Very safe anchorage.
RADIO: Malin Head Station.
BERTHING: Large fishing fleet has to be accommodated.
MEDICAL: Necessary to send advance warning re illness or injury to a Crew member.
FRESH WATER: Available.
FUEL: Fuel oil available.
DEVELOPMENTS: Major harbour scheme has commenced – additional wharves, and piers.
IDENTIFICATION CARDS: Not needed.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Department of Agriculture and Fisheries, Dublin.

LIMERICK: 52.40 N. 08.38 W. (See Plan)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
1 Custom's Manifest (Tobacco List).
Health Declaration.
Ship's Register (Tonnage Certificate).
Safety Equipment Certificate.
Safety Radio Certificate.
Load Line Certificate.
Receipt for last previous Trinity House Light Dues payment (if any).
Derat Certificate.
PILOTAGE: Compulsory from Scattery Island (52.35 N., 09.31 W.) to Limerick. Pilot may be taken off Kilcredane Head about 9 miles further West as an optional extra (usually by vessels over 5,000 d.w.t.). ETA for Pilots passed in advance by Agents. Masters may call Pilots (Scattery Pilot Station – Channel 16 VHF) or by normal International Code sight or sound signals. ETA to be sent 24 hours in advance and amended as necessary. Pilots watch only when vessels are expected inwards or outwards.
ANCHORAGE: Vessels normally wait tide to Limerick at Scattery Roads; Beighcastle Anchorage depth over 60 ft. (52.40 N. 08.57 W.) about 18 miles downstream off Limerick is nearest deep-water anchorage; now disused as lightening place for bulk grain cargoes.
RESTRICTIONS: Entrance to Limerick Dock is limited to 2 hours preceding HW; for vessels over 3,000 d.w.t. (laden) daylight HW only.
MAX. SIZE: Dependent on tide. Up to 21 ft. draft on spring tides

(neap tides about 16 ft.) Vessels of 500 × 65 ft. beam have berthed Limerick Dock on suitable draft.
HEALTH: If no infectious diseases on board, pratique granted by Customs Preventive Officer on arrival on presentation of Health Declaration of Master. Landing of dogs and cats from outside British Isles strictly forbidden.
RADIO: Irish Stations; Valentia Radio (links-calls available) or Malin Head Radio, or any U.K. Radio Station. Agents have special arrangements with Valentia Radio and Malin Head Radio, cables passed by direct telex to Agent's office.
VHF: Masters can call Scattery Pilot Station on Channel 16, or Limerick Harbour Radio – same, working on Channels 12 and 13.
TUGS: One 400 h.p. tug available. The Harbour Dredger is also fitted with a towhook and used as tug if necessary.
BERTHING: In Limerick Dock there are 10 berths of which only 1 (Shell berth) is reserved exclusively for tankers. Drafts on all berths approx. tidal gauge plus 2 ft. Extensive berthage on tidal quays now used by fertilizer vessels up to about 1,000 d.w.t. lying safe ground on mud berths.
TANKERS: Dernish Oil Jetty situated approximately 1 mile South of Shannon Airport. Jetty head 150 ft. long. Distance between head and stern buoys 430 ft. Depth alongside LW 26 ft. Jetty designed for vessels of up to 12,000 d.w.t. Aviation fuel pumped direct to airport.
STEVEDORES: Sole stevedores Limerick Cargo Handling Ltd. (as a result of rationalisation scheme). ETA per Agent before 1600 hrs. each day Monday to Thursday for labour next day. Master to state number of gangs/workable hatches. Crew open and close hatches. Normal work 0800/1700 hrs. but overtime can be worked 24 hours per day, Saturday and Sunday included. Requisition for labour for weekend work and 0800 hrs. Mondays by 1600 hrs. Friday.
Discharge rates: Bulk cargoes 1,000 tons per day.
D.B.B. 60 standards per day.
Packaged timber 150 stand. per gang day.
Bagged cargoes (palletised in hold) 400 tons per gang day.
Generals 130 tons per gang day.
All cargoes by crane discharge.
Grain consigned to Ranks is discharged directly to mill by floating grain elevator "Garryowen" in Wet Dock.
CONTAINER HANDLING FACILITIES: A 32-ton Gantry Container Crane at Limerick Docks.
MEDICAL: All medical facilities available short notice.
DENSITY: 1000 in Limerick Dock.
FRESH WATER: Available at all berths ex hydrant. Average rate 7.5 t.p.h.
FUEL: All grades available in reasonable quantities per road truck on 24 hours notice. (Non-bunker port prices).
WATCHMEN: Watchmen from crew, or if none available shore watchmen available.
HATCHES: Opening and closing of hatches, setting up derricks, shifting of hatches, beams, patent hatches, etc., all to be done by ship's crew with no assistance from shore gangs.
CONSULS: Belgium, Denmark, Finland, France, Germany (Fed. Rep.), Holland, Spain, Sweden.
CUSTOMS ALLOWANCES: (Tobacco per 8 days). Master 200 cigarettes; Officers 150 cigarettes; Crew 100 cigarettes. Wine/Spirits: quarter pint per man per day.
REPAIRS: Limited facilities. Dry dock available for vessels up to 40 ft. beam and not exceeding 15 ft. draft.
REPATRIATION: No difficulties. Shannon International Airport 15 miles. Daily flights world-wide destinations.
TIME: As U.K. GMT or GMT plus 1 hour (Summer Time).
HOLIDAYS: (For dock working), New Year's Day (1st January); St. Patrick's Day (17th March); Easter Monday; First Monday in June; First Monday in August; half-day 24th December, 25th December, 26th December (Christmas Day and St. Stephen's Day).
POLICE/AMBULANCE/FIRE: Dial 999 for all emergency services.
SHORE LEAVE: No restrictions.
AUTHORITY: Limerick Harbour Commissioners.

AGENT: Mullock & Sons Ltd., Ship's Agents and Chartering Brokers, Security House, 15 Lower Mallow Street, Limerick. Tel.: 061-45044; 061-45155. Cables: "Mullock Limerick". Telex: 6986.

NEW ROSS: 52.23 N. 06.56 W.

PORT LIMITS: Drumdowney Point to Kilmore Quay adjacent Barrow Bridge 52° 23′ N. 06° 56′ W. The vessel is considered to be an arrived ship at the time of first high water after arrival off Barrow Bridge.
DOCUMENTS:
2 Cargo Manifests.
1 Bill of Lading.
1 Crew List.
1 Ship's Store List.
1 Passenger List.
1 Clearance.
Register.
Light Dues Certificate.
Deratisation Certificate.
PILOTAGE: For estuary Pilot (see Waterford).
New Ross Pilots Tel. 051-82206. Pilotage messages received and transmitted by Barrow Bridge VHF Channels 16 and 11. Early ETA advisable. Pilotage compulsory.
ANCHORAGE: To Pilot's advice.
RESTRICTIONS: Max. draft 19 ft. at neap tides, 22 ft. at spring tides, max. length 420 ft., max. beam 60 ft.
Navigation of the River Barrow for max. size vessels usually restricted to 2 hours before, to 2 hours after high water.
HEALTH: Declaration on arrival, international signals for pratique.
RADIO: Malin Head, Land's End or Ilfracombe Radio Station.
TUGS: Available on request.
BERTHING: 1,400 ft. new jetty, depth 25 ft. below LW Spring tide. Roll-on/Roll-off facilities available.
STEVEDORES: 24 hours notice required.

Bulk discharge rate:	200 t.p.h.
Bag rate	100 t.p.h.
Liquid discharge	300 t.p.h.

FRESH WATER: Available at all berths.
FUEL: Obtainable by road tankers.
CONTAINER FACILITIES: 45-ton crane. Five-acre storage space.
MEDICAL: Services available locally.
DENSITY: 1012 New Ross.
WATCHMAN: Available if required.
HATCHES: Ship's crew normally open and close hatches; shore-crane may assist.
CUSTOMS: Members of a crew who remain on a vessel during stay in port, are allowed to retain under certain conditions the following quantities of the undermentioned goods:
Tobacco (in any form): Master 8 oz., cigarettes 200; Officers: tobacco 6 oz., cigarettes 150; Crew members: tobacco 4 oz., cigarettes 100.
Spirits (in any form) to cover 4 days 1 pint (1 bottle each). Wine of any strength allowed in place of spirits at rate of 1 pint wine to half pint spirits. In addition, an allowance of 1 quart of beer or 1 pint of wine 30 proof per man per day. Members of crew whatever rank finally leaving vessel allowed to take ashore free of duty for their own personal consumption, following quantities of undermentioned goods, when they form whole of their uncomsumed stores:
(a) If from ports in Great Britain, Northern Ireland, or the Isle of Man, or continental ports between the Elbe and Brest (except vessels crossing at regular and frequent intervals): tobacco in any form 4 oz.; spirits (ordinary drinkable) quarter pint; spirits (cordials or perfumed) quarter pint.
(b) If from any other port, double the quantities specified at *(a)*.
(c) Irrespective of the port from which arriving.
IDENTIFICATION CARDS: Not required.
REPAIRS: Floating ship repairs only.
REPATRIATION: Facilities exist.
AIRPORTS: Dublin 95 miles; Cork 90 miles.
TIME: GMT plus 1 hour. Reverting to GMT between October and March.
HOLIDAYS: St. Patrick's Day (17th March); Easter Monday; Whit Monday (1st Monday in August); 25th and 26th December.
POLICE/AMBULANCE/FIRE: Telephone 999.
SHORE LEAVE: Allowed.
AUTHORITY: New Ross Harbour Commissioners.

RATHMULLEN: 55.05 N. 07.31 W.

DOCUMENTS: Papers supplied by Agent in Rathmullen or by Customs.
PILOTAGE: Pilot obtained through Agent in Rathmullen 24 hours notice of ETA required.
ANCHORAGE: Anywhere in Lough.
MAX. SIZE: Any size of vessel can anchor. Max. draft for berthing, 30 ft.
HEALTH: See "Dublin".
RADIO: Malin Head.
TUGS: None required.
BERTHING: No specific requirements.
STEVEDORES: 24 hours ETA required.
MEDICAL: Assistance can be arranged at short notice. Hospital facilities are available.
FRESH WATER: Available on berth.
FUEL: Different grades available at short notice.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: Tobacco, Wine: See "Dublin".
IDENTIFICATION CARDS: Not needed.
CONSULS: None at port.
REPAIRS: Only small repair jobs carried out.
REPATRIATION: Facilities exist.
AIRPORT: 80 miles away, serviced by regular flights.
TIME: GMT plus 1 hour. Reverting to GMT in Winter months.
HOLIDAYS: Work can be arranged on all church and bank holidays.
POLICE/AMBULANCE/FIRE: Police, Rathmullen 2; Fire, Letterkenny 112; Ambulance, Letterkenny 230.
TELEPHONES: No arrangement for placing telephones aboard.
SERVICES: No special services.

AGENT: Charles Deeney, Kerrs Bay, Rathmullen, Co. Donegal, Eire. Tel. Rathmullen 10.

ROSSLARE: 52.16 N. 06.20 W.

PORT LIMITS: The limit lines start from a point on shore 4,000 ft. South-east of viaduct and extend due North for a distance of 6,000 ft. and thence due West for a distance of 7,000 ft., thence due South for a distance of 3,430 ft., terminating on shore at a point 3,650 ft. West of existing viaduct.
DOCUMENTS:
Customs Documents.
Ships Manifests.
Crew List.

PILOTAGE: Not compulsory.
ANCHORAGES:
Prohibited Anchorage: 304° – 4.5 cables from Lighthouse
Thence 214° – 2 ,, ,, ,,
,, 124° – 4.5 ,, ,, ,,
,, 034° – 2 ,, ,, ,,
No anchorage inside breakwater. Sheltered from Southerly round to North Westerly winds.

Dangers: Shoals with depths of less than 18 ft. extend about 4 cables E.S.E. from head of breakwater. Shoal 18 ft., Southern end of which lies about 0.75 cables Northward of end of breakwater. Southern end of an extensive stony flat, having depths of 13 ft. to 18 ft. lies about 3.5 cables further to N.W. Between these shoals lie several outcrops of 18 ft.-19 ft.
MAX. SIZE: Max. draft 16 ft. 6 in. No. 3 berth – 440 ft. length, 16 ft. 6 in. draft. No. 4 berth – 380 ft. length, 16 ft. 6 in. draft. Also see "Berthing".
HEALTH: If no infectious diseases on board, pratique given by customs on arrival. If from a port within E.E.C. this may be given verbally, otherwise required in writing.
RADIO: Ilfracombe or Lands End radio station.
VHF: Call sign "Rosslare Harbour radio". Channel 16. Channel 14 for further communication when within radio range.
TUGS: None available.
BERTHING: Berth No. 3 reserved for British Rail and Irish Shipping Ferries. Berth No. 4 must be clear for all departures from Berth No. 3. Port caters for Roll-on/Roll-off traffic only, via stern loading terminal and ramp on West side of pier.
STEVEDORES: Ordered by Agents. ETA necessary.
MEDICAL: Advance notice required at least one hour. Hospital facilities 12 miles away.
DENSITY: Average 1025.
FRESH WATER: Laid on, delivery by hose. Cost £1.00 per 1,000 gals, or part thereof.
FUEL: No facilities.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: Crew assisted by stevedores.
CUSTOMS ALLOWANCE: Tobacco: 50 grammes per day or (40 cigarettes or 10 cigars). Spirits, 0.25 litres per day. Wine, 0.50 litres per day.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: No repair plant. Minor repairs possible by firms at Wexford (12 miles), Waterford (52 miles), Arklow (50 miles).
REPATRIATION: No facilities.
AIRPORTS: Dublin 110 miles. Cork 134 miles.
TIME: GMT plus 1 hour. Reverting to GMT in Winter months.
HOLIDAYS: New Year's Day; St. Patrick's Day (17th March); Easter Monday; June Bank Holiday; August Monday; Christmas Day (December 25, and 26). No work Christmas Days – December 25,and 26.
POLICE/AMBULANCE/FIRE: Police: Rosslare Harbour 33204; Ambulance: County Hospital, Wexford 22233; Fire: Fire Brigade, Wexford 22618.
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Crew allowed ashore.
IDENTIFICATION CARDS: Seaman's Book sufficient.
DEVELOPMENTS: Proposed additional Ro/Ro berth.
GENERAL: Leading lights for berth are fixed red, visible over an arc of 90° from 079° to 169° surmounting yellow diamond shaped daymarks.

Lighthouse on pier end, height 50 ft. flashing W.R.G. every 5 seconds.

Vessels coming astern to berth should make due allowance for N.E. and S.W. cross currents off pier end.
AUTHORITY: Coras Iompair Eireann.

SHANNON ESTUARY: (See Plan)

(*a*) Foynes Harbour: 52.36 N. 09.06 W.
(*b*) Foynes Island: 52.37 N. 09.07 W.
(*c*) Tarbert Island Oil Terminal: 52.35 N. 09.21 W.

(*a*) FOYNES HARBOUR

DOCUMENTS: See "Limerick".
PILOTAGE: Compulsory from Scattery Island to Foynes Buoys. Pilot may be taken off Kilcredane Head about 9 miles farther West as an optional extra (usually by vessels over 5,000 d.w.t. ETA for Pilots passed in advance by Agent. Masters may call Pilots (Scattery Pilot Station, Channel 16 VHF) or by normal International Code sight or sound signals. Foynes Harbour Pilot boards at Foynes Buoys. Call Foynes Harbour Radio VHF Channel 16.
ANCHORAGE: Vessels waiting to enter Foynes normally anchor Foynes Roads (West of Foynes Buoys).
RESTRICTIONS: No restrictions by day or night on vessels under 3,000 d.w.t. Vessels over 3,000 tons, up to 500 ft. BP length, without limit on beam, and up to 30 ft. draft in daylight only on suitable tidal conditions. Large vessels in ballast normally enter on early flood tide and swing with tidal stream berthing port side to quays ready for departure after loading. Similar vessels loaded enter on last of flood. Alternatively berth starboard side to quay on early ebb and swing after unloading with reduced draft on departure.
MAX. SIZE: Vessels up to 500 ft. BP length and 30 ft. draft with no restriction on beam. Ore cargoes of up to 16,000 tons have been loaded and tankers up to 20,000 tons have discharged.
HEALTH: See "Limerick".
RADIO: See "Limerick".
VHF/RADIO: As for Limerick except for "Limerick Harbour Radio" substitute "Foynes Harbour Radio".
TUG: None available.
BERTHING:

West Pier: 30 ft. LWOST neap tides. 350 ft. quay with mooring buoys ahead and astern. For tankers, crude ore (loading by conveyor system) and other cargoes. See "Stevedores".

East Pier: 32 ft. LWOST neap tides – 450 ft. quay with mooring buoys ahead and astern. Metal concentrates bulk (loading by conveyor system) and other cargoes. See "Stevedores".

Three other berths where vessels up to 2,000 d.w.t. lie safe aground on soft mud during low water.
STEVEDORES: ETA per Agent before 1600 hrs. Monday/Thursday for labour next day 0800 hrs., before 1600 hrs. Friday for labour Saturday or 0800 hrs. Monday. For cargoes other than bulk ore or concentrates in bulk Masters should state number of gangs/workable hatches.

Crude Ore: West Pier Conveyor: 500 t.p.h. loaded normally on continuous basis, day and night, commencing on berthing (16,000 tons in 28 running hours).

Concentrates in bulk. East Pier Conveyor: 250/300 t.p.h. normally loading 12 hours per 24 hours (running hours). Other import/export cargoes by ship's gear or shore mobile cranes (max. 3 units available).

Packaged D.B.B.: 120 stds. per gang day (pre-slung).
Packaged D.B.B.: 70 stds. per gang day (shore slings).
Bulk Fertilizers: 750 tons per day (mobile grab crane).
Bag Fertilizers 400 tons per gang day (shore mobile cranes).
Bagged Barytes, bagged cement and other bagged commodity: 400 tons per gang day (ship's gear/mobile crane).

Storage facilities: 15 acres of open landing ground and 25,000 sq. ft. of covered storage.

Weighbridge: An electronic weighbridge with a capacity of 50 tonnes, and length of bridge is 50ft.
MEDICAL Emergency facilities available at short notice locally. Full general hospital facilities at Limerick, 25 miles distant.
DENSITY: Variable on season and tidal conditions between 1008/1020.
FRESH WATER: Available at all berths. Quantities over 35 tons must be notified 24 hours in advance. 12p per ton.
FUEL: See "Limerick".
WATCHMEN: Normally crew watchmen.
HATCHES: See "Limerick".
CUSTOMS ALLOWANCE: See "Limerick".
REPAIRS: Limerick facilities – no dry dock.
REPATRIATION: No difficulties – Shannon Airport 40 miles.
TIM : See "Limerick".
HOLIDAYS: See "Limerick".
POLICE/AMBULANCE/FIRE: Call local telephone operator and request service required.
SHORE LEAVE: No restrictions.
AUTHORITY: Foynes Harbour Trustees.
AGENT: See "Limerick". Full time Tel.: Foynes 45 and part-time at Foynes 84.

(*b*) FOYNES ISLAND

LOCATION: Cement Limited Oil Jetty is located on N.W. side of island. Buoyed moorings for tankers up to 60,000 tons (length 950 ft.). Vessels lie alongside breasting dolphins off pipe trestle in 50 ft. min. LWOST.
DOCUMENTS: See "Limerick".
PILOTAGE: Compulsory from Scattery Island to Foynes Island (otherwise as Limerick).
ANCHORAGE: Vessels normally wait at Scattery Roads or at anchor N.E. of Foynes Island Jetty waiting daylight early flood tide for berthing.
RESTRICTIONS: None for vessels up to 60,000 d.w.t. subject daylight movements berthing early flood tide and departures during flood tide.

Mooring lines required: at least 4×120 fathoms and 6×90 fathoms polypropylene or similar.
MAX. SIZE: A min. depth alongside 50 ft.
RADIO:
VHF:
HEALTH:
TUGS:
} See "Limerick".
MEDICAL: No facilities on island. See "Foynes" and "Limerick".
TANKERS: Flexible hoses 2×8 in. passed by derrick from pipe trestle to ship. Connections – PCD 11.75 in., 8 holes.
DENSITY: 1025 except in very exceptional conditions.
FRESH WATER: None available.
FUEL: None available.
CUSTOMS: See "Limerick".
REPAIRS: None except via Foynes or Limerick.
REPATRIATION: Via Foynes.
TIME: See "Limerick".
HOLIDAYS: As Limerick. Vessels normally discharge without regard to holidays.
TELEPHONES: Shore 'phone placed on board for ship's use with cargo hoses. Tel.: Foynes 55.
SHORE LEAVE: Restricted to daylight hours as launch service only then available. No access to mainland except by launch.
AUTHORITY: Limerick Harbour Commissioners.
AGENT: See "Limerick".

(*c*) TARBERT ISLAND OIL TERMINAL

LOCATION: Electricity Supply Board power station and Jetty located on N.W. shore of Tarbert Island (with road access from the

mainland) 52.35 N. 09.21 W. Berth 48 ft. draft LWOST overall length including outer mooring dolphins 1,050 ft. with berthing face of 300 ft.
DOCUMENTS: See "Limerick".
PILOTAGE: Compulsory from Scattery Island to Tarbert (otherwise as Limerick).
ANCHORAGE: Vessels normally wait at Scattery Roads for daylight flood tide for berthing.
RESTRICTIONS: None for vessels up to 70,000-80,000 d.w.t. on suitable draft, berthing daylight flood tide, departure on flood tide in daylight or darkness (subject good weather).
MAX. SIZE: The berth has 48 ft. alongside at low water.
RADIO:
VHF: } See "Limerick".
HEALTH:
TUGS: Not required.
MEDICAL: No facilities. Nearest doctor at Glin, Co. Limerick (6 miles), See "Limerick".
TANKERS: 2, Marine Arms – 10 in. PCD 14.15/16 in. Outer diam. 16 in., inner diam. 11 in. Holes, 12 of 0.75 in. diam.
DENSITY: 1025, except in very exceptional conditions.
FRESH WATER: Limited supply on special request.
FUEL: None available. Jetty head approached from shore by footway (4.5 ft. wide×650 ft. long), therefore no direct access to berth from shore for road transport.
WATCHMEN: Watchmen from crew.
CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: None locally. Nearest Limerick 40 miles distant. Difficulty of access should be noted. Stores/provisions and/or spares, except the lighters, must be transported by launch from Tarbert Old Pier on East side to the Oil Terminal Berth and taken on board by ship's tackle.
REPATRIATION: Via Limerick.
TIME: See "Limerick".
SHORE LEAVE: No restrictions.
TELEPHONES: At jetty head. Tel.: Extension to Power Station telephone.
AUTHORITY: Limerick Harbour Commissioners.
AGENT: See "Limerick".

SLIGO: 54.16 N. 08.28 W.

DOCUMENTS:
Crew List.
Aliens List for other than Irish and British Ships.
Customs Clearance from previous port.
Health Declaration.
Manifest.
Surveys 109 Deck Cargo and 107 for Grain.
PILOTAGE: Tel. 071-73157 for Outside Pilot, Sligo 3036 for Inside Pilot who can be contacted on VHF Channels 12 and 16. Pilot boat a black yawl. Pilot boards off Raghley Head.
ANCHORAGE: East of Wheat Rock Buoy depth 40 ft.
RESTRICTIONS: Small vessels from half tide to 2 hours after high tide, large vessels near high tide and daylight.
MAX. SIZE: 275 ft. long, breadth not restricted, draft 16 ft. Spring tides, 13 ft. neap tides.
HEALTH: Home trade areas, verbal declaration, all others written declaration. Vessels from Great Britain automatic procedure. Suspected diseases inform Customs Officer or County Medical Officer of Health. Appropriate signals day and night.
RADIO: Malin Head, Wick or Port Patrick Radio.
TUGS: None.
STEVEDORES: 24 hours notice required. Coal 500 tons per day for crane. Fertilisers in bags 2 gangs, 500 tons per 8 hour day. Timber 40 stds. per hatch per day.
MEDICAL: No facilities.
DENSITY: 1004, high tide.
FRESH WATER: Available by hose, at 12.5p ton.
FUEL: All grades available, 24 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES:
Register.
Articles.
Light Dues Certificate.
Deratisation Certificate.
CUSTOMS ALLOWANCE: Members of crew who remain on a vessel during stay in port allowed to retain, under certain conditions, the following quantities of the undermentioned goods:

Tobacco in any form (to cover 8 days): Master 8 oz. 200; Officers 6 oz. 150; crew members 4 oz. 100.

Spirits in any form (to cover 4 days) 1 pint (1 bottle each). Wine of any strength, allowed in place of spirits at rate of one pint wine to 0.5 pt. spirits. In addition, an allowance of 1 quart of beer or 1 pint of wine per man per day.

Members of a crew of whatever rank finally leaving vessel allowed take ashore, free of duty, for own personal consumption, following quantities of undermentioned goods, when they form whole of their unconsumed stores:

(a) If from ports in Great Britain, Northern Ireland or the Isle of Man, or continental ports between the Elbe and Brest (except vessels crossing at regular and frequent intervals): Tobacco in any form 4 oz. Spirits (ordinary drinkable) 0.25 pint. Spirits (Cordials or perfumed) 0.25 pint.
(b) If from any other port, double the quantities specified at *(a)*.
(c) Irrespective of the port from which arriving.

IDENTIFICATION CARDS: Required.
CONSULS: Netherlands Vice-Consul, Sligo 2622.
REPAIRS: Welding and light repairs.
REPATRIATION: Facilities exist.
AIRPORT: Dublin, 135 miles away.
TIME: GMT plus 1 hour. Reverting to GMT between October and March.
HOLIDAYS: St. Patrick's Day (17th March); Easter Monday; Whit Monday (1st Monday in August); 25th and 26th December. Not usual to work on any of these days.
POLICE/AMBULANCE/FIRE: 999.
TELEPHONES: None available for placing on board.
GENERAL: In N.W. gales, shelter available at Killybegs, Donegal Bay.
SHORE LEAVE: Allowed.
AUTHORITY: Sligo Harbour Commissioners.

WATERFORD: 52.15 N. 07.07 W. (See Plan)

DOCUMENTS:
3 Manifests.
1 set Bills of Lading.
1 Crew List (aliens).
1 Ship Stores List.
1 Passenger List.
PILOTAGE: Compulsory. Tel. Address "Dunmore Pilots" 24 hours ETA if possible. Tel. Dunmore East 83119. VHF call sign "Dunmore Pilots". Channel 16 calling up, Channel 14 working.

Pilot Boat black hull with words "Pilots" in white on sides. Location off Dunmore East Pier.

In event bad weather a vessel is directed to Passage East by VHF where a Pilot will board in smooth water.
ANCHORAGE: Good anchorage on Eastern Shore at entrance to Harbour in Easterly winds. 30 ft. LWOST.
RESTRICTIONS: Draft restricted by 2 bars. At Duncannon, a sand bar with a low water depth of 14.5 ft. The other at Cheek Point with low water depth 11.5 ft.

Vessels of deeper draft await tide at Dunmore East Anchorage.
MAX. SIZE: 450 ft. LOA normally; 475 ft. LOA by arrangement. Draft 22 ft. neap tides; 24 ft. 6 in. spring tides. 5,000/7,000 d.w.t. or 10,000 d.w.t. partly laden.
HEALTH: Vessels fly "Q" flag, pratique given by Customs. Infectious diseases to be notified to Agent before arrival.
RADIO: Messages through Land's End or Valentia Radio Stations.

Harbour Commissioners have VHF station at Dunmore East, Channel 14 for calling, Channel 16 working.

A watch is kept at the station during the following hours:

0000 to 0100	1200 to 1300
0400 to 0500	1600 to 1700
0800 to 0900	2000 to 2100

TUGS: No tugs available.
BERTHING:
North Side

Jetties	*Length* (m.)	(ft.)	*Approx. Depth LWOST* (m.)	(ft.)	*Cargo Handling facilities*	*Remarks*
National Board & Paper Mills	45.7	150	6.09	20	Bulk oil discharge	Private
Nos. 1, 2 and 3 Berths	300	984	6.91	22' 8"	2 at 6-ton 4 at 3-ton elec. portal cranes	Public W.H.C.
No. 1	106.7	350				
No. 2	71.3	234				
No. 3	121.9	400				
Hall's	79.2	260	7.62	25	Grain elevators. Storage capacity of 25,000 tons	Private 200 t.p.h.
North Side (New Wharves):						
Frank Cassin Wharf (Container Wharf)	154.2	506 223 729	6.85	22' 6"	2 at 35-ton gantry container cranes	W.H.O. Private backed by Container Compound
New Container Berth	100.5	330	7.82	25' 8"	1 at 35-ton derrick crane	W.H.O. Public backed by Container Compound
No. 4 Berth	146.3	480	7.82	25' 8"	*Proposed:* 2 at 7.5 ton grabbing cranes	W.H.O. General
South Side:						
Forde Wharf, with Roll-on/ roll-off terminal and compound	91.4	300	6.91	22' 8"	1 at 20-ton 1 at 6-ton elec. portal cranes	W.H.O. Public
Clyde	243.3	800	5.18	17	1 at 25-ton electric derrick	W.H.O. Public backed by Container Compound
British Railways	85.3	280	5.48	18	1 at 24-ton electric derrick	W.H.O. Public backed by Container Compound
Graves & Co.	82.3	270	5.48	18		Private timber wharf

Also various Pontoons, etc., for Livestock loading.
There are various other cranes – 10 ton mobiles, forklifts, travel-lifts up to 28 tons, etc., available.
BRIDGES: Times of passing through Redmond and Suir Bridge for National Board and Paper Mills Berth and for vessels proceeding upriver to Fiddown, to be arranged by Ship's Agent.
STEVEDORES: Agent arranges discharge upon receipt of ETA.
Grain discharge: 1,400 tons per day (180 t.p.h.).
Coal discharge: 300 tons per gang per day.
Sugar discharge: 800 tons per gang per shift of 8 hours.
Fertiliser discharge: 280 tons per gang per day.
Timber discharge: 30 standards per gang per day.
MEDICAL: Hospital and ambulance available. Arrangements made by ship's Agent.
TANKERS: Great Island Jetty, used by Electricity Supply Board. Max. design size 20,000 d.w.t. However approach channel of river and Duncannon Bar not yet dredged for this size.
DENSITY: 1008 at LWOST.
FRESH WATER: Available by hose 15 t.p.h.
FUEL: Supplies available by road tanker.
DEVELOPMENTS: Consideration being given to deepening the approach channel. The extension of the deep-water berths will have 25 ft. 8 in. alongside at LWST.
GANGWAY/DECK WATCHMEN: Day watchmen not necessary. Night watchmen at Master's wish.
OPENING/CLOSING HATCHES: Done by crew.
CERTIFICATES:
Register.
Freeboard Certificate.
Tonnage Certificate.
Deratisation Certificate.
Radio Certificate.
Life-saving Appliance Certificate, etc.
CUSTOMS ALLOWANCE: Tobacco: Master 8 oz. Officers 6 oz. Crew 4 oz. Wine and/or Spirit: 1 pint spirits.
CARGO GEAR: Not beyond ordinary Factory Act requirements.
IDENTIFICATION CARDS: Not needed.
CONSULS: Belgian, French, Spanish, Danish – M. Farrell & Son, Tel. 4978. Dutch Consul – S. Morris Ltd., Tel. 4300.
REPAIRS: Minor repairs.
DRY DOCKS: No dry docks available.
REPATRIATION: Facilities exist.
AIRPORT: Dublin 100 miles, Cork 75 miles, Shannon 75 miles. Served by regular airlines.
TIME: GMT plus 1 hour. Reverting to GMT in Winter months.
HOLIDAYS: St. Patrick's Day; Easter Monday; August Bank Holiday; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Police 4888; Ambulance 4844; Brigade 5555.
TELEPHONES: None available for placing on board.
SHORE LEAVE: Allowed.
AUTHORITY: Waterford Harbour Commissioners.

NOTES

Please also advise Shipping Guides (Services) Ltd.

El Salvador

ACAJUTLA: 13.35 N. 89.52 W. (See Plan)

DOCUMENTS:
1 Clearance.
4 Voyage Memorandum.
8 Crew List.
8 Disembarking Passengers' List (local passengers list).
8 Transit Passenger List.
8 Store List.
International Health Certificate.
Certified Manifests.
12 Copies of the Manifests.
12 Copies of Bill of Lading.
Cargo Distribution List.
Tally Books.
Shipmaster's Report: Papers required for entering as follows:
1 L.P. 1 & 2 Health Form.
Clearance from Last Port.
4 Memorandum of Voyage.
5 Spanish Crew Lists.
5 Passenger Lists.
5 Store Lists.
2 Mail List.
Agent distributes all papers. Agent also supplies list of papers for next port.
Bond sealed. Shop not sealed.

PILOTAGE: Compulsory. *(a)* Vessels requiring Pilot use International Code Signals. *(b)* Pilot boards vessel at a distance between 1 and 2 km. from the port, where vessel should wait with engine stopped. *(c)* Pilot ladder required for boarding. *(d)* Gangway ladders should be raised and folded, derricks and cranes inside, anchors ready for berthing. Pilot is equipped with walkie-talkie for communicating with tugs.

ANCHORAGE: There is no specific anchorage area. Pilot meets vessel and immediately proceeds alongside. If there are no berths available, the vessel may anchor anywhere outside the dock.

MAX. SIZE:

Berth	*Max. Draft*	*Vessel Length*	*Water Depth at MLW*
A–1	9 m.	152 m.	10 m.
A–2	11 m.	183 m.	12 m.
B–3	9 m.	152 m.	10 m.
B–4	11 m.	198 m.	12 m.
B–5	9 m.	152 m.	10 m.
B–6	9 m.	152 m.	10 m.

Tankers: At the sea-line berth, max. draft 12 m. and max. length 213 m.

HEALTH: If there is any suspicion of illness aboard, Captain has to inform by radio 24 hours in advance, indicating nature of disease and all details. On arrival, vessel should anchor with yellow flag hoisted, to wait for the doctor of the port.

RADIO: There is no special key for calling. Port VHF service is open 24 hours a day. Contact through Channels 16 and 27.

Channel 27 receives on 157.35 mHz and transmits at 161.95 kHz. Business and operation.

Channel 16, 156.8 mHz ship calling and Safety. Channel 14, working.

TUGS: Tow lines not usually used; if necessary the tug lines will be used, and their charge included in the whole service.

Three tugs, available, one 800 h.p., one 1,200 h.p., one 1,800 h.p. Tugs meet the vessels off the dock.

BERTHING: Vessels can berth in safety at any time, day or night.

In the case of cargo vessels it should be stressed that the swell experienced alongside is a serious problem and Masters would be well advised to make use of the shore lines offered on hire to save undue wear and tear on their moorings. Vessels frequently have to leave the berth because of the swell, and broken moorings are common.

There are 2 piers: the first one called "A" consists of a breakwater mole 763 m. long. The access mole runs for approximatley 400 m. and has a free width of 7 m. The pierhead which is 37 m. wide and 310 m. long, includes a combined breakwater, a mooring dock (2 berth capacity) and a transit shed. This pier can handle general and liquid cargo.

The second pier called "B" (4 berth capacity) is 360 m. long and has a free width of 28 m. Products handled in this pier, general and bulk cargo.

MEDICAL: There are doctors in the port who attend normal cases and specialists and hospitals in Sonsonate City at 20 km. (by road) and in San Salvador, capital of the Republic, 85 km. from the port.

DEVELOPMENTS: The construction of a breakwater at the end of existing pier head "A" will start in August 1974. The breakwater will extend in a N.W. direction in line with the existing pier for a distance of 35 m., then change direction to the North with an angle of 30 degrees and extend 270 m. with a width of 18 m. This breakwater will offer another berth capable of handling liquid and general cargo.

CEPA intends to develop the port to provide adequate facilities for the handling of containers in order to attend the further increase in the country's foreign trade and particularly to make provisions for the development of containerised berths in Central America.

TANKERS: Moorings at RASA (Refineria de Acajutla Sociedad Anonima). This refinery is the property of Esso Standard Oil and Shell Petroleum Company.

Buoy Berth: Depth of water is about 15 m. Diameter of buoy lines, 2 of 25 cm. for clean products and one of 75 cm. for crude oil and fuel oil. There are no facilities for residue discharge.

STEVEDORES: Must be ordered 24 hours before arrival by Agent, confirmation by radio-telephone as to the number of gangs needed is always convenient.

A line handling gang is in constant attention all day, this gang also attends gangway. No charge for this service.

Stevedores are available for nightwork.

DENSITY: Salt water.

FRESH WATER: Delivered by hoses. Rate approximately 40 t.p.h., cost US$0.50 per metric ton.

FUEL: Possible to supply diesel and Bunker "C" only in limited quantities delivered by lorries. Viscosities: Bunker "C" 175 sec. Saybolt furol. Diesel 40 sec. Saybolt universal.

FIRE PRECAUTIONS: Inspection of hoses; no smoking; not allowed to solder or light any kind of fire; isolation of the place of loading and discharging operations; fire equipment to be ready.

GANGWAY/DECK WATCHMEN: This service is done by the port staff free of charge.

OPENING/CLOSING HATCHES: This work is carried out by stevedores.

SHIP CERTIFICATES:
Vessel has to carry the Ship's Register (showing the register tonnage).
Derat. Certificate.
International Health Certificate.
Manifest Certificates.

CUSTOMS ALLOWANCES: Customs allow to take out of the vessel only tobacco for personal use. Not allowed to take any wine or spirits out of the vessel.

CARGO GEAR: Ship's gear used, equipment has to be in good state with certificates showing capacity and safety.

IDENTIFICATION CARDS: Not required, but each member of crew has to be in possession of a valid passport.

CONSULS: British Consul. In Sonsonate City there is the Consul of Guatemala Republic, tel. 51-0739, and in San Salvador City are Consulates for most countries.

REPAIRS: Possible to do minor engine and deck repairs. Other repairs can be carried out in San Salvador City. Any repairs that will delay sailing of vessels cannot be done without previous and specific authorisation of the manager of the port.

REPATRIATION: There are facilities for repatriation.

AIRPORT: There is an airport served by regular airlines in San Salvador at 95 kms. from this port (by road).

TIME: No alterations in time during the year; local time is GMT minus 6 hours.

HOLIDAYS: 1st January, Maundy Thursday, Good Friday and Saturday, 1st May, 10th May, 6th August, 15th September, 2nd November, 25th December; the port stops working only on 1st January, Good Friday and 25th December.

POLICE/AMBULANCE/FIRE: National Police (Sonsonate) tel. 51-0838; Ambulance (Sonsonate) tel. 51-0589; Fire (CEPA, Acajutla) tel. 52-3000.

TELEPHONES: No possibilities to install telephones aboard.

GENERAL: Quarantine authorities pay strict attention to the meat on board and its residuum to prevent fever and it is forbidden to remove any kind of meat from the vessel. Berthed vessels need, in case of swell, special hawsers and wires provided by the port, and charged to vessel.

Hire of these lines is US$0.60 each one and for every 1,000 tons gross.

SERVICES: No facilities to discharge tank-washings.

SHORE LEAVE: Members of the crew are allowed to go ashore.

DELAYS: There are no delays for mooring, loading and discharging. Refuelling bunkers operates slower than normal loading and discharging.

AUTHORITY: Comision Ejecutiva Portuaria Autonoma (CEPA).

AGENT: F. D. Gibson & Company, POB 242, San Salvador. tel. 213208. Telex 20174. Cables: "Gibson" San Salvador.

LA LIBERTAD: 13.29 N. 89.19 W.

CLOSED TO CARGO VESSELS SINCE MAY 1976

DOCUMENTS: Required:
By Port Captaincy
Clearance from last port called.
2 Crew Lists.
1 Store List.
1 Passengers List. In case passengers disembarking, passports to be countersigned by the migration delegate have to be shown.
1 Voyage Memorandum.
1 Manifest of Cargo from each port.
By doctor delegate of health
Health Certificate.
1 Voyage Memorandum.
By quarantine delegate
Voyage Memorandum.
Crew List.
Cargo Manifest, one for each port.
By CEPA delegate
Voyage Memorandum.
Crew List.
2 Store Lists.
Cargo Manifest (5 copies).
Tally Books for cargo.
Number of tons of diesel on board.
Number of tons of water.

By Customs delegate
Voyage Memorandum.
1 Crew List.
Passenger List.
Store List.
Cargo Manifests countersigned by the Consuls each port of origin and 7 more copies for each one.

PILOTAGE: Vessels requiring a Pilot use International Code signals. No official pilot service.

ANCHORAGE: Depths of 60 ft. available. Vessels can anchor at a minimum distance of 1 km. from the quay. All dry cargo vessels work cargo at the anchorage. No quay berths available.

HEALTH: On arrival vessel should anchor and wait visit of Port Authorities. Any suspected diseases should be notified 24 hours in advance.

RADIO: VHF Service with transmission and receiving frequency of 27.075 mHz. In the dock the set is 100 watts AM, transmitter/receiver by 3 Channels:
Channel 1, 2163 kHz calling the tugboats.
Channel 2, 2182 kHz calling and Safety.
Channel 3, 2196 kHz calling the ships.
In the tugs, the sets are 60 watts AM, transmitter/receiver by 5 Channels:
Channel 1, 2163 kHz calling the dock.
Channel 2, 2182 kHz calling and Safety.
Channel 3, 2196 kHz calling the ships.
Channel 4, 2638 kHz calling the ships.
Channel 5, 2738 kHz calling the ships.
The following set is a monitor to receive emergency calls: 2163 and 2196 kHz.

TUGS: No tugs required or available.

STEVEDORES: 24 hours notice required to arrange gangs and barges.

MEDICAL: Inform Agent as soon as possible to arrange a medical visit. The port has doctors to attend normal cases, and there are specialists and hospitals in San Salvador (capital of the Republic) at 35 kms. by road from this port.

TANKERS: At Esso Standard Oil, S.A. terminal, vessels anchor and moor to 3 buoys about 900 yards S.E. of the shore and about 1,000 yards S.S.W. of the pier. Pipe-line extends from La Puntilla in a S.E. direction. Two pipe-lines for discharging products to Esso Standard Oil, S.A, The end of each pipe-line is marked by a metallic buoy, the cargo hoses for No. 1 and No. 2 pipe-lines are connected by separate chain to a "Spreader" which by single chain is attached to a metallic marker buoy. On the "Spreader" there is marked, by welding, 1 and 11 where the chains are attached, indicating what pipe-line they are connected to. Ship's crew is used in connecting and disconnecting cargo hoses.

Vessels should moor only on high water during daylight hours; however, they may unmoor day or night. Launch available for mooring and running lines. Approach is made from the Eastward on a true course 270°, a marker buoy is placed temporarily at a distance of 700 ft. seaward from end of pipe-lines to guide vessel in mooring operations. The marker buoy should be passed on the inside at a distance of 50 ft. Port anchor should be dropped first when the end of the pier is in true bearing 006°. When about 7 shots of chain have run out, the starboard anchor should be dropped. The stern of vessel will swing or may be worked to Northward (starboard). A mooring line should be run to the port stern buoy from port side assisting in swinging the vessel into position. Vessel should tie up securely with 3 lines to each buoy, and anchor spread 60° with 60/76 fathoms of chain on each. The eyes of all lines to buoys should be well protected to prevent chafing on the buoys. When in position, the pipe-line hose buoy is taken on board at the starboard side.

DENSITY: Salt water.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: There is a service of watchmen provided by Customs.

OPENING/CLOSING HATCHES: Carried out by stevedores.

SHIP CERTIFICATES:
Ship's Register.
Deratisation Certificate.
International Health Certificates required.

CUSTOMS ALLOWANCES: Only tobacco for personal consumption may be taken ashore. No wine or spirits to be taken ashore.

CARGO GEAR: Vessels' cargo gear to be in good condition with certificates of capacity and safety.

IDENTIFICATION CARDS: Not required if crew members possess passports.

CONSULS: In the capital, San Salvador, 35 km. from the port, there are consulates for most countries.

REPAIRS: It is not possible to have repairs.

REPATRIATION: Facilities available.

AIRPORT: There is an International airport served by regular airlines in San Salvador, distance approximately 46 kms. from the port.

TIME: GMT minus 6 hours. No alteration.

HOLIDAYS: Festivals: Saturday of the Holy week, 14th April, 10th May, 22nd June, Corpus Christi, 5th August, 12th October, 24th October, 5th November, 7th December, 24th December, 31st December. Legal holidays: 1st January, Maundy Thursday and Good Friday, 1st May, 6th August, 15th September, 2nd November, 8th December, 25th December. The port is only completely out of work on the following days: 1st January, Good Friday and 25th December.

POLICE/AMBULANCE/FIRE: National Police (La Libertad), 35-3175; Ambulance (San Salvador), 21-9406; Fire (San Salvador), 21-8661.

TELEPHONE: It is not possible to place telephones on board.

GENERAL: Quarantine Authorities prohibit removal of meat from the vessel.

SHORE LEAVE: Crew is allowed to go ashore.

AUTHORITY: Comision Ejecutiva Portuaria Autonoma (CEPA).

AGENT: F. D. Gibson & Co., PO Box 242, San Salvador. Tel. 21.32.08. Telex 20174. Cables: "Gibson".

LA UNION (Cutuco): 13.20 N. 87.51 W. (See Plan)

DOCUMENTS: See "Acajutla".

PILOTAGE: Obtained usually through Agent, can be cable-requested to Port Captain-La Union.

ANCHORAGE: La Union Bay – up to 34 ft. Approximately 14 Class II and a large number of Class III anchorage berths are available in the harbour. 5 Class II berths are in the vincinity of the pier in depths of 33 ft. to 30 ft., and approximately 9 more, in depths of 70 to 30 ft., are just Westward of Isla Zacatillo. The first area has a mud bottom; the second is sandy and rocky. The large number of Class III berths are in an area Northward of the pier and in the area between the 2 anchorages providing Class II berths. The least depth in each of the areas is 25 ft. A large number of relatively unsheltered anchorage berths of all classes are available outside the harbour in the Gulf of Fonseca.

RESTRICTIONS: Enter any time – preferable on flood tide with draft over 24 ft.

MAX. SIZE: Largest vessel that can be accommodated in harbour would occupy an anchorage berth with a min. depth of 43 ft. and a diameter of 3,300 ft. Largest vessel that can be accommodated alongside wharf would occupy a berth with least depth of 25 ft.; length is not a limiting factor, although a max. 550 ft. is recommended due to strong currents, 3 knots, and pressure on part of any vessel extending for any greater distance beyond length of wharf.

HEALTH: Disease should be reported. Pratique necessary on each occasion.

RADIO: Direct to Agents or Guarailco, San Salvador.

TUGS: No tugs required.

BERTHING: Berthing usually carried out on slack tides due to cross currents, up to 3 knots. The estimated military port capacity is 1,800 tons of general cargo per day. Port can accommodate 2 standard-type ocean-going cargo vessels, and possibly one alternative class T/C (small ocean-type tanker under favourable conditions) alongside berths, and approximately 14 ocean-type cargo vessels, and a large number of Class III (coaster-type cargo vessels) at anchorage berths. Roll-on/roll-off pier, depth alongside 16 ft. LW.

STEVEDORES: Prior advice preferable. Stevedore force consists of 12 gangs of up to 16 men per gang for on-board work. Similar gangs are available on pier, and up to 300 labourers, crane and fork-lift operators comprise shore gangs.

MEDICAL: Services available – no special restrictions.

TANKERS: Drafts 25/34 ft. fore and aft. Tankers of up to 550 ft. in length can be accommodated at either side of pier, where adequate connections of 6–8 in. and 10 in. pipe-lines are located. Largest vessel that can be accommodated alongside would occupy a berth with a least depth of 25 ft.; length is not a limiting factor, except as noted previously.

FRESH WATER: Four 2 in. connections on each side; volume estimated at 10 t.p.h.

FUEL: Bunkers and diesel – can be delivered when berthed.

GANGWAY/DECK WATCHMEN: Not required – National Marines on guard.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCE: Not controlled, but restricted ashore.

IDENTIFICATION CARDS: Passes for leaving ship to have Captain's signature.

CONSULS: Only Nicaragua is represented.

REPAIRS: No facilities.

REPATRIATION: Can be arranged.

AIRPORT: San Salvador – 120 miles away – regular airlines.

TIME: GMT minus 6 hours. No alterations.

HOLIDAYS: Easter Thursday, Good Friday. Port not worked only on those dates.

POLICE/AMBULANCE/FIRE: In La Union – proximate to Port.

TELEPHONES: None available.

SHORE LEAVE: Allowed.

AUTHORITY: International Railways of Central America.

AGENTS: F. D. Gibson & Co., PO Box 242, San Salvador. Tel. 21.32.08. Telex 20174. Cables: "Gibson".

Equatorial Guinea: (Formerly Spanish Guinea)

ALL ENTRIES ARE SHIP'S OFFICERS REPORTS.

REPORT NO. 1. PURSER'S REPORTS

MALABO: (Formerly Santa Isabella)

Documents:
9 Crew Lists.
9 Passenger Lists (Marked "none" if no passengers on board).
3 Customs Declarations.
3 Stores and Provisions.
4 Arms and Ammunition.
1 Vaccination List (Smallpox, Cholera and Yellow Fever).
9 Cargo Manifests.

Stores: No stores were purchased at this port, advise top up prior to calling at this port.

Mail: Advisable to send to next big port.

BATA: Same papers as above. No officials come out to the ship at this port, however, papers should be kept ready. Vessels moor to a buoy for discharge.

Also see "Rey Malabo".

REPORT NO. 2. SHIPMASTERS REPORT

BATA: 01.52 N. 09.46 E.

Roadstead with single point mooring buoy connected to the shore with 6 in. pipe-line, 6 in. hose: (everything in a deplorable state). No tugs or Pilots available. Master should have local knowledge when approaching berth in hours of darkness. Vessels are moored with 2 anchors forward and 2 ship's lines (plus two 8 in. shore lines) to the single point mooring buoy. 5 lengths of 15 m. hose available. Preferable stern discharge connection to be used. Max. pressure: 4 kg/sq.cm. All grades through this line. Linewash of water in between the different grades. There is rubber ball for cargo separation.

Advice: 1. In view of the deplorable state of buoy, lines and hose, Master should be very careful in mooring his vessel – which has to be done by himself – in order not to damage same.
2. Master should have ship's motorboat ready to run ship's lines to the buoy because motor launch, which is supposed to do this is very old and liable to breakdown at a crucial moment.
3. Anchors should be dropped in a position S.W. of the buoy in order to stay well clear of the unmarked wrecks, in good holding ground with 4 to 5 lengths of chain.
4. Tidal currents move the ship relative to the mooring buoy – so it is necessary to heave anchors tight – bearing in mind that the construction, etc. of the buoy is very weak.
5. The buoy carries a light but the light does not work. Anyway mooring after dark is not advisable.

Documents: Only a small customs post available here:
1 Cargo Manifest.
1 Store Manifest.
1 Crew List.

Custom allowance: No restrictions – no sealing of bonded stores.

Shore leave: Allowed by ship's boat.

Radio communication: None. Though there are officially coast radio stations in this country, they do not operate on schedule. Telegrams should be sent via coastal radio stations of other countries. No VHF.

PUERTO MACIAS, (Puerto Nuevo): 01.49 N. 09.44 E.

Situated about 1 mile South of the mouth of the Rio Ekuku. This is quite a new jetty – developed in 1973 – shaped like the letter "L", where the long leg of this "L" is connected to the shore and 4 dry cargo vessels can moor alongside the short leg in about 14 m. of water Every vessel has on her off-shore side 2 mooring buoys to assist in mooring and unmooring. No tugs available. Though it is stated that a Pilot is available, this information should be treated as unreliable. The pier is used for the discharge of general cargo and the loading of logs and sawn wood. According to information received this jetty will be made available to tankers for discharge of oil products.

Documents: See "Bata". This new jetty falls under the jurisdiction of "Bata" authorities.

Radio communication: See "Bata".

REY MALABO, (formerly Santa Isabel): 03.46 N. 08.48 E.

Situated on the Island of Macias Ngueme Biyogo (formerly Fernando Poo) Capital of the Republic of Equatorial Guinea.

Documents:
9 Crew Lists.
3 Stores Manifests.
3 Crew declarations.
2 Lists of Arms and Ammunition.
4 Lists of Ports of Call.
2 Passenger lists or negative.

General: No tugs.

Pilots: Effectively none. Only a locally informed inhabitant of this port comes on board to inform the Master, he is equipped with a large scale Spanish chart of this bay, but he has no nautical knowledge and he does not know how to handle a ship.

Note: 1. Masters should bear in mind that they have to manoeuvre and moor the vessel themselves.
2. In view of the continuous breakdowns (and insufficient power) of the mooring-launch it is absolutely necessary to have the ship's motor boat at stand by to run the ship's mooring-lines ashore.

Mooring procedure: Tanker berth: old jetty (muelle viejo). The ship should be moored stern-to to this jetty. On entering the port with the lights in line starboard anchor is dropped in the middle of the bay and the ship has then to manoeuvre around with her own engines, till in line with the berth.
N.B. Because there is very seldom anybody present at the jetty to accept the mooring lines (on arrival as well as on departure) the vessel's crew should be kept on stand by to do this job.

Arrival/Departure: Between 0600 and 1800 hrs.

Tankers: Preferably stern discharge into a 6 in. line with 6 in. hose. All grades through one line – Linewash with water in between – pressure 4 kg/sq.cm. max.

Dry cargo vessels: Berth at a new jetty on the West side of the bay. No cranes available.

Advice: 1. Masters should be very careful when dropping their anchors as some vessels (Man of war) moor with their sterns to the dry cargo jetty and have their anchors in the middle of the bay. These anchors are very easily fouled by incoming vessels anchors. A useful suggestion might be to put anchor buoys on the anchors in order to show another incoming ship their position.
2. Because it is quite difficult to manoeuvre a tanker around in this bay without any tug assistance, it should be borne in mind that when the wind is over Force 2 manoeuvring with a sizeable vessel is apt to falter, and no assistance can be expected from any quarter.

Departure: Vessels are free to leave within mentioned hours without Pilot.

Radio communication: See "Bata".

Custom allowance: No limit – no sealing of bonded stores.

Shore leave: No restrictions, but with own motor boat.

Currency: Eq. Guinea Peseta = Spanish Peseta.

Also see "Mababo".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Ethiopia

ASSAB: 13.01 N. 42.44 E.

PORT LIMITS: A line drawn from Ras Gombo to the Northern point of Umm al Baher (Islands) to southern point of Umm al Baher, then to Ras Marcanah.

DOCUMENTS:

5 Manifests for transit passengers and passports.
5 Manifests for landing passengers and passports.
5 Crew Lists.
1 complete Crew Provisions List.
1 Crew Personal Effects List.
1 Store List.
6 Cargo Manifests.

PILOTAGE: Compulsory Pilots take tankers in and out of oil harbour only during daytime. Pilots embark about 1 mile N.N.E. from Northern extremity of breakwater. Commercial harbour gives 24 hour service. Vessels calling Assab must advise Agent through Assab Coastal Radio Station by call sign ETC. Assab Radio Signal Station is available.

ANCHORAGES: Assab Bay provides good anchorage in 42 to 48 ft. of sand and coral bottom, good holding ground. Generally weather in Assab can be divided into two: Summer time and Winter time weather, during Summer (May–September) Northerly wind blows with a maximum force of 3/4 BS. During Winter time (October-April) South-easterly local monsoon winds blow usually 5/6 BS but reaching force 7/8 BS during daytime and generally drop at night. This 7/8 BS force is mainly experienced about December to February.

RESTRICTIONS: There are 2 entrances, the North and the South entrance, the depth at the entrances is 38 ft. Least width 1,300 ft.

Vessels of any size enter or leave port during hours of darkness except tankers, and vessels carrying dangerous cargo. In these cases, where vessels are carrying explosives or other dangerous cargoes, Agents of calling vessels must notify the Port Office in advance of discharging and/or loading of explosives. Inflammable and other highly dangerous cargoes in commercial harbour are permitted from 0600 to 1800 hrs. local time.

MAX. SIZE: Largest vessels which can enter commercial harbour 200 m. LOA, 80 ft. beam, 34 ft. draft.

HEALTH: Quarantine and sanitation services available. Quarantine officer boards arriving vessels and necessary medical clearance given.

RADIO: Coastal radio station available *(a)* position Lat. 13° 01′ 24″ N. *(b)* Long. 42° 44′ 38″ E. Coastal radio station in service for 13 hours per day 0700 to 2200 hrs. Call sign ETC. Transmits traffic lists on 489 kc/s after a premliminary announcement on 500 kc/s, 30 minutes past each odd hour starting at 0500 and ending 1700 hrs. (0530, 0730, 0930, hrs. etc.).

(c) Transmit traffic lists on 6509 at 0500, 0900 and 1300 hrs. and searches 6265.5–6280.5 between 0515–0600, 0915–1000, and 1315–1400 hrs.

(d) Transmit traffic lists on 8618 at 0700, 1100 and 1500 hrs. and searches 8354–8374 between 0715–0800, 1115–1200 and 1515–1600 hrs.

(e) Rates shall include station charges and charge of transmission over telecommunication network within Ethiopia.

(f) Accepts ship letter telegrams (SLT) from ships for delivery in Assab.

(g) For radio telephone service. Station keeps watch and replaces on 2182 for radio telephone service at 0615–0700, 0815–0900, 1015–1100, 1215–1300, 1415–1500, 1615–1700 hrs. and transmits traffic same hours on 4379.3. Service hours will be extended to 24 hours.

VHF: VHF system will be installed in the port in the near future.

TUGS: Tug service compulsory for ships over 300 n.r.t. 2 tugs of 600 h.p. each, attend ships during arrival and departure.

BERTHING:

(a) North Half Jetty 1,620 ft. Long, 36 ft. depth.
(b) South Half Jetty.
(i) 1115 ft. long and 33.8 ft. depth.
(ii) 459 ft. long and 29.5 ft. depth.
(iii) 164 ft. long and 19 ft. depth
(c) 2 coaster piers, each 260 ft. long 26 ft. depth. Temporarily out of use.

Fenders are excellent and protect ships from impact; harbour is modern and has modern breakwater 711 m. long. 7 big ships and 4 coasters can be accommodated at a time.

STEVEDORES: 14 stevedoring agencies, any kind of cargo can be discharged and loaded. Skilled labourers and loading/discharging capacity are respectively 30-15 per hour. Crane lift capacity 30 tons.

Normal working hours: 0700 to 1200 hrs., 1600 to 1800 hrs. Work can be performed 24 hours a day including holidays.

MEDICAL: 1 hospital in town and clinic in port. When sick person on board, hoist (by day) International code flag "W", (by night) 3 lights in vertical line upper one red, and middle and lower, white lights. Doctor may be called on board at any time to attend sick crew or passengers by arrangement with Agents.

TANKERS: Oil harbour about 1.5 miles S.E. of commercial harbour with draft 33 ft. Crude oil discharging terminal 500 m. from Southern end of breakwater open sea buoy berth – tankers of 800 ft. length, and 36 ft. draft can be accommodated. Diameter of pipe-line for loading and discharging black products – 12 in., white products 10 in.

Tankers at the Shell Berth are moored by dropping 2 anchors and tying up 2 ropes from each quarter to the buoys, and 1 rope from each quarter to the dolphins. All grades of oil in bulk discharged into shore storage tanks from this harbour, and fuel oil is discharged from the Commercial Harbour.

In Assab, the petroleum installations are of Shell Red Sea Co., and Mobil Oil East Africa Co.

SALT LOADING TERMINAL: Located 1.7 miles from the Commercial Harbour, salt loading ships drawing up to 33 ft. are berthed at this terminal using 2 anchors and mooring to buoys and dolphins.

DENSITY: At berths is 1.03 while the tides are negligible for all seasons; max. 1 ft.

FRESH WATER: Available. Supplied upon request by Agent and can be delivered at 60 t.p.h.

FUEL: All grades available, at commercial harbour. Advance notice necessary. Rate of 300 t.p.h.

FIRE PRECAUTIONS: Modern fire brigade.

GANGWAY/DECK WATCHMEN: Watchmen on deck necessary, and rate arranged as per agreement of employer and employee.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: All ship's International Certificates should be on board.

CUSTOMS ALLOWANCES: Tobacco, 400 cigarettes. Wine and/or Spirits. 1 litre or bottle of spirit.

CARGO GEAR: Different types of certified cargo handling equipment available.

IDENTIFICATION CARDS: Needed.

CONSULS: Only Italian Consulate in Assab, others live in Asmara the capital city of Eritrea.

REPAIRS: Minor repairs can be carried out at Port Office workshop.

REPATRIATION: Possible.

AIRPORT: 15 km. from Assab. Ethiopian Airlines. 5 domestic flights per week.

TIME: GMT plus 3 hours.

HOLIDAYS: See "Massawa".

POLICE/AMBULANCE/FIRE: Port Police Tel. 60049; Hospital Tel. 60119; Port Office fire brigade Tel. 60102.

GENERAL: 1 modern hotel and 1 motel with full facilities available in town.

SHORE LEAVE: Crew allowed ashore, with boarding passes.

AUTHORITY: Ministry of Communication, Department of Marine.

AGENTS: Flli-Biga et Cie, Via Dogali, PO Box 48, Assab. Tel. 66.00.37 Correspondence to Main Office: PO Box 1108, Asmara. Telex 2037 "Speditafrica". Cables: "Speditafrica".

MASSAWA: 15.37 N. 39.28 E.

PORT LIMITS: The coastline of Gurgussum Peninsula, at 15° 39′ N. to a point 15° 39′ N. 30° 30′ E. to 15° 35′ N. 39° 30′ E. to the coastline at 15° 35′ N. 39° 26′ 50″ E.

DOCUMENTS:

2 sets Manifests.
2 sets Bills of Lading.
5 Crew Lists.
5 Passenger Lists.
2 Stores Lists.

APPROACHES: Through North channel and South channel. In channel, in direction of leading lights 243°, max. depth 31 ft. (but alongside 30 ft.) Marking buoy showing a wreck in position approximately 200 m. S.E. of North breakwater.

PILOTAGE: Pilotage is compulsory for all vessels over 100 n.r.t. Pilot section headed by a Chief Pilot and 2 other Pilots.

There are 2 pilot boats. ETA should be given to Agent who will inform Pilot 72 hours prior to arrival. Signal tower located in port area contacts vessel on arrival informing Agent and Pilot, and receiving or transmitting by Morse lamp messages to and from vessel.

ANCHORAGES: 8 cables East of main lighthouse. Anchorage North of leading light not recommended.

Tides. Normally the range of tide varies between 1.5 and 2.0 m., but during spring tide season the range varies up to 3 m.

MAX. SIZE: Length 520 ft., draft 30 ft.

HEALTH: Doctor normally boards with Pilot, but can be asked to board together with Customs and Immigration while vessel on roads. All crew members must be vaccinated against smallpox and yellow fever, and possess necessary certificates. Deratisation and other health certificates required. Deratisation cannot be effected at Massawa, but exemption certificate can be obtained.

RADIO: Assab Radio, call sign ETC, Djibouti Radio, or Aden Radio may be used. Asmara Radio, call sign ETC 2, working hours 0500 to 1700 GMT. Radio-telegraphy and radio-telephone services.

TUGS: Join vessel in port. Compulsory.

3 tugboats are available, two of 350 h.p. and the third 1,000 h.p. The smaller motor tugboats used for assistance mainly within the port limits, and the deep-sea salvage motor tugboat, for salvage operations, but whenever conditions demand, is also employed for assistance within the port.

BERTHING: Vessels normally drop anchor before berthing.

Commercial Harbour: 6 berths, namely 1 to 6, and the overall distance from Berth No. 1 to Berth No. 6 is 907 m. These berths normally used by vessels handling general cargo, bagged cargo and livestocks. Depth of water at mean low water springs (MLWS) is shown below:

Berth No. 1 – 16 ft. 6 in.
Berth No. 2 – 24 ft. 6 in.
Berth No. 3 – 28 ft. 6 in.
Berth No. 4 – 28 ft. 0 in.
Berth No. 5 – 27 ft. 0 in.
Berth No. 6 – 30 ft. 0 in.

Salt Berth: This is a single berth where vessels load salt in bulk. The depth at the berth is 32 ft. Max. draft 29 ft. Loading with the help of conveyor belt at the rate of about 300 t.p.h.

Cement Berth: Depth 18 ft.

American Jetty: Depth 18 ft.

However, dredging will be carried out to accommodate vessels of a greater draft in the near future.

STEVEDORES: Radio 24 hours' notice of ETA stating number of gangs required. Loading discharging rates 5 t.p.h. on general, 10/15 t.p.h. on bagged cargo.

DENSITY: 1025.

MEDICAL: Notice should be given to Agent only when specialist needed. Hospital treatment available. Dental facilities available at Asmara, 110 km. away.

TANKERS: AGIP, Arkiko oil station terminal: max. draft for entering channel 29 ft.

Total Pier, depth alongside 36 ft., max. draft 30 ft.

FRESH WATER: Supplied alongside, Max. rate 600 tons per day or by barge of 50 tons on roads. Barge can be loaded/discharged in 8 hours.

FUEL: Can be obtained alongside oil terminals and at Berths 5 and 6 for heavy fuel only. Diesel can be supplied by lorries alongside. No bunker barge available.

GANGWAY/DECK WATCHMEN: Compulsory when alongside.

OPENING/CLOSING HATCHES: Normally by labourers, but can be done by crew.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. New allowance can be delivered after 1 week. Wine/Spirits: 1 bottle of wine/spirits (opened). Wine and beer quantity necessary for the stay in port allowed upon reasonable request on arrival.

IDENTIFICATION CARDS: Not needed. Immigration gives port entry card (without crew member's name) which must be given back prior to departure. In case of loss a fine is likely.

CONSULS: Italian Vice-consulate, Box 62. Tel. 52214. Other consulates at Asmara for Belgium, France, Gt. Britain, Italy, Sudan and U.S.A.

REPAIRS: Good workshops for minor engine repairs. Slipway for vessel up to 600 g.r.t.

REPATRIATION: Via Asmara. Daily flight Massawa-Asmara, then by international flights. Or Massawa-Asmara by road, 110 km., asphalt road.

AIRPORT: 7 km. from port with daily service to Asmara. International airport at Asmara 60 km. by air.

TIME: GMT plus 3 hours.

HOLIDAYS: For 1976: January 7th (Christmas Day – Coptic); January 19th (Epiphany); March 2nd (Victory of the Battle of Adowa); March 13th (Prophet's Birthday); April 6th (Victory Day); April 23rd (Good Friday – Coptic); April 25th (Easter Sunday – Coptic); May 1st (Labour Day); September 11th (New Year's Day); September 12th (Abolition of Feudalism); September 27th (Finding of the True Cross); October 6–8th Id-al-Fatir; December 18th Id-al-Kebir and Sundays.

POLICE/AMBULANCE/FIRE: Police, tel. 52425; Ambulance, tel. 52234–5–6; Fire Brigade, tel. 52220.

TELEPHONES: Possible to place telephones on board. Arranged by Agent.

SERVICES: Radar and gyro compass technician available, but special spare parts not available.

SHORE LEAVE: Crew cannot leave vicinity of Massawa without special immigration permit.

AUTHORITY: Department of Marine.

AGENT: Please always address to: Asmara Head Office – Fratelli Biga & Company, Viale Leonardo de Vinci 2/14 – Asmara PO Box 1108. Share Company – Shipping Chartering, Stevedoring and Forwarding Agents (SCAC Group). Branches Massawa, Assab, Ababa, and Djibouti. Telegraphic "Speditafrica" Asmara. Telex 2037 "Speditafrica" Asmara. Tel. 11.03.59–11.03.62 Asmara. Tel. 55.21.4 Massawa. Home Tel. Shipping Advisor 13901 Asmara.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Faroe Islands

KLAKKSVIK: 62.14 N. 06.35. W. (See Plan)

DOCUMENTS:
One of each:
Crew List.
Passenger List.
Custom Documents (one list crew's quantity of tobacco and spirits).
Health Document.
Manifest.
Bill of lading.

PILOTAGE: Not compulsory but available. Give ETA via Torshavn radio, OXJ, 1 or 2 hours before arrival, and Pilot will meet vessel in Roads. International signals can always be used. VHF Channels 16, 12, and 6 in use.
ANCHORAGE: In Roads in 12 to 20 fathoms; good anchorage.
RESTRICTIONS: No restrictions upon entry.
MAX. SIZE: Up to 450 ft. length, but draft must not exceed 20 ft
HEALTH: Pratique usually automatic.
RADIO: Torshavn radio, OXJ, is only coast station in Faroe Isles.
TUGS: No tugs available.
BERTHING: Ships will be berthed on arrival, if ETA announced 12 hours before arrival.
STEVEDORES: Ships Agent will arrange stevedores.
MEDICAL: Inform doctors before arrival. Hospital facilities available.
TANKERS: Only small tankers, up to 2,000–3,000 tons can be handled.
FRESH WATER: Available from quay. 30 t.p.h.
FUEL: Diesel oil available, usually without notice (or short notice).
DEVELOPMENTS: Berthing place will be widened about 600 ft. on each side of bay and permissible draft will be increased.
GANGWAY/DECK WATCHMEN: Watchmen usually unnecessary, but available if desired.
OPENING/CLOSING HATCHES: Normally done by crew.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes. Wine and/or Spirits, 1 bottle of wine and 1 of spirits.
IDENTIFICATION CARDS: Not needed.
CONSULS: British, tel. 5109 and 5489; Norwegian, tel. 55018 and 55353.
REPAIRS: All types of deck and engine repairs possible. Slipways for ships up to 200 ft. length.
REPATRIATION: Small changes in crew can usually be arranged and, for example, sick seamen/fishermen are often sent home, when recovered.
AIRPORT: Nearest airport on Vagoy, about 6 hours travelling. Regular flights, 6 a week.
TIME: GMT. Permanent.
HOLIDAYS: Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police 5348; Ambulance 5464; Fire 04.
TELEPHONES: Can be arranged on board at one berthing place, at about 50,00 kr plus dues for conversations.
SERVICES: Compass adjusting, day and night.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Normally there are none.
AUTHORITY: Harbour Master.

AGENT: Christen Joensen Stengavegur, P.O. Box 179, 3870 Klaksvik, Faroe Islands. Cables Christen Joensen. Tel. Klaksvik 55922.

SOERVAAG: 62.04 N. 07.18 W.

DOCUMENTS:
Bill of Lading.
Customs Documents (including Crew List).
Ship's Certificate (stating size of ship).

PILOTAGE: Ships can call Pilot via Torshavn Radio. Pilot has good knowledge of local conditions.
ANCHORAGES: Danish Chart No. 82 – on Soervaag fjord – can be recommended as good. Bottom gravel.
RESTRICTIONS: Difference between high and low water up to 2 m. on Spring tide and up to 1 m. on neap tide.
MAX. SIZE: Largest vessel reported in Soervaag was 12,000 d.w.t. tanker. Harbour about 150 m. long and formed with one long pier and another 1 stretching from it. Draft at pier 8 m. Pier runs N.E./S.W.
HEALTH: Ships coming from countries having epidemic-disease have to fly the flag "Q". No persons allowed connection with shore, before official doctor given free pratique. Doctor comes from Midvaag or Wesmannahavn and can be at Soervaag in half hour.
RADIO: Only civilian radio on Faroe Islands is Torshavn-Radio (Int. call sig.: OXJ) via this radio ships can call for medical assistance and weather forecast. These 2 services are free. All traffic to Faroe Islands via Torshavn-Radio.
TUGS: No actual tugs can be obtained, but many small vessels which can be used as tugs.
BERTHING: Captains should take care when berthing not to come on to East side of pier – owing to very low water.
STEVEDORES: Arranged through A/S NI. Niclasen, Soervaag, or Harbour Master.
MEDICAL: Hospital in Torshavn with all facilities.
TANKERS: Ordinary pier also used by tankers (draft 8 m.) size of load/discharge-lines: 3 in. and 6 in.
FRESH WATER: Ships can obtain fresh water direct from pier.
FUEL: Marine diesel fuel; turbo-jet A1–100; gasoline-petroleum.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Captains have to make arrangements with stevedores, receivers or shippers.
CUSTOMS ALLOWANCE: Tobacco, each crew member is allowed to have 200 cigarettes or 250 gm. of tobacco. Wine and/or Spirit, crew members not allowed any wine or spirit. Captain allowed 2 bottles every second day.
IDENTIFICATION CARDS: Not required.
CONSULS: Belgium, Finland, Greece, Iceland, Norway, Spain, U.K., West Germany, Brazil, France, Holland, Italy, Portugal, Sweden.
REPAIRS: Small deck and engine repairs carried out.
DRY DOCKS: On Skaalefiord, dry dock up to 1,500 d.w.t.
REPATRIATION: Available.
AIRPORT: Faroe Island has 1 airport – only 3 km. from Soervaag. During Summertime daily services to Bergen, Norway and Copenhagen, and weekly services to Glasgow.
During Wintertime weekly services to above destinations.
TIME: GMT. Permanent.
HOLIDAYS: Same as Denmark.
POLICE/AMBULANCE/FIRE: Police 8; Ambulance 8; Fire 4 or 46.
TELEPHONE: Telephones can be placed on board.
SHORE LEAVE: Crew members are allowed ashore.
REGULATIONS: Per ordinary regulations in Danish Ports. Harbour dues to be paid before ship's departure.
DELAYS: Usually none.
AUTHORITY: Harbour Master.

TORSHAVN: 62.00 N. 06.45 W.

DOCUMENTS: See "Klakksvik".
PILOTAGE: Not compulsory. Can be obtained through Torshavn. Radio 2182 kHz. or Channel 16 VHF (Harbour Office).
ANCHORAGES: Due South of breakwater in depths about 30 fathoms.
MAX. SIZE: Max. draft 25 ft. This is only restriction.
HEALTH: Pratique usually automatic.
RADIO: Torshavn Radio, OXJ.
TUGS: No tugs available.
STEVEDORES: Must be arranged with the Agent.
FRESH WATER: 100 t.p.h., by pipe-line.
FUEL: All kinds of fuel at 100 t.p.h.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: Tobacco (half carton); wine/spirit (1 bottle).
IDENTIFICATION CARDS: Not required.
REPAIRS: All kinds are possible.
DRY DOCKS: Slipway for vessels up to 1,000 tons.
REPATRIATION: Can be arranged.
AIRPORT: Regular airlines, 2 hours by car from Airport.
TIME: GMT Permanent.
HOLIDAYS: Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police, 1448; Ambulance, 3540; Fire, 04.
TELEPHONES: No facilities.
SERVICES: Compass adjusting only.
SHORE LEAVE: Allowed.
AUTHORITY: Torshavnar Havn.

TRANGISVAAG: 61.33 N. 06.50 W.

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Bill of Lading.
1 Bonded Store List.

PILOTAGE: When Pilot required pre-arrange with Agent by telegram or telephone, 2 hours notice ETA wanted. Pilot boat is local fishing-boat, usually boarding vessel at harbour entrance.
ANCHORAGE: Safe sheltered harbour up to 30 fathoms deep along the entrance transit bearing. Vessels anchor 1 cable offshore in 8 fathoms, clay bottom.
RESTRICTIONS: Vessels may enter harbour day and night.
MAX. SIZE: Vessels may berth with draft up to 7 m.
HEALTH: Pratique granted if no contagious illnesses aboard and all arrival formalities accomplished by the boarding officials.
RADIO: Torshavn Radio, call signal OXJ, 24 hours service, listens 2482 kHz, replies and transmits traffic on 1778 kHz, traffic lists on 1778 kHz 35 minutes past each even hour. VHF service: Channel 16 (156.80 mHz) Channel 26 (161.90 mHz). All ETA messages, etc. must be routed through Torshavn Radio.
TUGS: None; if required local fishing-boats are capable to act as tugs.
BERTHING: Tveraa at Northern side of fjord. Outer side of quay 180 m. length and 20/21 ft. alongside. Inner side length 170 m. and 15 ft. alongside. Quay is for general cargo, fish and salt.
Harbour basin length 58 m., depths 7 to 18 ft. alongside.
Drelnes on South side of fjord. Quay length 89 m. Depth alongside outer side 23 ft.; inner side length 43 m. depth 22 ft.
STEVEDORES: Enable Agent to arrange gang important obtain in good time accurate ETA from vessel. Work normally not carried out on Sundays.

MEDICAL: Advance notice to Agent preferable, good hospital facilities for both surgery and medicine.
DENSITY: 1024.
FRESH WATER: Water available at main quay, rate 50 t.p.h.
FUEL: Diesel gas oil available, 50 t.p.h., no advance notice required.
DEVELOPMENTS: New quay under construction in extension of existing quay.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close hatches.
CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes or 200 grams tobacco out of Bond. Limited quantity wine and spirits.
IDENTIFICATION CARDS: Not needed.
CONSULS: Spanish Vice-Consul.
REPAIRS: Local marine repair companies can undertake all repairs of general nature to deck, engines, hull, electric and radio equipment, etc. Slipway available for small vessels.
REPATRIATION: May be arranged by sea or air.
AIRPORT: (Vagar) Served by regular airlines, located 50 miles from Trangisvaag.
TIME: GMT, no alterations during the year.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Christmas Day; Second Christmas Day; work not carried out these days.
POLICE/AMBULANCE/FIRE: Police tel. 10 and 53; Ambulance 134; Fire 159.
TELEPHONES: Usually not placed aboard, but can be arranged.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

AGENT: Eyvind Mortensen, POB 38, 3880 Tvoroyri. Trongisvagur, Faroe Islands, Tel. 30–170, Cables "Insurance".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Fiji Islands

LAUTOKA, (Vuda Point): 17.36 S. 177.26 E.

DOCUMENTS/HEALTH: Refer to "Suva".
PILOTAGE: Not compulsory at present. However, most vessels avail themselves of a Pilot, who boards at Navula Passage, 20 miles South of Lautoka. Masters should telegraph to their Agents ship's ETA at Navula and indicate whether they require a Pilot or not at least 24 hours in advance.
Note: Radio communications with Fiji can be difficult and Masters are advised that telephone or telex messages worked via New Zealand or Australia direct to their Agents are far more reliable.
The Pilot normally boards from a 26 ft. wooden launch, blue hull with white superstructure, buff cabin top with orange liferaft on forward cabin. The pilot vessel can be contacted on VHF 16/6. Listening watch only when vessels are expected. Pilot normally boards 1 mile seaward of the passage on the leads. In heavy weather it may be necessary for a vessel to enter the passage to embark the Pilot. There is no anchorage outside the passage.
Vessels requiring pratique should anchor approximately 1 mile to the Westward of Vio Island in Lautoka Harbour. If prior arrangements have been made through Agent, Health Officers may board inside Navula (The Health Officers inspect vessels only from 1 hour after sunrise to 1 hour prior to sunset). The Pilot for those vessels not employing one from Navula but requiring a Pilot for berthing will board at the quarantine anchorage off Vio Island.
ANCHORAGES: The whole of the area enclosed by a circle of diameter approximately 1 mile between Vio Island and Pinder Reefs is an acceptable anchorage with depths ranging from 9 to 13 fathoms.
MAX. SIZE: Minimum depth in approaches to wharf 32 ft., depth alongside 36 ft. Generally speaking, any vessel not exceeding 32 ft. draft can be accommodated. Main wharf is only 457 ft. long but overhangs are allowable, ("Oriana" LOA 804 ft., berths at Main Wharf), dolphins for mooring lines being situated off each end of the wharf. Range of tide approximately 5.5 ft. at springs and 3 ft. at neaps, but state of tide does not affect the foregoing.
At Vuda Point, the tanker berth of Lautoka, tankers in the 18,000 to 24,000 d.w.t. class can be handled. This is a submarine pipe-line installation, the ship mooring to 4 buoys, available depth being about 36 ft.
TUGS: No tugs available. Can be obtained from Suva if reasonable notice is given.
BERTHING: Berthing and unberthing at Vuda Point only in daylight. Berthing at Lautoka is at discretion of Harbour Master or Pilot, but in normal conditions is effected at any hour of day or night.
Berthing in Lautoka is generally effected port side to.

Wharf	*Length*	*Depth*
Queens West	457 ft.	36 ft.
Queens North	257 ft.	24 ft.
Queens East	400 ft.	12 ft.
SPSM	146 ft.	32 ft.
Kings	300 ft.	6 ft.

FUEL: Diesel fuel is available at the North and East berths on Queens Wharf.
FRESH WATER: Fresh water is available at all berths, there may be some restrictions in the dry season.
TANKERS: See "Max. Size". No slop discharge facilities. Discharge line 8 in. diameter.
DENSITY: 1025.
CONSULS: None.
REPAIRS: Only comparatively minor repairs can be effected such as welding jobs and repairs to pumps and other auxiliaries.
REPATRIATION: Repatriations can be effected through vessel's Agents.
AIRPORT: Nadi International Airport is 16 miles from Lautoka. Frequent flights to all parts of the world by several major airlines operating through Nadi.
TIME: GMT plus 12 hours. No alterations to clocks.
POLICE/AMBULANCE/FIRE: Dial 000 in emergency. Police, 60222; Ambulance, 60399; Fire, 60211.
SERVICES: Tank-cleaning labour and labour for painting, chipping, etc. can be provided, but no equipment. No facilities for discharge of slop tanks etc. Compass adjustments can be arranged.
AUTHORITY: Wharf Manager, Ports Authority of Fiji, Lautoka.

LEVUKA: 17.41 S. 178.51 E.

DOCUMENTS:
Goods carried in unregistered space (C.E. 148) (1 only).
List of articles in possession of Crew, Officers and Master (1 only).
Crew List (2 only).
Passenger List (2 only).
Parcel List (1 only).
Primary Health Report (1 only).
Special Malaria Forms (1 only).
Vaccination Certificates (1 for each person).
Derating Certificates (1 only).
PILOTAGE: Pilots are arranged through Agents.
MAX. SIZE: Length 560 ft. Max. draft 25 ft.
HEALTH: Radio pratique may be granted when any vessel has not visited any malarious port and Master declares that crew and passengers are healthy and vessel has not come from any area where internationally quarantinable diseases are endemic or in epidemic. Vessel may then enter port by day or night. On berthing, Master must immediately deliver to Quarantine Officer fully completed Primary Health Report and Derating or Derating Exemption Certificate. If there is any suspected case of disease or fever on board, vessel must be anchored at quarantine anchorage until cleared by port Medical Authority. Pratique is automatic if a vessel has been granted pratique at another port in Fiji.
TUGS: No tug service available.
BERTHING: Only 1 vessel berthing at a time.
Berthing in Levuka is generally effected starboard side to, outside Queens Wharf. Both dry cargo ships and tankers use the one berth available for overseas shipping at Levuka. Berth length 575 ft. Depth 18 to 34 ft. dependent on tide.
STEVEDORES: Estimated time of arrival of any vessel and tonnage of cargo to be discharged should be received at least 24 hours from time of arrival.
MEDICAL: Normal hospital facilities are available. Specialist services not available but can be arranged for within 24 hours. Smallpox, cholera and yellow fever valid Vaccination Certificates are required to be held by ship's crew and passengers except those coming from New Zealand, Australia, Gilbert and Ellice Islands, Tonga or Samoa.
TANKERS: Load and discharge lines 8 in. steel pipe. 1 berth only.
DENSITY: 1025.
FRESH WATER: Available only during normal working hours, which is from 0600 to 1600 from Monday to Thursday, and Friday up to 1500. Rate of delivery of water is about 15 t.p.h.
FUEL: Light marine diesel only – viscosity kin. at 100°F. = 3.4.
FIRE PRECAUTIONS: Bunkering only permitted during period between sunrise and sunset.
GANGWAY/DECK WATCHMEN: Services of watchman highly recommended to stop unauthorised persons from going on board.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCES: All crew and officers will be issued, with 25 cigarettes per day. A maximum of 4 days' allowance may be given at any one time. Cigars or tobacco may be taken in lieu of cigarettes. Masters and other officers may be allowed to keep in their possession small quantities of liquor.
Daily allowances: spirits, 1 reputed quart to Master; beer, 2 reputed quarts to other officers; spirits,0.25 reputed quart to other officers; beer, 2 reputed quarts to Master.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: Minor engine repairs are possible, but deck and major engine repairs could be carried out at Port of Suva, which is about 57 miles away.
REPATRIATION: Facilities exist for repatriation.
AIRPORT: Is situated on island of Viti Levu and the distance is about 200 miles. It is served by regular airlines (international). Connections twice daily from local airport, 12 miles from port.
TIME 12 hours ahead of GMT.
HOLIDAYS: Working of cargo is not permitted on Sundays, Good Friday and Christmas Day. Application to work on Sundays to be made to the Senior Collector of Customs at Ovalau.
POLICE/AMBULANCE/FIRE: Police, 44033; Ambulance, 44015; Fire, 44041.
TELEPHONES: Arrangements may be made with Postmaster for installing telephone on board.
GENERAL: Rat guards must be affixed to all shore moorings or cables greased when alongside to prevent the advent of rats.
SHORE LEAVE: All crew members are allowed shore leave unless there is a special restriction from any Government authorities.
DELAYS: No berthing at night (lines cleared by quarantine authorities). Bunkering from sunrise to sunset. No loading or discharge during rain.
AUTHORITY: Harbour Master.

SUVA: 18.08 S. 178.26 E. **(See Plan)**

PORT LIMITS: A vessel is considered to be an "arrived vessel" having passed the W. Reef Beacon at the entrance to Suva Harbour.
DOCUMENTS:
1 Last Port of Clearance Certificate.
1 Declaration of Nett and Unregistered Tonnage form.
3 Passenger Lists.
3 Crew Lists.
3 Stores Lists (for high duty goods).
Passenger liners are required to submit Transit Passenger Lists and also a letter of Guarantee from Master.
Vaccination Certificates for Passengers and Crew.
Deratisation Certificates.
PILOTAGE: Arranged through vessel's Agents. 24 hours notice of ETA with confirmation 12 hours before arrival. Suva Harbour Control should be contacted on Channel 20 VHF when within VHF range. Pilot vessel is a white clipper bow launch with word "Pilot" in black on each side and will leave wharf 45 minutes before signalled ETA of vessel. Pilots board on leads 5 miles from front lead. Vessels may stand in on leads to meet pilot vessel. Vessels are advised to provide 2 manropes for pilot ladder which will usually be required on the port side. No anchorage for vessels awaiting a Pilot.
ANCHORAGES: Safe anchorage may be found in depths of 10 to 20 fathoms within the harbour. Holding is good, mud bottom.
RESTRICTIONS: Vessels may enter at any time of day or night.
MAX. SIZE: No length or draft limitation for conventional vessels entering port. Largest vessel regularly entering is 42,000 tons.

HEALTH: Health authorities require that vessels cable details of ports visited within 50 days of ETA. Radio pratique will be granted to vessels which are healthy and have not visited a port in a malarial area within 50 days. Health authorities board and inspect any vessel which has visited a malarial port within 50 days and will spray any vessel which has visited a malarial port. Authorities board from a launch as vessel enters harbour: Quarantine officer will sight Maritime Declaration of Health and Deratisation Certificate on boarding. No further pratique formalities are required in Fiji ports other than first port of entry.
RADIO: Suva Radio, call sign 3 DP.
TUGS: 2 tugs available, one of 680 h.p. and one of 340 h.p.
BERTHING: Vessels berth port or starbord side to King's Wharf or port or starboard side to Walu Bay Wharf as may be necessary. King's Wharf is 1,600 ft. in length, having a least depth alongside of 42 ft. at MLWS at the North end and 35 ft. at the South end, whilst Walu Bay Wharf is 600 ft. in length, having a least depth alongside of 31 ft. MLWS.
Vegetable oil: Vessels loading vegetable oils berth at Walu Bay or North King's Wharf.
LPG carriers: Berth North King's Wharf or Walu Bay.
STEVEDORES: Arranged by ship's Agents.
MEDICAL: Advance notice of medical assistance is desirable. Hospital facilities available. Current international vaccination certificates required.
TANKERS: Discharge lines 8 ins. diameter. Tankers discharge at King's Wharf, North and South berths. Depths alongside 42 ft. No residue discharge facilities.
DENSITY: Salt water, density 1025 approx. No tide effect on density.
FRESH WATER: Available at all berths. Delivery rate 30 t.p.h. per hose.
FUEL: Furnace fuel oil, diesel fuel oil, gas oil available by prior arrangement through oil company.
GANGWAY/DECK WATCHMEN: Employment of deck/gangway watchmen is recommended and normally provided by ship's Agents.
OPENING/CLOSING HATCHES: Normally opened and closed by stevedore labour but crew may be employed at Master's discretion.
CERTIFICATES:
Load Line.
Certificate of Registry.
Safety Equipment Certificate.
Radio Certificate.
Deratisation Certificate.
Maritime Declaration of Health.
CUSTOMS ALLOWANCES: 1 oz. tobacco per man per day. No alcohol.
IDENTIFICATION CARDS: Not compulsory.
CONSULS: The following countries are represented: Belgium, United States of America, Netherlands, France, Norway, Denmark, Sweden, Federal Republic of Germany, Great Britain, New Zealand, Australia and India.
REPAIRS: Engine and deck repairs may be carried out at local machine shops.
REPATRIATION: Facilities exist for crew changes and repatriation.
AIRPORT: 15 miles to Nausori (Suva) Airport, serving Pacific Islands on weekly basis. Numerous daily flights to Nadi International Airport.
TIME: Local time is 12 hours ahead of GMT.
HOLIDAYS: New Year's Day; Christmas Day; Boxing Day (Dec. 26th); Independence Day (Oct. 10th); Prince of Wales' Birthday (17th Nov.); Queen's Birthday (14th June); August Bank Holiday (4th August); Good Friday; Easter Monday. Cargo is not worked on public holidays.
POLICE/AMBULANCE/FIRE: Police, 23811; Ambulance, 23071; Fire, 22688; Emergency, 000 for any of the above services.
TELEPHONES: Telephone connections to ships are provided.
SERVICES: Compass adjusting may be carried out.
SHORE LEAVE: Allowed.
DELAYS: Delays are not usual except for rain during hurricane season from November to April.
AUTHORITY: Fiji Marine Department.

OUT PORTS OF SUVA: Customs and Pilot are embarked at Suva or Lautoka.

Ellington: 17.20 S. 178.14 E. Private wharf for loading sugar and molasses from Raki Raki Mill.

Lambasa; 16.26 S. 179.22 E. Open roadstead at mouth of Lambasa River where vessels load from lighters, sugar from S.P.S.M. Sugar mill.

Naikorokoro: North Coast of Kadavu. Anchorage for loading sawn timber.

Savu Savu: 16.47 S. 179.21 E. Government wharf for local coast trade and anchorage for cruise vessels.

Vatia Point: 17.25 S. 177.46 E. Private wharf for discharging explosives and fuel to gold mines.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Finland

EKENAS/TAMMISAARI: 59.58 N. 23.26 E.

DOCUMENTS:
2 Crew Lists (passengers to be included).
1 Customs Declaration (official forms supplied by the Customs Authorities).
4 Manifests.
1 Bill of Lading.

PILOTAGE: Pilots for Ekenas/Tammisaari applied for either at Hango Pilot station by approaching Pilot station outside Hango/Hanko, where Pilot boat will meet vessel right outside Pilot station; or at Koverhar Pilot station by giving ETA 2 hours ahead over VHF Channel 16, working frequencies Channels 6, 8, 12, 13.

Koverhar Pilot boat will meet arriving vessels at Ajax Buoy.

Telegram addresses: Hango Pilot or Koverhar Pilot.

MAX. SIZE: Max. draft 15.1 ft. (4.6 m.). No other restrictions. At Skogby, draft up to 24 ft.

RADIO: Hanko Radio, Call sign OFI.

TUGS: Normally no tugs stationed at Ekenas but can be arranged from nearest port.

BERTHING: Two quays at Ekenas: "Trakajen", length about 160 ft.; "Stenkajen", length about 500 ft.

"Stenkajen" is equipped with one shore crane with a lifting capacity of 5,000 kg. The shore crane is equipped with grab for lifting bulk cargoes such as coal, coke, china-clay and ball-clay. 2 mobile cranes, capacities 27 and 36 tons.

Situated about 6 nautical miles from Ekenas is Skogby Sawmill Quay. Depth alongside 24 ft. Skogby Sawmill exports sawn goods, mainly to U.K., both packaged and loose.

STEVEDORES: ETA to be given to Agent 1400 hours Finnish time on the day before arrival in order to prepare loading/discharging.

MEDICAL: Hospital treatment can be arranged when needed.

DENSITY: 1001.

FRESH WATER: Fresh water is delivered to the ship's side by means of hose.

FUEL: No bunkering available at Ekenas.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: 200 cigarettes permitted for each Crew member. 1 open bottle of 0.75 litre wine or spirit is allowed for each Crew member over 18 years of age.

IDENTIFICATION CARDS: Not needed.

REPAIRS: Minor electrical and deck repairs may be carried out.

AIRPORT: Nearest Airport is Helsinki Airport, situated about 100 kms. from Ekenas.

HOLIDAYS: On Saturdays and days preceding Church holidays, the eve of Independence Day, the day preceding May Day, on Whitsun Eve and on New Year's Eve the working day consists of four working hours, starting from 0700 or 0800 and lasting to 1100, 1200 hrs. resp. without break for meals. May Day, Independence Day, (6th December), Easter Saturday, Midsummer Eve and Christmas Eve are considered as labour free days.

POLICE/AMBULANCE/FIRE: Police, tel. 002; Ambulance, tel. 13340; Fire, tel. 005.

TELEPHONES: There are no arrangements for placing telephones on board the vessel but telephone calls can be made from the Harbour Constable's Office.

SUPPLIES: Ship stores and provisions can be ordered from Hango through Agent.

SHORE LEAVE: Shore leave allowed for crew members.

AUTHORITY: Harbour Master.

HAMINA: 60.34 N. 27.11 E. (See Plan)

PORT LIMITS: A vessel is considered to be an "arrived vessel" subject to Charter Party Terms, when arrived at roads.

DOCUMENTS: Normally required:
1 Crew List.
1 Passenger List.
3 Manifests.
1 Bill of Lading of each consignment.

Customs documents:
1 Special List (personal effects).
1 Provision List (Ship's Articles).

Ship's papers required:
International Tonnage Certificate.
International Load Line Certificate.
Certificate of Registry.
Tonnage Dues and Ice Dues Certificates if vessel called earlier.

PILOTAGE: Sea Pilot boards at Orrengrund, 36 miles from Hamina. VHF radio telephone Channel 16; Pilot boat: hull red, superstructure yellow. Vessels coming from Eastward can take Pilot at Haapasaari (Aspo), but must order Pilot by radio via Coast Radio Station at least 6 hours before ETA Haapasaari.

Harbour Pilotage: Harbour Pilot takes over at Roads. Harbour Pilot boat: hull black, superstructure yellow, word "Pilot" painted with red letters. Harbour pilotage optional.

ANCHORAGE: 2 anchorages with good holding grounds at Roads.

RESTRICTIONS: Usually no restrictions. Draft 9.0 m. to oil harbour and 8.4 m. elsewhere. Port open throughout year.

MAX. SIZE: Draft is governing factor. No tide but prolonged Easterly winds can cause lower water level, which must be checked before entering berths.

HEALTH: Bill of Health not required. In case suspected disease or fever on board, doctor to be contacted, preferably via Agent by radio before arrival.

RADIO: Vessels in Baltic Sea usually contact Helsinki radio/OHC, A1 and OHG, A3. VHF Channels 16 and 26. Vessels in Eastern part of Gulf of Finland contact Kotka radio/OHF, A1 and OFU, A3. VHF Channels 16, 25 and 27.

RADAR/VHF: There is no land radar service. Harbour is equipped with VHF radio telephone, Channels 16 and 12.

TUGS: Join vessels at Roads. Ship's lines usually used.

BERTHING:

Quay	*No.*	*Depth (m.)*	*Length (ft.)*
Tervasaari	1–5	4.0	270
Hailikari		3.9	62
Coaiquay		7.0	345
Kaukas	1–3	7.9	216
Kaukas-Hackman	1–5	5.2–5.5	365
Rauma-Repola	1–2	3.6	140
Enso-Gutzeit	1–2	7.9	240
Hiirenkari	1–2	7.9	158
	3–5	8.4	310
	Ro/Ro	7.0	
Roads		7.9	
Outer roads		9.0	
Oil harbour		9.0	

SPECIALISED CARGO HANDLING FACILITIES: Coal and bulk quay has a length of 345 m. and loading depth of 7 m.; 5 electric cranes, the lifting capacity from 5 to 6.5 tons.

Container crane 25 tons capacity. Sawn timber quays 3–6 m. draft.

Roll-on/roll-off berths 7 m. draft.

CRANES:

	No.	*Capacity/Tons*	*Type*
Coal quay	3	5	
	2	6.5	
Rauma-Repola quay	12	2–15	mobile
Hiirenkari quay	1	24	container

STEVEDORES: ETA is expected in good time before arrival.

MEDICAL: Advance notice helpful but not compulsory. Hospital facilities available at town.

TANKERS: Ocean-going tankers effect discharging through stern pipe-line. Mooring with both anchors, and stern to quay. Tankers up to 2,000 d.w.t. can discharge through side lines. Heavy oil and light products discharged into 10 in. line through hose of 8 in. No slop tank available. 1 tanker berth, draft 9 m.

DENSITY: 1003.

FRESH WATER: Available at majority of quays; elsewhere supplied by boat.

FUEL: Fuel and diesel oils available at short notice. Delivery by tank truck.

GANGWAY/DECK WATCHMEN: Shore watchmen available, Sundays and holidays 100% extra.

OPENING/CLOSING HATCHES: Crew close automatic hatch covers. Hatches to be covered manually are usually covered by stevedores.

CUSTOMS ALLOWANCES: Tobacco: Master 200 cigarettes or 200 grams tobacco. Others, 100 cigarettes or 100 grams tobacco. Wine and/or Spirit: Master, 3 bottles wine or spirits. Others, one bottle.

CONSULS: Great Britain, Denmark, Holland, Norway, Sweden.

REPAIRS: Minor repairs effected.

REPATRIATION: There are facilities for repatriation.

AIRPORT: Helsinki Airport, distance 145 km. Regular flights.

TIME: Local time is GMT plus 2 hours. No alterations during year.

HOLIDAYS: New Year's Day (Jan. 1); Epiphany (Jan. 6); Good Friday; Easter Monday; Labour Day (May 1); Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Independence Day (Dec. 6); Christmas (Dec. 25 and 26).

POLICE/AMBULANCE/FIRE: Police 002; Ambulance 41304 and 43111; Fire 005.

TELEPHONES: None available for placing on board.

REGULATIONS: Regular terminal vessels have preference at certain berths.

AUTHORITY: Haminan Kaupungin Satamalaitos.

HANKO: 59.49 N. 22.58 E.

DOCUMENTS:
Ship's Register.
Crew List.
Manifests.
Bills of Lading.
Provisions List.
Health Certificate.

PILOTAGE: Compulsory, distance from sea to port is 6 miles. Pilot boat painted red, arriving outside Russaro called by radio via Hanko Radio or by flag, sound or Morse: "G".

ANCHORAGE: Inside Gustavsvarn.
RESTRICTIONS: Draft 26.5 ft., length/breadth no restriction; no tide.
RADIO: Cable Agents giving ETA via Hanko or Helsinki Radio.
RADAR: At Pilot station; service for ships entering port, contact by ship's radio.
TUGS: In Winter time harbour tug boat helps ships to and from the quay.
BERTHING: Advise Pilot. Depths at piers 19-29 ft. Quay height about 6 ft. above sea level. Shore fenders keep vessel about 2 ft. off quay. Special quays for roll-on/roll-off traffic.

Quay	*Permitted draft in feet*	*Length of quays metres*
Germany	22	150
Great Mole	25	704
Notholms	25	425
Free Harbour	25	150
Kone Oy	20	125 railway connection and shore cranes

CRANES:

	No.	*Capacity/tons*	*Type*	
Great Mole	1	2.5	Movable	
	1	6	,,	
	2	3	,,	
Germany quay	2	2.5	,,	with grabs
Notholms quay	2	2.5	,,	
	2	5	,,	1 with grabs
	1	40	,,	

Free harbour: No crane; 21 fork lift trucks available.
STEVEDORES: Ordered by Agents.
FRESH WATER: Delivered from shore installations at daytime. Rate of delivery about 20 t.p.h.
FUEL: Delivered by rail cars only.
DENSITY: 1005.
WATCHMEN: Available but not compulsory.
HATCHES: Crew allowed to open and close hatches.
CUSTOMS ALLOWANCES: No restrictions in the Free Port, outside about 200 cigarettes and limited amount spirits per man.
IDENTIFICATION CARDS: Not required.
CONSULS: Denmark, Iceland, Netherlands, Norway, Spain, Sweden.
REPAIRS: Small repairs possible.
TIME: Local time GMT plus 2 hours.
TELEPHONE: Police 003; Fire 005; Ambulance 82228.
AUTHORITY: Harbour Master.

HELSINKI: 60.09 N. 24.57 E. (See Plan)

DOCUMENTS: See "Oulu".
PILOTAGE: Compulsory. ETA required 24 hours prior arrival. At present there are 2 different channels available for vessels approaching Helsinki.

1. Helsinki Lighthouse–Harmaja–Helsinki. Waterway leading from sea via Helsinki Lighthouse, situated in Gulf of Finland off the islets and shoals South of the port of Helsinki at a distance of about 12 miles may be considered as main approach. Channel navigable by vessels with a draft up to 9.6 m. (31 ft. 6 in.). Obtain Pilot from Pilot station at Harmaja. Vessels using main channel from Helsinki Lighthouse should keep Harmaja Lighthouse in line with church tower of Suomelinna, bearing about 7°. The Islet of Harmaja not navigable without a Pilot further in than 2 miles.

2. Porkkala-Helsinki. Fairway runs by Porkkala Lighthouse along the Eastern coast of Porkkala peninsula. Navigable by vessels with a max. draft of 9 m. (29 ft.). Pilots obtained from Porkkala-Ronnskar.

Harmaja Sea-Pilot station: Tel. 668 203. Harbour Pilots at Harbour Office: Tel. 634 308.
ANCHORAGE: Good anchorage available outside harbour, depth 26-30 ft. clay bottom.
MAX. SIZE: Draft 31 ft., length 200 m.
HEALTH: See "Oulu".
DIRECTION FINDING: (Harmaja Radio Beacon) Harmaja Radio Beacon (frequency 298.8 kc/s) transmits:

Non-directional radio signals, with a modulation frequency of 395 c/s. By listening to these signals with a direction finding receiver, equipped with frame aerial, a ship can determine her bearing to the beacon.

DEPTH OF CHANNELS:
(1) From Porvoo via Kuggsund and Hevossalmi Canal 2.4 m.
(2) From Porvoo to outer roads via Kalvo and straits at Kustaanmiekka 7.3 m.
(3) From Pellinki to Helsinki 9.0 m.
(4) From Helsinki Lighthouse to Helsinki 9.6 m.
(5) From Barosund to Helsinki outer route 5.5 m.
(6) From sea South via Porkkala 9.0 m.

TUGS: Several available: charges based upon time when tug leaves station berth until moment of return to same station.
BERTHING: Port and equipment owned by Municipality of Helsinki. 5 principal parts of port are South and West Harbours, Sornainen Harbour, and Herttoniemi and Laajasalo Oil Harbours. North Harbour serves only passenger-launch traffic to surrounding islands.

Foreign passenger traffic is concentrated on the South Harbour. Piece-goods traffic is also handled on Katajanokka quay.

West Harbour handles main part of transoceanic traffic, heavy goods and bulk cargoes. This part of port is Helsinki's coal harbour with necessary discharging equipment and coal storage facilities; also, silos of 2 flour-milling plants (Vaasan Hoyrymylly Oy and Sate Granary), into which grain discharged by suction. On silo quay pneumatic grain unloader owned by State Granary travels along 71 m. long bridge alongside ship to be unloaded. Equipment is 30 m. above quay level and range of suction pipe 11 m. from edge of quay. Unloading equipment can handle 100 t.p.h. Mass export articles such as cellulose, paper and wood goods, loaded chiefly in his harbour. In West Harbour is free-zone warehouse, which offers same privileges as free port.

The Sornainen Harbour operates mainly as a North Sea piece-goods harbour. The area contains a coal harbour.

Herttoniemi and Laajasalo form the oil harbour, where the leading oil companies have oil storage tanks and own piers.

See Table opposite

BULK HANDLING FACILITIES: Specially equipped berths for handling bulk cargoes in Sornainen Harbour and Saukko coal harbour. Berths equipped for containers or roll-on/roll-off traffic in West Harbour (40-ton container crane) and Sornainen Harbour.
STEVEDORES: 24 hours ETA required. 5 companies available of which 2 specialise in discharging timber and coal.
Working hours; Weekdays, 0700–1600 and 1600–2230. Saturdays, 0700–1500. Lunch break weekdays and Saturdays 1100–1130.
MEDICAL: Agents to be informed by radio if fever suspected.
TANKERS: Max. draft 31 ft.
DENSITY: Fresh water.
FRESH WATER: Unlimited amount available by hoses from Hydrants at quays.
FUEL: All grades available; any amount of short notice.
GANGWAY/DECK WATCHMEN: Recommended but not necessary.
OPENING/CLOSING HATCHES: Crew/Stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle wine or spirits each man.
IDENTIFICATION CARDS: Not needed.
CONSULS: All maritime countries are represented in Helsinki.
REPAIRS: All types available.
DRY DOCKS: 2 dry docks and 1 floating dock, maximum length of dry docks 120 m., breadth at entrance 20 m. Depth on sill 5.8 m. and 140.7 m., 14 m., 4.5 m. Maximum size of floating dock, length 165 m., breadth 28 m., depth 7.8 m.
REPATRIATION: Available.
AIRPORT: Distance to airport 25 km. Flights every day all over Europe.
TIME: GMT plus 2 hours. No alterations.
HOLIDAYS: New Year's Day (1st January); Epiphany; Good Friday; Easter Monday; Workers' Holidays (1st May); Ascension; Whit Monday; Midsummer Day; All Saints' Day; Independence Day (6th December); Christmas Day (25th December); Boxing Day (26th December).
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 006; Fire 005.
TELEPHONES: Facilities for linking up vessels to telephone network available on all of the most important quays. Apparatus handed over to vessel by port official on duty for purpose, who also gives its number. Charge for annual contract is 600 mks per vessel. For short-term use charge is 20 mks a day and 50 mks a month. Charge entitles to unlimited local calls. Trunk calls charged separately.
SERVICES: Compasses are adjusted by competent adjusters approved by the Board of Navigation. For compass adjustment the port has constructed piles or buoys with direction markings. These appliances can be used also for radio direction-finders.

Vessels using the compass-adjustment facilities must have on board a Harbour Pilot, who is entitled to the same compensation as for harbour pilotage.
CLASSIFICATION SURVEYORS: Lloyd's Register of Shipping, Bureau Veritas, American Bureau of Shipping, Germanischer Lloyd, Det Norskey Veritas.
ICEBREAKERS: *Teuvo*, length 39.9 m., breadth 12.9 m., fitted with 2 combined water/foam cannons for firefighting purposes, total capacity of 300 cu. m. per hour. VHF-telephone: call OIEV.

During ice seasons one of the following Government icebreakers assigned to assist ships from open water to harbour area and vice versa:

	Length (m.)	*Breadth (m.)*
Varma	86.5	21.2
Apu	86.5	21.2
Tarmo	84.0	20.5
Voima	83.5	18.7
Sampo	74.1	16.7
Murtaja	74.1	16.7
Karhu	74.1	16.7
Hanse	74.1	16.7
Sisu	65.3	14.4
Urho	65.3	14.4

Masters should communicate with icebreakers between January and March.
DEVELOPMENTS: New passenger terminal will be ready by the Spring 1977 on Katajanokka quay. Coal traffic will be removed from Saukko Quay to Sornainen Harbour. Container terminal activities will be started in the West Harbour.
AUTHORITY: Captain of the Port.

			Length (m.)	Depth fairway (m.)	Depths alongside (m.)	Number and type of crane	Lifting capacity tons
South Harbour:							
I	(a)	Makasiini Quay	300		8.0		
	(b)	Olympia Quay	190	6.9	7.5		
	(c)	,,	150	6.9	7.5		
II	(a)	Custom House Quay	60		6.0		
	(b)	South Branch Quay	75		6.0		
III		Lubeck Quay	27		2.5		
IV		,,	57		3.5		
V		Keisarinluoto Quay	75		3.0		
VI		,,	37		2.8		
VII		Linna Quay	96		3.0		
VIII	(a)	Katajanokka Quay	51	6.4	7.1	12 portal cranes	1.5–3
	(b)	,,	425	6.9	9.6		
	(c)	,,	225	7.9	9.1	2 ,,	3–5
	(d)	,,	100	7.9	9.5	4 ,,	2.5–5
	(e)	,,	100	7.9	9.0		
	(f)	,,	163		9.5	2 ,,	3–6
	(g)	,,	51	9.1	10.0		
IX		Quay for coal, gypsum etc.	37		6.5		
		Total	2,219				
West Harbour							
I	(a)	Salmisaari Quay	124	7.3	8.0	Cranes for coal: 2 portal cranes	6
	(b)	Tammasaari Quay					
	(d)	,,	67	7.3	7.5		
	(e)	,,	22	6.3	8.7		
	(f)	Electricity Works Oil Quay	60	8.9	10.0		
II	(a)	Jaalaranta Quay	70		3.9		
	(b)	,,	90		3.9		
III	(a)	Saukko Quay	35		5.0	Cranes for coal:	
	(b)	,,	10		6.0	2 bridge cranes, length 90.5 m.	5.2
	(c)	,,	30		7.0	1 bridge crane, length 90.5 m.	5.2
	(d)	,,	50		8.0	1 bridge crane, length 83.5 m.	5.2
	(e)	,,	50		8.5	Cranes for containers: 1 container crane for 20'–40' containers	40.0
			70	8.9	9.1		
	(f)	,,	116	8.9	9.1		
	(g)		94	8.9	9.1		
IV	(a)	Saukonniemi Quay	60		7.0		
	(b)	,,	12		5.0		
V	(a)	Jatkasaari Quay	34		3.5	Cranes for general cargo: half portal cranes	
	(b)	,,	31		5.0	,,	
	(c)	,,	59		5.5	13 ,,	1.5–3
	(d)	,,	256		7.2	,,	
	(e)	,,	135		7.5	,,	
	(f)	,,	155		8.5	2 ,,	3–6
	(g)	,,	120	8.9	9.2	,,	
	(h)	,, (North section)	120	8.9	9.5	1 stationary crane	25 / 20 / 10
	(h)	,, (South section)	150	8.9	9.0		
	(i)	,,	15		8.0	9 portal cranes	3–5
	(j)	,,	260	8.9		Ramp	
	(k)	Sampo Quay	187	8.9			
	(l)	Ocean Quay	178	8.9			
VI	(a)	Silli Quay	17		3.4		
	(b)	,,	125		4.4		
	(c)	,,	35		6.0		
VII	(a)	Hietalahti Quay	85		6.5		
	(b)	,,	80		7.0		
VIII	(a)	Munkkisaari Quay	195		8.2	Pneumatic grain unloader	100t/h
	(b)	,,	75		8.0		
		Hernesaari Quay	90		7.6		
	(d)	,,	257	8.9	7.6		
		Oy Rudus Quay	2×24				
		Total	3,619				
Sornainen Harbour:							
						4 portal cranes for discharging of coal	6.0
I		Hanasaari Quay	648	8.4	9.0	1 stationary crane	150 / 50 / 30
						2 bridge cranes	100t/h
						2 portal cranes with grab and hook	6.2
II	(a)	Parru Quay	123	8.4	8.0		
	(b)	Ferry-berth 1	150	8.4		Ramp, max. load 54 tons	
	(c)	Sompa Quay	513	8.4		Cranes for general cargo: 6 portal cranes	3–5
III	(a)	Ferry-berth 2	110	8.4	7.0	Ramp	
	(b)	Ferry-berth 3	140	8.4	8.0	Stern ramp, side ramp, max. load 120 tons	
IV	(a)	Central Pier	75		5.0		
	(b)	Central Pier	45		4.0		
V	(a)	Railway Pier	20		4.5		
	(b)	Railway Pier	55		5.0		
VI	(a)	New Pier	77		4.7		
	(b)	New Pier	77		5.4		
VII	(a)	Old Pier	75		4.5		
	(b)	Old Pier	87		5.3		
VIII	(a)	Sompa Eastern Quay	399		5.8	Cranes for general cargo: 2 portal cranes	3–5
		Total	2,594				

continued overleaf

	Length (m.)	Depth fairway (m.)	Depths alongside (m.)	Number and type of crane	Lifting capacity tons
Lauttasaari Harbour:					
(a) Building material quay	90		4.0		
(b) Building material quay	88	5.2	5.8		
(c) Building material quay	35	5.2	5.8		
Total	213				
Herttoniemi Oil Harbour:					
Oil Harbour Pier	2×96	8.)	8.6		
Oljynpuristamo Co's Pier	100				
Elo Co's Pier	24				
Laajasalo Oil Harbour:					
Shell Co's Northern Pier	18		5.5		
Shell Co's Southern Pier			8.5		
Shell Co's New Pier	32		10.0		
Esso Co's Pier	30	9.6	10.6		
Gulf Co's Pier	58	9.6	10.2		

INKOO: 60.01 N. 23.55 E.

PILOTAGE: Pilot boards off Ronnskar Lighthouse (Tel. Helsinki 294112, telephone and VHF). Distance to coal Harbour 18 miles, Oil Harbour 17 miles.
MAX. DRAFT: *Approaches:* Fairway to Coal Harbour 29 ft. 6 in. Fairway to Oil Harbour 32 ft. 10 in.
TUGS: Available any time. 1 tug stationed at Inkoo.
BERTHING: Coal Quay length 175 m.; depth alongside 25 ft. 6 in.
Paper Quay length 140 m.; depth alongside 25 ft. 6 in.
CRANES: On the Coal Quay, one crane, 10 tons and one crane, 6 tons, by hook and half of the capacity by grab. Mobile cranes to hire of several capacities on Paper Quay.
DENSITY: 1004.
FRESH WATER: Available.

JAKOBSTAD (Alholmen): 63.42 N. 22.42 E. (See Plan)

DOCUMENTS:
International Measurement Certificate.
3 Manifests.
2 Bills of Lading of each consignment.
Customs Documents:
1 Crew List.
1 Special List (personal effects).
1 Provision List (ship's articles).
Important: If the vessel is calling at two or more Finnish ports, 2 of each of these lists are to be produced at the first port of call.
PILOTAGE: VHF Channel 16, MF 2182 kHz. Anchorage for vessel awaiting a Pilot: outside the lighthouse "Kallan". Pilot boat equipped with radar.
ANCHORAGES: On inner roads called "Ado Roads", depth of water 28/30 ft.
MAX. SIZE: Max. draft in the inner harbour 24 ft. 3 in. No tide.
HEALTH: See "Oulu".
RADIO: Vasa Radio Station. Gamlakarleby/Kokkola VHF Channel 28.
TUGS: Tugs are normally stationed in the harbour. Ship's lines to be used.
BERTHING: Laukko Pier. Length 2×100 m., depth 24 ft. 3 in.
New Quay. Length 200 m., depth 24 ft. 3 in.
Old Quay. Length 300 m., depth 17 ft. (inside) 19 ft. (outside).
Kantlax, Oilport. Depth 7 m.
Busto Quay (roll-on/roll-off) length 160 m., depth 24 ft. 3 in.
Cranes: 8 mobile cranes available.
STEVEDORES: Working time: 1st shift Monday-Saturday 0700–1600 hrs. (meal hours 1100–1200); 2nd shift Monday-Friday 1600–2400 hrs. To commence loading at 0700 hrs. notice must be given latest at 1600 hrs. the day before, or before 1200 hrs. if commencing at 1600 hrs.
MEDICAL: Advance notice not required. All facilities available.
TANKERS: Vessel's draft must not exceed 24 ft. 3 in.
DENSITY: Fresh water.
FRESH WATER: From pipe-line alongside quay.
FUEL: Only gas oil available.
GANGWAY/DECK WATCHMEN: Watchmen recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: Derat. Certificate to be kept on board.
CUSTOMS ALLOWANCES: Tobacco: 100 cigarettes per 3 days for each crew. Wine and/or Spirits: 1 bottle per 6 days for each man of 21 years age.
IDENTITY CARDS: Not needed.
CONSULS: Danish, Tel. 10144; Norwegian 10444; Swedish 10444.
REPAIRS: All types of repairs possible.
DRY DOCKS: Only a small slipway.
REPATRIATION: Crew changes can be effected.
AIRPORT: Kronoby Airport about 30 km. from Jakobstad. 2 flights daily.
TIME: The local time is 2 hours later than GMT.
HOLIDAYS: 1st and 6th January; Good Friday; Easter Eve; Easter Monday; Labour Day (1st May); Ascension Day; Midsummer Eve; Whit Monday; 6th December (Independence Day); 25/26th December All Saint's Day.
POLICE/AMBULANCE/FIRE: Police 10039; Ambulance and Fire 10055.
TELEPHONES: Connection for telephone on board available.
AUTHORITY: Harbour Master.
AGENT: Wilkman & Lenander Ab, POB 6, SF-68601 Jakobstad, Finland. Telex 7516 (answer back: 7516 wilkm sf). Tel. 10148, 10278. A.O.: 12171, 10446. Shipbrokers, Liner Agents, Forwarding Agents.

KASKO (KÅSKINEN): 62.23 N. 21.13 E.

DOCUMENTS:
2 Crew Lists.
2 Customs Lists.
2 Passenger Lists.
Manifest, Bill of Lading, etc.
Between 1st December/30th April Iceclass Certificate required (can be given in Kasko).
PILOTAGE: Pilot boards 4 miles outside Pilot station. Pilot boat or station can be called by radio telephone 2182 or VHF Channel 16. Notice is not required. Pilot can be called, daytime flag "G" or "PT", night-time by Morse "PT".
ANCHORAGE: Safe areas of anchorages, 3 miles W.S.W. of Pilot station Salgrund, depths 15–20 m.
MAX. SIZE: Max. draft 8 m.
HEALTH: Pratique automatic.
RADIO: Vasa Radio.
VHF: VHF Channel 16 (Salgrund Pilot).
TUGS: None.
BERTHING:

Deep Harbour Quay	Depth 27 ft.
Outer Harbour Quay	,, 22 ft.
Inner Harbour Quay	,, 23 ft.
Total length of quays 2,694 ft.	

DENSITY: 1004.
STEVEDORES: Available; rates about 250-300 tons pulp per work gang.
MEDICAL: Hospital available.
FRESH WATER: Brought by truck Winter-time; Summer by pipe-line.
FUEL: Available by tank truck.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes. Wine/Spirit: 1 bottle spirit.
CONSUL: Swedish Consul, Tel. 427.
REPAIRS: Only small repairs.
AIRPORT: Distance to Vasa Airport 100 km. Served by regular airlines.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Oulu".
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 300; Fire 005.
TELEPHONE: Can be connected. No cost for connection.
GENERAL: Port is the most Northern in Finland which under reasonable conditions can be kept open throughout Winter.
AUTHORITY: Harbour Office.

KEMI: 65.44 N. 24.33 E. (See Plan)

PILOTAGE: Pilot boards from Pilot station at Kemi Lightvessel. VHF and radio telephone watch maintained. Pilotage distance: Ajos 17 miles; Veitsiluoto 22 miles.
MAX. SIZE: Sea to Fairway at Ajos. Max. draft 10 m. Sea to Fairway at Veitsiluoto. Max. draft 7.3 m. Also see "Berthing".
TUGS: One tug available, 450 h.p. Icebreaker tug of 3,500 h.p.
BERTHING:

Quays:	Length (metres)	Depth (metres)	Permitted draft (metres)
Oil Quay	90	10.5	10
No. 1	210 (Berthing both sides)	7.5-8.5	7-8
No. 2	315	4.7-9.5	4-9
No. 3	185	6.0	5.3
No. 4	168	6.0	5.3

CRANES: Two mobile cranes, capacity 6 tons.

FRESH WATER: Available at Quays Nos. 1 and 2.
FUEL: Available.
DENSITY: Fresh water.
AUTHORITY: Harbour Master.

KOKKOLA: 63.50 N. 23.08 E.

PILOTAGE: Pilot boards from Pilot Station at Tankar (Tel. Kokkola 16160, radio-telephone and VHF). Distance to the port 12 miles.
MAX. DRAFT: From sea to Fairway 9.25 m.
TUGS: 2 tugs available: 350 h.p., 1,500 h.p.
BERTHING:

Quay	*Length*	*Depth*
New Stone Pier	140 m.	24 ft.
Oil Jetty		30 ft. 6 in.
New Quay (South side)	323 m.	30 ft.
(North side)	106 m.	26 ft.
Industrial Port	210 m.	30 ft. 6 in.
Old Quay		20 ft.
General Cargo Quay		14 ft. 6 in.

CRANES: Two 8-ton cranes at the New Quay and 11 mobile cranes 3-20 tons capacity.
FRESH WATER: Available.
DENSITY: 1002.

KOTKA: 60.28 N. 26.57 E.

Crew List.
Passenger List.
1 copy of Cargo Manifest.
1 copy of every Bill of Lading.
Ship's Register.
Ice Certificate.
Customs Manifest for Stores, for ship and individual.
PILOTAGE: On arrival off Orrengrund, contact Orrengrund Pilot by VHF. On arrival off Kotka, contact Harbour Pilot Kotka, VHF Channels 11, 13, 14, 16. Depth in approaches 29 ft. 6 in.
ANCHORAGES: Havouri roads, Kukouri roads and at the entry to the harbour. All 39 ft. 6 in. depths.
MAX. SIZE: Max. draft 29 ft. 6 in.
HEALTH: In case of sickness on board, contact the Agents before entering the port.
RADIO: Kotka radio call sign OHF.
TUGS: Tugs normally join the vessel in the harbour entrance. Ship's lines are to be used. 3 tugs available, 1,650 h.p., 810 h.p. and 300 h.p.
BERTHING:

Quay	*Permitted Draft (ft.)*	*Length (Metres)*
Central Harbour	16-21	1,000
North Quay	21-22	226
Middle Quay	21-29	540
East Quay	22-29	320
Bulk Quay (Polish Quay)	27.5	360
Sunila Quay	20-26	160 (26 ft.)
		240 (20 ft.)
Inner Roads	12-24	
Outer Roads	25-29	
Halla, East Harbour	14-23	250
West Harbour, Roads	24	
Oil Harbour	29	
Oy Valmet AB.	16-24	155
State Railways		
Oil Quay	17.5	40
Power Plant (Mussalo)	26	200
Oil Quay	29	
Hietanen Terminal Harbour	29	475

CRANES: 31 shore cranes with capacity of 3-60 tons.
SPECIALISED CARGO-HANDLING FACILITIES: Hietanen terminal harbour, consisting of 3 ro-ro berths and 1 conventional berth, specialised for ro-ro traffic.
MEDICAL: Master to advise by Radio Kotka on arrival if medical attendance required aboard.
TANKERS: 3 tanker berths, draft 29 ft. 6 in.
DENSITY: Fresh Water.
FRESH WATER: East port and oil port are equipped with water pipe-lines, but in Sunila port only supplied by tugs.
FUEL: All grades of fuel available.
DEVELOPMENTS: Channel to be dredged to 10 m.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally by the crew.
SHIP CERTIFICATES: List of Certificates to be on board:
Passenger Ship Safety Certificate.
Cargo Ship Safety Construction Certificate.
Cargo Ship Safety Equipment Certificate.
Cargo Ship Safety Radio-telephone Certificate.
Cargo Ship Safety Radio-telegraphy Certificate.
Exemption Certificate.
Nuclear Passenger Ship Safety Certificate.
Nuclear Cargo Ship Safety Certificate.
Derat Certificate.
CUSTOMS ALLOWANCES: For passengers: Tobacco: 200 cigarettes or 0.2 lb. of other manufactured tobacco. Wine and/or Spirits: 1 bottle. For foreign crew: None.
IDENTIFICATION CARDS: Not required.
CONSULS:

Great Britain	Tel. 16 160	Belgium	Tel. 15 400
Iceland	Tel. 12 178 or 12 175	Denmark	Tel. 11 160
Italy	Tel. 61 286	Netherlands	Tel. 11 200
Norway	Tel. 17 220 or 15 220	Spain	Tel. 15 220
Sweden	Tel. 15 220		
France	Tel. 15 400		

REPAIRS: All types of repairs can be carried out.
DRY DOCKS: 3 floating docks. Docking dimensions for vessels: Valmet: length 127.2 m., beam 20.1 m., draft 6.8 m./5,000 tons. Wartsila: length 130 m., beam 19.7 m., draft 5.8 m./4,500 tons. Wartsila: length 96 m., beam 16.5 m., draft 4.5 m./2,500 tons.
REPATRIATION: Facilities exist.
AIRPORT: Nearest Helsinki, 140 km.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year's Day (Jan. 1st); Epiphany (Jan. 6th); Moving Holidays; Easter Holiday, 4 days (Sunday included); Ascension Day, 1 day; Whitsunday, 2 days (Sunday included); Midsummer Day, 3 days (Sunday included); All Saints Day 1 day (first Saturday of Nov.); Christmas Holidays (Dec. 24th-26th). Other free days: May 1st; Dec. 6th (Independence Day). Cargo work can be done on all above holidays.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 006; Fire 055.
TELEPHONES: On some berths telephones placed on board.
GENERAL: It is prohibited to let or throw any substance or refuse causing pollution or shoaling in the harbour area.
SERVICES: Compass adjusting service available.
SHORE LEAVE: No restrictions.
AUTHORITY: Port Authority of Kotka.

KOVERHAR: 59.52 N. 23.13 E.

DOCUMENTS:
Ship's Register.
Crew List.
Manifests.
Bills of Lading.
Provisions List.
Health Certificate.
PILOTAGE: Compulsory. There are 2 approaches: (1) Via Ajax, max. draft in fairway 33 ft. Pilot arrives from Pilot station at Koverhar. (Tel. Tammisarri 43072 or VHF.) Distance to port 11 miles.
(2) Via Hanko, max. draft in fairway is 28 ft. Pilot arrives from Pilot station at Hanko, Tulludden (Tel. Hanko 82246, radio-telephone, VHF). Station has radar. Distance to port 23 miles.
MAX. SIZE: Max. draft alongside quay 30 ft. No restrictions on length or breadth. No tide.
RADIO: Cable Agents giving ETA via Hanko and Helsinki Radio.
TUGS:

Kurt 450 h.p.	*Wilpas* 400 h.p.
Ingrid 700 h.p.	*Waija* 1,850 h.p.

BERTHING: Length 250 m., depth 30 ft. Quay 6 ft. above sea level.
New berth, length 120 m., depth 30 ft. Quay 6 ft. above sea level.
CRANES: Two of 13 tons and one of 12.5 tons capacity.
STEVEDORES: Ordered by Agent.
FRESH WATER: Available rate 20 cbm./hr.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.
IDENTIFICATION CARDS: Not required.
REPAIRS: Small repairs possible.
TIME: GMT plus 2 hours.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 12660; Fire 43100.
AUTHORITY: Harbour Master.

KRISTINESTAD: 62.16 N. 21.23 E.

DOCUMENTS:
Ship's Measurement Certificate.
2 Crew Lists.
Cargo Manifest.
Copy Bill of Lading.
2 Provision Lists and Tobacco Lists for Customs.
Ice Certificate 1.12–3.4.
PILOTAGE: Pilot boards at Hojerstein light buoy. At least 2 hours ETA required. Pilot boat has red painted hull, white marking "L" on bow, and deck house yellow. Pilot station situated on Hoggklubb Island South of Kristinestad, International pilot call signals to be used, also radio telephone 2182 and VHF Channel 16.
ANCHORAGE: Good safe holding ground off Adgrund. Depth 10 m.
MAX. SIZE: For general cargo and timber, 20 ft. draft in old port. For tankers, 33 ft. in the oil port.
See also "Tankers".
RADIO: Messages through coastal stations. also Kristinestad VHF Channel 24.
TUGS: 1 tug available 240 h.p.

BERTHING: No special requirements. Pilot gives orders for berthing.

Inner Wooden Quay. Length 75 m., depth alongside 15 ft.

Outer Stone Quay. Length 250 m., depth alongside 20 ft.

There are 3 mobile cranes of 10 tons capacity.

SPECIALISED CARGO HANDLING FACILITIES: Bulk cargoes can be discharged at quay, 4 portable cranes available. There is one ramp for roll-on/roll-off ships in oil harbour at Bjorno.

STEVEDORES: Advise ETA and gangs required as stipulated in charter-party. Also when laytime will commence to count. Only timber cargoes loaded.

Normal working hours 0700-1600. Saturdays and days preceding holidays 0700-1300.

DENSITY: 1004.

MEDICAL Hospital facilities available.

TANKERS: Oil harbour at Pohjolan Voima Oy, power station at Bjorno. Depth 33 ft.=10 m. alongside the oil pier. One berth for tankers. Discharge capacity with two 10 in. pipe-lines 2,500 t.p.h. Fresh water supply to tankers available from shore installation rate 30 t.p.h.

FRESH WATER: Fresh water supply by shore installation. Any amount available.

FUEL: Fuel available by tank cars of about 20 tons capacity at short notice.

GANGWAY/DECK WATCHMEN: Not compulsory at Timber Pier. Compulsory in oil harbour, according to rules of Board of Navigation.

OPENING/CLOSING HATCHES: Normally carried out by crew, but on request may be handled by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per 6 days, per man. Wine/Spirit allowance: One bottle per man.

CARGO GEAR: BOT Certificates. No additional requirements.

IDENTIFICATION CARDS: Not required.

CONSULS: Danish, tel. 99.

REPAIRS: No shipyards, but welding pipe-line electric repairs possible.

AIRPORT: Nearest airports in Vaasa and Pori within 100 km., several flights per day.

TIME: Local time GMT plus 2 hours.

HOLIDAYS: See "Oulu".

POLICE/AMBULANCE/FIRE: Police Station of Kristinestad 104; Ambulance 60; Fire Brigade 005.

TELEPHONE: Public telephones on the pier.

GENERAL: Timber pier in Port of Kristinestad closed from the end of December to the middle of April owing to ice. Oil port will be kept open according to the general ice situation of Gulf of Bothnia.

SHORE LEAVE: Allowed.

AUTHORITY: Harbour Master.

MANTYLUOTO, Pori (including Reposaari and Tahkoluoto): 61.36 N. 21.29 E. **(See Plan)**

PORT LIMITS: The line between the lighthouses on Mantyluoto and Reposaari.

DOCUMENTS:

Ship's Register.
Crew List.
Passenger List.
Customs Documents.
Manifests.
Bills of Lading.

PILOTAGE: Pilot compulsory. Telegr. address: Luotsiasema, Mantyluoto (Pilotstation Mantyluoto), VHF Channel 16 or frequency 2182. 24-hr. service by pilot boats from Mantyluoto Pilot station, boats red-painted, international light or sound signals. Pilot to be taken 4 miles off Mantyluoto. In heavy fog, if required, Pilot station able to navigate vessels into harbour by radar, provided vessel has corresponding equipment.

ANCHORAGES: Reposaari Roads and outside the breakwater.

RESTRICTIONS: Depth in the channel 7.6 m.

MAX. SIZE: No other restrictions, but max. draft 25 ft. (7.6 m.).

Tahkoluoto Oil Harbour: Max. draft: 10.0 m.

Tahkoluoto Bulk Harbour: Max. draft: 10.0 m. Length of the quay 145 m. For self-discharging bulkships only.

Reposaari: Max. draft: 3.9 m.

RADIO: Inform Agents giving ETA via Helsinkiradio, Hankoradio, or Mariehamnradio, or VHF Channel 26, Pori.

TUGS: 5 tugs available from 200 h.p. up to 3,520 h.p. Tugs normally join the vessel near the quays. Tugs use ship's lines.

BERTHING:

Quay	Quay Section	Depth of water (at normal water) (m.)	(ft.)
Kivilaituri	I	7.0—7.3	23—24
	II	6.0—6.5	20—21
	III	4.5—5.5	15—18
Betonilaiturin lansipaa	IV	7.0	23
Betonilaiturin itapaa	V	6.5	21
	VI	3.9	13
Vasikkaniemen etelalaituri	VII	3.9	13
	VIII	6.5	21
Vasikkaniemen paalaituri	IX	7.0	23
Vasikkaniemen pohjoislaituri	X	7.6	25
Kirrisannan laituri	XI	7.6	25
Reposaaren laituri	XII	3.9	13
Tahkoluodon laituri	XIII	9.5	31

CRANES:

Quay	Quay Section	Cranes Number	Capacity
Kivilaituri	I		
	II	two	3 tons
	III		
Betonilaiturin lansipaa	IV	two	3 tons
		two	3/5 tons
Betonilaiturin itapaa	V	—	—
	VI	—	—
Vasikkaniemen etelalaituri	VII	two	5 tons
	VIII		
Vasikkaniemen paalaituri	IX	one	25 tons
Vasikkaniemen pohjoislaituri	X	four	6 tons
		one	15/30 tons
Kirrisannan laituri	XI	one	200 tons
Reposaaren laituri	XII	—	—
Tahkoluodon laituri	XIII	—	—

CARGO HANDLING FACILITIES: Three Ro/Ro berths, 30–ton crane able to handle containers.

STEVEDORES: The vessels receive workers in the order in which they enter the harbour. ETA advices appreciated in order to facilitate arranging gangs.

MEDICAL: No advance notice for medical attention required. Hospital facilities available.

DENSITY: 1004.5.

FRESH WATER: Supply by shore installation.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: This work normally carried out by crew.

CERTIFICATES: Load Line Certificate and during Winter season Ice Dues Certificate which issued by authorities for each season.

IDENTIFICATION CARDS: Not needed.

CONSULS: Vice-Consuls: Britain, tel. 939/43122; Denmark, tel. 939/43122; Netherlands, tel. 939/43222; Norway, tel. 939/43222; Sweden, tel. 939/11141.

REPAIRS: Most repairs possible.

AIRPORT: Distance from airport 22 kms. Served regularly by Finnair.

DEVELOPMENTS: Coal quay under construction at Tahkoluoto.

TIME: Local time 2 hours ahead of GMT. No seasonal alterations.

AUTHORITY: Porin Kaupungin Satamalaitos, Pori.

MARIEHAMN: 60.06 N. 19.56 E.

PORT LIMITS: The Southern boundary of the port is on a line between 60° 03.5′ N., 19° 56.1′ E. and 60° 04.2′ N., 19° 55′ E.

DOCUMENTS:

1 Crew List.
1 Passenger List.
3 Provision Lists.
2 Special Lists (in possession each crew member – cigarettes, tobacco, spirit, radios, etc.).
2 Bills of Lading.
Registered Tonnage Certificate.

PILOTAGE: Pilot arrives from station at Lotsberget in Westerhamn harbour, and meet entering vessels about 2 nautical miles southwest of Marhallan lighthouse. 3 hours notice of ETA is required. Pilot station and cutter are fitted with VHF-radio and keep watch on Channel 16, 24 hours a day. Working-Channel is 13. Pilot can also be ordered by cable via Mariehamn Radio.

Pilot can also be taken from Nyhamn pilot station 12 miles from the port. Nyhamn has VHF, Radio 2182 kc/s and Radar.

ANCHORAGES: Good anchorages North of Grano Island in 10 to 20 m. water.

MAX. SIZE: Ships of 130 m. length and 6 m. draft can enter the port.

RADIO: Mariehamn Radio, call/sign OHM on telegraphy and OFH for telephony. Connected to the public telegraph and telephone service.

VHF: Following stations keep watch on VHF Channel 16: Mariehamn Radio, Mariehamns Pilot, Mariehamns Hamn (Harbour Office), Sjobevakningen Mariehamn (The Coast Guard at Mariehamn).

TUGS: 1 tug of 320 h.p. available. The m/s *Gustaf Erikson* belonging to the Alands Lifeboat Society. Usually ships' lines are used.

BERTHING: Deep Water quay. Length 315 m., depth 20 ft. Total length of other quays 690 m. Average depth 18 ft.

Power Station Pier. Depth 16 ft. Oil Pier, depth 16 ft. 5 in., max. length of tanker, 80 m.

There are 2 mobile cranes of 10 tons capacity.

CRANES: 3 mobile cranes can be rented from Alands Kranservice. Maximum lift, one crane of 15 tons and two of 25 tons on the shortest radius.

SPECIALISED CARGO-HANDLING FACILITIES: 2 berths for roll-on roll-off traffic, used by car ferries.

STEVEDORES: Ordered by Agents. ETA in good time to obtain gangs.

DENSITY: 1005.

MEDICAL: All services available.

FRESH WATER: Most berths supplied by shore installations about 15 t.p.h., otherwise by truck.

FUEL: Only diesel oil, no heavy products.

GANGWAY/DECK WATCHMEN: Available but not necessary.

OPENING/CLOSING HATCHES: Normally done by crew.

CERTIFICATES: International Tonnage Certificate or National Tonnage Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes and limited amount spirits for each crew member.
CREW IDENTIFICATION CARDS: Not needed.
CONSULS: Denmark 11 454, Holland 12 070, Iceland 21 849, Norway 12 050, Sweden 11 624, U.S.S.R. 11 524, West Germany 11 410.
REPAIRS: Most repairs possible.
DRY DOCKS: Slipway for small vessels, max. about 3-400 d.w.t. Floating dock, length 117.8 m., width 28.4 m., draft 5.8 m. Able to dock vessels up to 6000—8000 d.w.t.
SURVEYORS: No permanent surveyors at Mariehamn.
REPATRIATION: Mariehamn is a good place for repatriation, with many connections to Sweden and to the Finnish mainland every day, with car-ferries and aeroplanes. About 1 million tourists are visiting Aland Island every year.
AIRPORT: About 5 km., daily traffic to Stockholm and Abo.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Oulu".
POLICE/AMBULANCE/FIRE: Police 002 or 11 126; Ambulance 005, Fire 005 or 11 000.
TELEPHONES: Available at berths for passenger ships. Connection will cost 120 Fmk. year 1976.
AUTHORITY: Harbour Master, Port of Mariehamn.

NAANTALI: 60.28 N. 22.01 E. (See Plan)

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Dangerous Cargo List.
Ship's Register.
PILOTAGE: Pilot compulsory at Uto Pilot station. When approaching Uto communicate with VHF Channel 16. ETA, name of vessel, destination, draft. Change of Pilot takes place in Lohm. Harbour pilots available at the port. Distance Uto-Lohm, 25 miles. Lohm-Naantali, 28 miles.
ANCHORAGE: Good safe anchorage in harbour area. Max. draft 10 m.
MAX. SIZE: Maximum permissible length for tankers 210 m., Mainguay – maximum length for any vessel 150 m.
HEALTH: International Quarantine flag required in case of suspected disease or fever including preliminary report by VHF, otherwise ask Agent.
RADIO: Hanko Radio; Mariehamn Radio; VHF Turku 26; VHF Mariehamn 27; VHF Korppoo 23.
VHF: Communication on Channel 16, own working Channel 11.
RADAR: When Radar Service needed, ask Agent.
TUGS: Harbour icebreaker tug *Naantali* 1,200 h.p., equipped with bow steering propeller. Use ship's lines. Additional tugs on application from Turku.
BERTHING: No special requirements. Harbour/Drafts: No tide. Main quay, length 275 m., draft 10 m. Timber quay, length 80 m., draft 6.7 m. 3 car-ferry piers, length 80 m./80 m./95 m., drafts 9 m./6.5 m./6.5 m. Lubricating Oil pier, length 33 m., draft 6.5 m. Sugar quay, length 35 m., draft 4.5 m.
CRANES: 2 cranes owned by electric powerplant of 6 tons each and heavy-lift of 200 tons.
BULK CARGO FACILITIES: Grain handled by pneumatic elevator and belt conveyor, Loading/Discharging 200 t.p.h., maximum reach for outlet/inlet 13 m., maximum height above quay level 8 m. when loading, discharging no limits, 135 m. of main quay intended to be for handling of grain, 120 m. for coal,, which is handled by 2 cranes of 6 tons each and belt conveyor, discharging rate about 300 t.p.h.
SPECIALISED CARGO-HANDLING FACILITIES: Roll-on/roll-off traffic possibility.
STEVEDORES: Available, ordered by Agent.
MEDICAL: Advise by radio prior arrival if medical attendance required aboard.
TANKERS: Oil Harbour, Neste Oy. Discharge lines ashore 10 in., 12 in., 18 in., Diameter of cargo hoses and respective draft of tanker berths:
Berth No. 1, 6 in., 5.7 m.
Berth No. 2, 10 in., 10.0 m.
Berth No. 3, 8 in., 10 in., 12 in., 11.5 m.
DENSITY: 1007.
FRESH WATER: Supplied by shore installations at most berths.
FUEL: All grades available.
FIRE PRECAUTIONS: Usual precautions.
GANGWAY/DECK WATCHMEN: Available. Tankers compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCE: 200 cigarettes/200 gr. tobacco and 1 bottle spirits/wine,
IDENTIFICATION CARDS: Not required.
CONSULS: In Turku 17 km. away.

Belgium	phone	381511
Honduras	,,	786161
Iceland	,,	336444
Great Britain	,,	382322
Italy	,,	20510
Austria	,,	375970
Greece	,,	334704
U.S.S.R.	,,	336441
Norway	,,	27922
France	,,	382111
Sweden	,,	333344

REPAIRS: Small repairs can be carried out, ask Agent.
DRY DOCKS: None, See Turku. Naantali, Oy Navire Ab Navire yard, new buildings, main dimension of building dock 220 m. × 70 m., outfitting dock 180 m. × 125 m., sill depth 8.2 m.
SURVEYORS: Ask Agent.
CARGO GEAR: Heavy-lift crane of 200 tons, max. reach 9.1 m., max. lifting height 18 m. from quay level.
REPATRIATION: Good connections everywhere.
AIRPORTS: 20 km. distant. Regular service.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year's Day, Epiphany, Good Friday, Easter Monday, Labour Day, Whit Monday, Midsummer, All Saints' Day, Independence Day, (6th December), Christmas.
TELEPHONES: A telephone connection available at Main quay.
SERVICES: Facilities for discharge of tank-washings, 10,000 cu. m. (Oil Harbour). Compass adjusting, ask Agent.
SHORE LEAVE: No restrictions for crew members.
IDENTIFICATION CARDS: Not required.
REGULATIONS: Oil pollution strictly prohibited, as well as all kind of dirt.
DELAYS: Usually no delays.
DEVELOPMENTS: Summer 1977 one more pneumatic elevator for grain, rate 200 t.p.h., max. reach 16 m.
POLICE/AMBULANCE/FIRE: Police 751 133; Ambulance 751 123, Fire Brigade 005.
AUTHORITY: Harbour Master, Naantalin Satamalaitos.

OULU: 65.01 N. 25.28 E. (See Plan)

PORT LIMITS: The seaward boundary of the port is drawn West of Oulu Roads. The arriving vessel passing the Hermanni Island is inside the boundaries and if necessary to anchor on the roads, is considered to be an "arrived vessel".
Port consists of four separate parts *(a)* Toppila – Main Harbour. *(b)* South Harbour – Nuottasaari Quay – Ore Harbour. *(c)* Oil Harbour (Vihreasaari). *(d)* Oritkari Quay, inc. roll-on/roll-off quay.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs Documents.
2 Crew Bond Declarations.
2 Ships bond-store Lists.
Derating Certificate.
4 Manifests.
2 Bills of Lading.
Ship's Register, Certificate of tonnage.
PILOTAGE: Vessel requiring Pilot applies from Marjaniemi. Pilot station, Lat. 65° 02′ 4″ N., Long. 24° 34′ E., near West point of Hailuoto Island. Pilots require 12 hours notice of ETA to Peltinmatala lightbuoy (Pilots) or to alternative position 3 miles North of Kelmi lightbuoy. Pilot boat red coloured displaying usual international pilot signs. Pilot station equipped with HF (2182) and VHF, Channel 16, radar and RC. Morse signalling by light. No specific requirements on part of Pilots boarding, only safe pilot ladder according to rules. Anchorage near lightbuoy Peltinmatala, when awaiting for Pilot in fine weather; in bad weather advisable to ride against weather and wind. Pilot for Oulu can also be obtained near the "Kemi I" light-tower. Vessels with a draft more than 8.0 m. must use this fairway and apply for Pilot either from Marjaniemi or Kemi Pilot station, wireless 2182 or VHF 16.
ANCHORAGE: Safe anchorage on Oulu roads. There are no safe anchorages West of Hailuoto Island.
RESTRICTIONS: Day and night service, no tides. Winter season, contact ice-breaker 24 hours in advance on HF (2182), or VHF Channel 16.
MAX. SIZE: *Marjaniemi Fairway:* 8.0 m. *Kemi Fairway:* 10.0 m.
Toppila Harbour: North Quay depth 6.1 m., Hietasaari Quay, depth 6.1 m.
South Harbour: Oritkari Deep Water Quay, depth 9 m. Nuottasaari Quay depth 6.4 m.
Oil Harbour: Depth 10 m.
Also see "Berthing".
HEALTH: No special rules existing in obtaining pratique. If disease or fever is suspected on board report to ship's Agent; will contact the Health Authority for necessary arrangements.
RADIO: Vaasa Radio (North Quarken). Close to Hailuoto Island call "Oulu Radio" VHF Channel 27 or Channel 24.
RADAR/VHF: At Marjaniemi Pilot station, radar range 30 miles. Contact with HF (2182) or VHF (Channel 16). All ice-breakers keep watch on frequency 2182 and VHF (16).
TUGS: Tug optional, but for vessels over 140 m. long use is advisable. Tug will meet on Oulu Roads according to agreement; customary to use ship's lines.
BERTHING: *Toppila Harbour:* Depth 5.0–6.1 m. North Quay length 1,000 m. South Quay length 2,200 m. Pulp factory Quay length 200 m.
South Harbour: Length 320 m.
Oritkari Quay: Length 270 m.
CRANES:

	No.	*Capacity (tons)*	*Reach of arm (m.)*	*Type*
South Harbour	1	5	12	Movable
Toppila	1	6	22	,,
	1	3	12	,,
	1	5	12	,,
	1	8	26	,,

CARGO HANDLING FACILITIES: *(a)* Toppila Harbour is equipped with 4 cranes to discharge bulk cargoes (coal, china-clay, potash,

etc.) and with 2 pneumatic pipes to discharge grain.
(b) Roll-on/roll-off berth is adjacent to the Oritkari Quay in the South Harbour.
(c) Oritkari Quay is built to mechanically handle paper cargoes.
BRIDGES: No bridges. Electric cable across Toppila fairway, 50 m. above water.
STEVEDORES: 24 hours' notice of ETA to be given to Agent who arranges necessary gangs.
MEDICAL: Medical attention arranged through Agent, 2–4 hours notice required. Good hospital facilities available.
TANKERS: One principal tanker berth in Vihreasaari Oil Harbour, depth 10.0 m. Discharge lines of 12, 14 and 18 in. Pressure 10 Kp/Cm^2.
DENSITY: Fresh water.
FRESH WATER: Available at main berths and Oil Harbour from pipe-line, cost about 5.00 mk/ton. Elsewhere water is delivered by boat, cost about 8.00 mk/ton.
FUEL: Small quantities of all grades available, deliveried by lorries.
DEVELOPMENTS: The second stage of the Oritkari deep Waterquay will be completed in 1980. The length of the new quay is 250 m. and allowed draft 10 m. The quay is specially designed for general cargo and there will be ro/ro and container facilities.
GANGWAY/DECK WATCHMEN: Watchmen recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew. Stevedores will do it by order of Master and will charge as shipwork.
CERTIFICATES:
Nationality Certificate.
Measuring Certificate.
Load-line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Derating Certificate.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 200 gr. pipe tobacco or equal amount of cigars allowed to each member of crew. Wine and/or Spirit: One bottle wine or spirit allowed for each member of the crew.
CARGO GEAR: Tested cargo gear to international safety regulations. Test certificates to be on board vessel.
IDENTIFICATION CARDS: Not needed.
CONSULS: Sweden, Norway, Denmark, Great Britain and Netherlands.
REPAIRS: Minor deck and engine repairs carried out. Docking only for small tug boats.
SERVICES: Compass adjusters and ship's cleaning.
DRY DOCKS: One small slipway. Max. vessels of 25 m. length and 8 ft. draft.
REPATRIATION: Good facilities for effecting crew changes and to arrange necessary repatriation.
AIRPORT: Oulu Airport 15 km. from harbour served by regular airlines. Six daily flights to Helsinki and six flights from Helsinki to Oulu with continuous connection to Kemi and Rovaniemi.
TIME: Local time GMT plus 2 hours.
HOLIDAYS: General holidays in Finland: New Year's Day (January 1st); Good Friday; Easter Monday; Labour Day (May 1st); Independence Day (December 6th); Christmas Day (December 25th); Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Fire 005, Reserve 006; Ambulance 006, Reserve 005; Police 002, Reserve 003.
TELEPHONES: A telephone connection available at Vihreasaari oil terminal.
AUTHORITY: Harbour Office of Oulu.

PARGAS: 60.18 N. 22.18 E. **(See Plan)**

DOCUMENTS:
3 Crew Lists.
1-2 Custom Provision Lists.
1-2 Custom Special Lists.
2 Passenger Lists.
2 Copies each Bill of Loading.
Tonnage Certificate and in special instances other regular documents.
PILOTAGE: On arrival at Pargas, from Gulf of FInland, from Baltic via Uto, from Gulf of Bothnia via Enskar, information of ETA to be given in good time to respective Pilot stations. VHF Channel 16 for calling, 13 for further communication. Charge for piloting in accordance with official Finnish tariff. Harbour Pilot available, but not compulsory, and can be ordered through Sea Pilot.
ANCHORAGES: Well sheltered and safe anchorage, immediately outside harbour area.
MAX. SIZE: Maximum depth both in channel and along quay 6.70 m. As regards length of quay and possibilities for a quick dispatch, it is desirable (though not an absolute stipulation) that discharging vessel be a bulk carrier with the engines aft.
HEALTH: Free pratique automatic for all vessels, but temporary exceptions in and according to regulations issued by W.H.O. and Authorities may occur.
RADIO: Radio-telephone contact with Agent and consignee/shipper is obtained via Mariehamn, radio-call 2196 kHz, reply 1852 OHF; or via Hango, radio-call 1967 kHz, reply 2649 OFO. Contact with VHF is ordered via Abo, Channel 26.
TUGS: A small motor tug of 200 h.p. available.
BERTHING: Directions to berth via nearest Pilot station, Pargasport. Quay level above water 1-2 m., dependent on berth.
Length of quays, 800 m. 2 electric coal-discharging bucket cranes and one electric conveyor belt.
STEVEDORES: Arrangements will be made by Agent, who must be advised of ETA previous day to enable arrange men, trucks, etc.
MEDICAL: Medical officer available locally. Necessary examination and taking of tests usually done in Abo. Regular appointment with local physician can be arranged by telephone with Agent or doctor.
DENSITY: Brackish water 1002.
FRESH WATER: Delivery from installation on quay.
FUEL: No local supply. In case of need delivery by truck from Abo.
GANGWAY/DECK WATCHMEN: Available but not necessary.
OPENING/CLOSING HATCHES: Must always be performed by crew.
CERTIFICATES: Normally tonnage certificate only but in special instances other regular ship's documents may also be needed.
CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits. In accordance with the decision of Customs authorities.
IDENTIFICATION CARDS: Not required.
CONSULS: See "Turku".
REPAIRS: Facilities for arranging small repairs on deck and engine in Pargas, but usually carried out by reliable companies in Abo.
DRY DOCKS: No local docking facilities. See "Turku ABO".
AIRPORT: Nearest airport in Abo. Distance about 25 km.
TIME: Local time/GMT plus 2 hours.
HOLIDAYS: New Year's Day (1st January), Epiphany (6th January), Good Friday, Easter Monday, Labour Day (1st May), Ascension Day, Whit Monday, Midsummer (2 days), All Saints' Day, Independence Day (6th December), Christmas (25th December). Work in harbour carried out during these days only under very pressing circumstances.
POLICE/AMBULANCE/FIRE: Police 744048; Ambulance 744064; Fire 005; Life-saving Corps 356595.
TELEPHONE: No facilities for placing telephone on board. Telephone available on quayside.
SHORE LEAVE: No restrictions for crew members.
DELAYS: Vessels dispatched in order of arrival. Usually no delays occur as work has generally been carried out within the time limit stipulated in C/P. Port activity aimed at good dispatch of vessels, and consequently work in 2 shifts has been arranged.
AUTHORITY: Port owned by Paraisten Kalkki Oy.

PATENIEMI: 65.06 N. 25.23 E.

OPERATORS: Oulu Osakeyhtio Sawmill. Port used for export of timber only, about 60,000 stds. per year. 12 km. North of Oulu.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs Documents.
2 Crew Bond Declarations.
2 Ship's Bond Store Lists.
Derating Certificate.
4 Manifests.
2 Bills of Lading.
Ship's Register, Certificate of Tonnage.
PILOTAGE: Pilot station at Marjaniemi. Marjaniemi – Pateniemi 40 n. miles 23 ft. depth.
ANCHORAGES: Safe anchorage on Oulu roads. There are no safe anchorages West of the Hailuoto Island.
RESTRICTIONS: Day and night service, no tides. Winter season, contact ice-breaker 24 hours in advance on HF (2182), or VHF Channel 16.
MAX. SIZE: Only dry-cargo vessels use this terminal. Max. draft 7 m. For length no restriction. Ship of 15,400 d.w.t. has entered.
HEALTH: No special rules existing in obtaining pratique. If fever or disease suspected on board to be reported to ship's Agent, he will contact Health Authority for necessary arrangements.
RADIO: "Vaasa Radio" (North Quarken). Approaching Oulu contact Agent through "Vaasa Radio". Close to Hailuoto Island call "Oulu Radio" VHF Station, Channel 27.
RADAR/VHF: At Marjaniemi Pilot station, radar range 30 miles. Contact with HF (2182) or VHF (Channel 16). All ice-breakers keep watch on frequency 2182 and VHF (16).
TUGS: Tug optional, but for vessels over 140 m. length the use is advisable. Tug will meet on Oulu Roads, according to agreement. Customary to use ship's lines.
BERTHING: Pier extends for 910 m. enabling 13 vessels of medium size to load simultaneously at quay. Depth at quays is from 20 to 23 ft.
STEVEDORES: 24 hours notice of ETA to be given to Agent, who arranges necessary gangs.
MEDICAL: Medical attention arranged through Agent. 2–4 hours notice required. Good hospital facilities available.
DENSITY: Fresh water.
FRESH WATER: Available at main berths delivered by boat and from pipe-line.
FUEL: Small quantities of all grades available, delivered by lorries.
FIRE PRECAUTIONS: Smoking prohibited in timberyards.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew. Stevedores will do it by order of Master and will charge as ship work.

CERTIFICATES:
Nationality Certificate.
Measuring Certificate.
Load Line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radio Safety Equipment.
Derating Certificate.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 200 gr. pipe tobacco or equal amount of cigars allowed to each member of crew. Wine and/or Spirit: 1 bottle wine or spirits is allowed for each member of the crew.

CARGO GEAR: Tested cargo gear to international safety regulations. Test certificates to be on board.

IDENTIFICATION CARDS: Not needed.

CONSULS: British, Danish, French, Dutch, Norwegian and Swedish Vice-Consuls at Oulu.

SERVICES: Compass adjusters and ship's cleaning (no tank-washing).

REPATRIATION: Good facilities for effecting crew changes and to arrange necessary repatriations.

AIRPORT: Oulu Airport 15 kms. from harbour served by regular airlines. 6 daily flights to Helsinki and 6 flights from Helsinki to Oulu with continuous connection to Kemi and Rovaniemi.

TIME: Local time GMT plus 2 hours.

HOLIDAYS: General Holidays in Finland: New Year's Day (January 1st); Epiphany (January 6th); Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day (May 23rd); Whit Monday; Midsummer Day (June 22nd); All Saints' Day (November 2nd); Independence Day (December 6th); Christmas Day (December 25th); Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Fire 005, Reserve 006; Ambulance 006, Reserve 005; Police tel. 002, Reserve 003.

REGULATIONS: Oil pollution strictly prohibited. Considerable timber lying in water and damages are ship's responsibility.

SHORE LEAVE: Crew members allowed ashore without restrictions.

AUTHORITY: Harbour Office of Oulu.

PORKKALA: 60.05 N. 24.23 E.

Documents and all general information, refer to "Helsinki".

PILOTAGE: A Pilot can be obtained from the Pilot station of Ronnskar or Porkkala, except for the shallowest fairway, for which the Pilot can be obtained from another Pilot station.

APPROACHES: There are 4 official ship routes leading to the port of Porkkala of Suomen Sokeri Osakeyhtio, the deepest one of which is 9.2 m. (30 ft.) and the shallowest one is 5.5 m. (18 ft.).

The port does not have an ice-breaker of its own and the fairway is kept open by means of the State's ice-breakers.

CLEARANCE: The customs formalities of the port are attended to by the Custom House of Helsinki.

TUGS: A tug-boat can be ordered either from Helsinki or from the port of Inkoo.

BERTHING: The port of Porkkala is owned by Suomen Sokeri and it is located at Kantvik. Directly in the vicinity of the port there is the factory of Suomen Sokeri Osakeyhtio (sugar mill).

The port basin has 2 parts. The outer part of the pier is 110 m. long and it can be used by vessels with a draft up to 9.2 m. (30 ft. 2 in.). The inner part of the pier is 50 m. long and it can be used by vessels with a draft up to 5.3 m. (17 ft. 4 in.). The fairway of the port basin is 120 m. wide, narrowing up at its end to 76.5 m.

South quay (at the South bank of Kantvik Bay); length 60 m., draft 21 ft. 11 in.

FRESH WATER: There is a water post for vessels, as well as distribution of electric current and connection facilities for telephones.

DENSITY: 1004.

SHIPMASTER'S REPORT: The sugar discharging berth for Porkkala is at Kantvik, situated in Lat. 60° 05′ N., Long. 24° 23.25′ E., about 21 miles West of Helsinki.

The Pilot for the port is embarked at the position indicated on British Admiralty Chart No. 2331, 115° 3.5 miles from Porkkala lighthouse. From there to the berth is 12 miles and the passage presents no difficulties. It is well lit, and there is ample water. The least depth recorded was 31 ft. and that was alongside the berth. There is a powerful tug for assisting in berthing and unberthing.

The discharging berth, alongside which vessels lie port side to, is modern and well fendered. It is sheltered from most directions. Unfortunately, the berth is short for a 500 ft. vessel, and additional moorings have to be placed from amidships.

There is only 1 crane on the berth and to work either of the end hatches a shift would be necessary. Work was continuous while the vessel discharged her part cargo at Kantvik, and an out-turn rate of 100 t.p.h. was achieved.

Fresh water is readily available from the Jetty, and presumably, fuel could be obtained by lighter from Helsinki. Telephones in the dock offices are available for official use.

There is a bus service to and from Helsinki, the journey taking about 40 minutes.

AUTHORITY: Suomen Sokeri Oy.

PORVOO (Skoldvik): 60.18 N. 25.33 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
2 Crews' Personal Effects Lists.
2 Stores Lists.
4 Cargo Manifests.
2 Bills of Lading.
Derat Certificate or exemption.
Ship's Register.
Tonnage Certificate.

PILOTAGE: Pilots (2) board 2 miles West of Kallbadagrund's lighthouse (60.01 N. 25.34 E.). Pilot station at Emasalo. When approaching communicate with Pilot on VHF Channel 16.

RESTRICTIONS: Vessels over 40 ft. draft are restricted by depth in Great Belt Channel, entrance to the Baltic where depth is 43 ft. Otherwise approaches to Porvoo are 44 ft. depth. In bad Winter, port may be closed by ice between January and April although normally kept open by ice-breakers.

MAX. SIZE: Up to 140,000 d.w.t. Max. draft 45 ft. (13.5 m.).

HEALTH: Bill of Health not required. In case suspected disease or fever on board, radio Agent full details before arrival to advise Port Health Officer in advance.

RADIO: Helsinki Radio, call sign OHC A1 transmissions; OHG A3 transmissions. VHF Channels 16, 26 and 28.

"Neste" harbour office, VHF Channels 9, 13, 16 and 21.

TUGS: 1 tug 2,900 h.p. available. Other tugs stationed at Helsinki. Ship's lines are used.

BERTHING: Neste Oy Oil Terminal: No. 1 berth, T-head jetty, depth 41 ft. 6 in. alongside. No. 4 berth, T-head jetty, depth 46 ft. alongside. No. 5 berth, T-head jetty, depth 26 ft.

DENSITY: Fresh water.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Available at berths.

FUEL: Available.

DISCHARGING/LOADING RATES:

No. 1 Jetty	Discharging	8,000 t.p.h.	(Crude oil)
	Loading	3,000 t.p.h.	(Fuel oil)
		1,500 t.p.h.	(Clean products)
No. 4 Jetty	Discharging	8,000 t.p.h.	(Crude oil)
	Loading	3,000 t.p.h.	(Fuel oil)
No. 5 Jetty	Loading	800 t.p.h.	(Fuel oil)
		800 t.p.h.	(Clean products)

BALLAST: A flow of 8,000 tons of oily ballast water can be fed to the water-cleaning systems of the refinery, with a flow rate of 1,000 cu.m. per hour.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine or spirits for each man.

TIME: GMT plus 2 hours. No alterations during the year.

AUTHORITY: Harbour Master.

RAAHE (LAPALUOTO): 64.41 N. 24.29 E. (See Plan)

PORT LIMITS: Vessel is considered to be an "arrived vessel" subject to Charter Party Terms, when passing breakwaters if not ordered to anchor near Raahe Lighthouse by Port Authority.

DOCUMENTS:
Crew Lists.
Passenger List.
Ship's Register.
Custom List.
Provisions List.

PILOTAGE: Masters to contact Pilot station and pilot boat, VHF Channel 16. Pilots board and disembark by pilot cutter (red) near Raahe Lighthouse (Lat. 64° 39′ N., Long. 24° 13′ 5″ E.). Day and night service.

ANCHORAGE: Vessels can anchor outside Raahe Lighthouse, depth 15-20 m. No anchorages inside breakwaters.

RESTRICTIONS: No restrictions night entry.

MAX. SIZE: Lapaluoto Harbour, draft inside 18 ft., outside 22 ft. Length up to 140 m.

Rautaruukki Oy Harbour; draft 24 ft. 8 in., length up to 360 m.

Ore Harbour, draft 22 ft.

RADIO: Helsinki Radio, 2182 kHz, call sign OHG, Mariehamn Radio, 2182 kHz, call sign OFH; Vaasa Radio 2182 kHz, call sign OFW.

RADAR/VHF: No port radar services. Pilot station. Radio, 2182 kHz, VHF Channel 16. Rautaruukki Oy Harbour Office, VHF, Channel 16 and tugboat "Rautalouto" VHF, Channel 16.

TUGS: Tug *Rautaluoto* 600 h.p.

STEVEDORES: Rautaruukki Oy, in Steelworks Harbour; other private firms.

SPECIALISED CARGO HANDLING FACILITIES: Lapaluoto Harbour, no shore cranes, Ore Harbour (Helmi), only conveyor. Rautaruukki Oy Harbour, import quay equipped with two 12.5-ton shore cranes and conveyor; export quay equipped with two 12.5-ton shore cranes, straddle carriers and equipment for handling steel and general goods. Max. lifting capacity 24 tons.

LIFEBOAT STATION: Lifeboat cutter "Niilo Saarinen", 360 h.p., 10 kts. Radio 2182 kHz, VHF Channel 16, Radar, fire and drainage pump 4,000 lit/min. Alarm through National Lifeboat Service, Pilot or Police Stations.

DENSITY: Average density 1002.

FRESH WATER: Available from Rautaruukki harbour.

FUEL: Small quantities available, one day's notice required.

FIRE PRECAUTIONS: No special precautions in Lapaluoto Harbour.

GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally by the crew.
CUSTOMS ALLOWANCES: About 200 cigarettes and limited amount spirits per man.
IDENTIFICATION CARDS: Not required.
CONSULS:
Denmark 31146 – 37269
Norway 31146 – 37269
Sweden 37300 – 37007
REPAIRS: Raahe Oy, Mechanical Workshop. Slip for small ships.
DRY DOCKS: None.
AIRPORT: Oulunsalo Airport, about 60 kms. from Raahe.
TIME: Local time is GMT plus 2 hours.
HOLIDAYS: New Year's Day; Twelth Night; Good Friday; Easter Monday; Labour Day (1st May) holiday when no work takes place; Ascension Day; Whitsun Monday; Midsummer Day; All Saints' Day; Independence Day (6th December); Christmas Day and Boxing Day.
POLICE/AMBULANCE/FIRE: Police 38063; Ambulance; Fire and First Aid 005.
GENERAL: Government ice-breaker assistance available when needed.
AUTHORITY: Port of Rautaruukki Oy, Port of Raahe (Lapaluoto).

RAUMA: 61.08 N. 21.30 E.

PORT LIMITS: Southern entrance port limit when passing Tankar, northern entrance port limit when passing Riskonpoella.
DOCUMENTS: 2 Crew Lists and 1 Passenger List. Ship's Register, Customs Documents, Ship's Papers etc. (Ship's Agent will give the necessary advice).
PILOTAGE: Pilot station at Kylmapihlaja-island, Lat. 61° 08′ 7″ N. Long. 21° 18′ 4″ E. International Pilot signals, VHF Channels 16 and 13. Fairways Santakari 17 ft.; Valkeakari 24 ft.; deep passage 28 ft.
ANCHORAGE: Ample area for anchorage in Archipelago.
RESTRICTIONS: Entrance channel for 24 ft. maximum draft usable in all conditions, the 28 ft. channel to be used in daylight only. Harbour open all year round.
MAX. SIZE: Draft limit only.
HEALTH: Event any suspect contagious disease ask for orders by wireless. Port Regulations do not allow such a ship to come alongside or even closer than 350 yards. Pilot must not leave ship before allowed by the Doctor. Pilot does not board an infected ship but ship piloted to safe anchorage by pilot boat.
RADIO: Helsinki Radio, Hanko Radio, Mariehamn Radio.
VHF: Rauma VHF Channels 26 and 28, Channel 16 used for calling Pilot, tug etc. Channels 13 and 12 for further operations.
RADAR: When required pilot station radar used for advising Pilot onboard.
TUGS: 1 port owned tug 1,260 h.p. Usually one extra tug of 1,160 h.p. or 600 h.p. available but not guaranteed. An early notice recommended if more than 1 tug needed.
BERTHING: Hakuni outer quay 270 m., depth 22 ft. used for loading forest products. Central quay 410 m., depth 22-24 ft. used for forest products loading and discharging bulk cargoes. Laitsaari quay 300 m. (165 m. ready, 135 m. under construction) 28 ft. paper loading. Inner harbour 300 m. 13-16.75 ft. timber loading.
Chemical quay one berth 16.75 ft. liquid prod. load/discharge.
Oil quay one berth 24 ft. oil load/discharge.
CRANES: Central quay two 6 tons; one 5 tons; two 3 tons. Five mobile cranes 5-30 tons, available.
STEVEDORES: 24 hours notice to Agent recommended.
SPECIALISED CARGO HANDLING FACILITIES: 400 m. berth specially equipped for handling bulk cargoes, mainly china clay, sulphur, coal, etc.
No special equipment for containers, but smaller containers can be handled by harbour cranes.
Good berths for roll-on/roll-off traffic.
Different kind of liquid chemicals can be handled in special berth.
MEDICAL: Advance notice recommended if possible. Hospital available (231 beds).
TANKERS: One berth, draft 24 ft. 15 in. cargoline 1,500 t.p.h. slop discharge facilities by tank-trucks.
DENSITY: 1004-1003.
FRESH WATER: Fresh water available on quay. Charges depending on amount taken.
FUEL: Fuel brought by tank-trucks.
GANGWAY/DECK WATCHMEN: Available if wanted. Watchmen supplied by private company.
OPENING/CLOSING HATCHES: Performed by ship's crew or by Stevedores at request of ship.
CUSTOMS ALLOWANCES: Tobacco: 6 day's ration (about 200 cigarettes or 200 gr. tobacco). Wine and/or Spirits: 1 opened bottle of wine or liquor, subject to Customs Regulations.
CARGO GEAR: Central quay shore gear available other quays mobile gear or ship's gear.
CONSULS: Denmark, Norway and Sweden.
REPAIRS: All types available.
DRY DOCKS: Rauma-Repola Oy: Dry dock 505 ft. 9 in. by 70 ft. 4 in. by 24 ft. 7 in. all sorts of repairs Hollming Oy: Slipway for ships up to 600 d.w.t.
SURVEYORS: Ship's Agent will give advice.
REPATRIATION: Repatriation and signing on or off.
AIRPORT: Pori – airport 50 km. away. Regular connections.
TIME: Local time is 2 hours ahead of Greenwich (Long. 30° E.).
HOLIDAYS: See "Turku".
POLICE/AMBULANCE/FIRE: Police, 002 and 003; Ambulance, 006; Fire alarm, 005.
TELEPHONE: Oil quay only, connection Fmk 25.00.
SERVICES: Compass adjusting facilities and compass adjusters.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Normally no identification card needed but passport or seaman's book preferable.
DEVELOPMENTS: New 29.5 ft. entrance channel under construction, plans for new berths with equal depth made.
DELAYS: No delays in berthing, loading and discharging weather permitting.
AUTHORITY: Traffic Manager and Harbour Master.

SAIMAA CANAL AND PORTS IN LAKE AREA OF SAIMAA

APPROACH CHANNELS: The canal can be reached from the international waters of the Gulf of Finland through an approach channel South of Someri. The channel passes the Island of Vihrevoi and continues, at the Island of Malyj Vysotski, as the Vysotski-Viipuri Channel, from which the approach channel departs at a distance of 10 km. from Malyj Vysotski. The length of the approach channel from the point of departure to the Brusnitchnoe Lock is 14 km. The distance from the international water area to the Island of Vihrevoi is 94.5 km. and the length of the section Vihrevoi-Malyj Vysotski 12 km. The total length of the channel from the territorial waters of the Soviet Union to the Brusnitchnoe Lock is thus 131 km.

From the territorial waters of Finland the canal may be reached through the so-called coastal channel starting from the Finnish border at the island of Santio and joining the above sea channel at the Island of Vihrevoi. The length of the channel from the border to Vihrevoi is 49 km. and the overall length of the Brusnitchnoe Lock is 85.5 km. The channel and its refuge harbours have been marked on the Soviet sea charts. Nos. 1131 and 1132 and on Finnish charts Nos. 11 and 12. The coastal channel may only be used by Finnish vessels while vessels of other nationalities must use the sea channel, except for foreign tugs.

Canal: The length of the canal on the Finnish side of the border is 23.3 km. and that of the part on the Soviet side 19.6 km. The overall length of the Saimaa Canal is thus 42.9 km. The average difference in the height between Lake Saimaa and the Gulf of Finland is 75.6 m. The canal has 8 locks, the heights of fall of which range between 5.54 m. and 12.69 m. Earth transports will use the 7 moving bascule bridges and the 6 stationary bridges across the canal.

SEASON AND HOURS: The natural open-water season of the Saimaa Canal lasts an average of 211 days. In mild Spring and Autumn seasons the open-water period lasts 225 days. Since most vessels using the canal have been strengthened for navigation in ice, a season of navigation of almost 8 months will probably be normal every year. The season begins at the turn of April-May and ends in mid-December. The locks of the canal are provided with ice-melting equipment and they will not form an obstacle for lengthening the season of navigation. On the other hand traffic will be obstructed by freezing of the water system of Saimaa and by pack ice formations in the bottom of the Gulf of Finland. As to the water system, the farther North one goes the earlier will the waters of Lake Saimaa freeze in Autumn and the later will the ice melt in Spring.

The opening and closing of the season of navigation on the canal are decided each year by the Finnish and Soviet Canal Delegates. The closing date of the canal will be announced in the daily papers of Helsinki and Lappeenranta not later than 7 days before the day of closing, but for the opening day 1 day's notice is given.

During the season of navigation the Saimaa Canal is kept open throughout the day. The administration centre of the canal will be on continuous duty.

PILOTAGE: Pilotage in the Soviet area on the sea channels between Vihrevoi-Brusnitchnoe and on the coastal channel between the border and Brusnitchnoe is carried out by the Soviet Pilot Service. All vessels must use a Pilot on these channel sections.

Pilotage on section Brusnitchnoe – mouth of the Saimaa Canal on Lake Saimaa (or Lock of Malkia) is carried out by canal Pilots submitted to the Canal Office. Pilotage is normally carried out in two parts, on section Brusnitchnoe – the Lock of Palli and on section the Lock of Palli – the mouth of the canal on Lake Saimaa. All vessels, excluding Finnish small vessels and floating objects less than 25 m. in length, shall use a Pilot when proceeding through the canal. The Canal Office may grant upon application a Master of a vessel the right to navigate his vessel on the canal without a Pilot provided that the Master of the vessel has passed an examination of the Canal Office. In navigation from the Gulf of Finland the Pilot must be ordered from the Viipuri Section of Inflot 12 hours before the arrival at the point where the Pilot is taken on board. The order must be checked 2 hours before the start of pilotage. To avoid excessive work by the Pilot Service and to eliminate delays special attention is to be given to the accuracy of the time the pilotage is to be started, particularly in the last notifications.

In navigation from Lake Saimaa the Pilot must be ordered from the Canal Office 12 hours before entrance into the canal. The order must be checked 2 hours before pilotage is to be started. In navigation from the Gulf of Finland a canal Pilot need not be ordered separately. Similarly, a Soviet Pilot for the approach channel need not be ordered separately when the vessel proceeds from Lake Saimaa. These orders will be placed by the Finnish and Soviet authorities concerned.

Pilotage in the water system of Saimaa is carried out by Pilots of the National Board of Navigation in Finland. The order for Pilots shall be made in good time to the Pilot station of Lauritsala.

MAX. SIZE: The canal can be used by vessels with dimensions not exceeding the following:

Length	82.0 m.
beam	11.8 m.
draft	4.35 m.
height of mast	24.5 m.

The draft of a vessel in tow, however, shall not exceed 4.3 m. For vessels larger than those mentioned above, a permit for navigation on the canal may be granted upon application by the Canal Office of the Saimaa Canal.

Permits may be granted to vessels the dimensions of which do not (at least considerably) exceed the following:

Length	82.0 m.
beam	11.8 m.
draft	4.4 m.
height of mast	24.5 m.

and which also as to their structures and properties are suitable to navigation on the canal. The permit may contain regulations concerning the structure or equipment of the vessel or special provisions pertaining to navigation of the vessel on the canal such as good manoeuvrability, liability to wait or speed restrictions.

The Canal Office of the Saimaa Canal may also grant a vessel or equipment with slightly larger dimensions, carrying exceptional cargo, a Trip Let Pass for one passage through the canal.

The Rules and Regulations for Traffic on the Saimaa Canal also contain more detailed directions – among others on the permissible dimensions of vessels in tow and timber rafts using the open canal sections.

NEW VESSELS: When designing new vessels, to be used also in traffic through the Saimaa Canal, the designers are advised to consult the main dimensions and the structure of the vessels with the canal authorities. The conditions of navigation in the canal depend, first of all, on manoeuvrability, though certain other factors are also important. Vessels suited to canal and inland water traffic may be constructed slightly longer and wider than permitted at present on the canal.

MAXIMUM PERMISSIBLE SPEED AND TIME OF PASSAGE: The highest permissible speed on the actual channel of the Saimaa Canal is 9 km/hr. and on the lake channels of the canal 15 km/hr.

The Canal Office has the authority to issue regulations permitting higher speeds, principally for small vessels. The time of passage through the part of the canal provided with locks (mouth of the canal on Lake Saimaa-Lock of Brusnitchnoe) is 6–8 hours depending on waiting time at locks caused by heavy traffic volumes, and on size of vessels.

The average speed on deep-water channels on Lake Saimaa is estimated to be 18 km/hr.

SIGNS AND SIGNAL LIGHTS: The sign system of the approach channel of the Saimaa Canal, the canal and the channels on Lake Saimaa is adequate to ensure safe navigation throughout the day, also at night and in poor visibility.

The approach channel is provided with beacons, light buoys and signs in accordance with the lateral system. The signs have been erected by Soviet authorities. The illumination and the signalisation systems of the Saimaa Canal are based on the same principles with beacons and signs, but in the signal system of the canal, sign lanterns, signboards, line markers, water traffic signs and radar reflectors have been used. The colour of sign lanterns is orange on the West bank and green on the East bank of the canal. In marking of the lake channels of Saimaa according to the cardinal system, leading and warning lights, light buoys, range beacons, landmarks and signs have been used. Information of the marking of the water system of Saimaa has been issued as a booklet by the National Board of Navigation in Finland: "Sisavesistojen loistot I 1968" – "Beacons of Inland Water Areas I 1968".

RADIO: There are two radiotelephone networks for marine use in the sphere of influence of the Saimaa Canal. On the frequency of 160 mHz reserved for actual marine radio communications there are also the Pilot radiotelephone and the public radiotelephone networks.

The Pilot radiotelephone network covers all stationary radiotelephone equipment at all locks, on the Kansola Bascule Bridge, at Pilot stations and in the traffic office in the administrative building at Mustola as well as portable radiotelephone apparatus used by canal Pilots. The radiotelephone equipment of the canal Pilots operate on Channel 11 of the international marine radio. The telephone of the Brusnitchnoe Lock and the radio telephone in the Administrative Centre of the canal are also provided with a general calling and safety Channel 16.

When approaching from the sea the vessel makes a radio contact with the Brusnitchnoe Lock by using Channel 11. After this all radio communications required by navigation on the canal also use Channel 11. On Lake Saimaa, radio communications move over to Channel 13 on which the traffic office of the Saimaa Canal and the Pilot station of Lauritsala are also able to operate.

The general radiotelephone network on Lake Saimaa (the so-called Saimaa Radio) uses Channels 23–28 of the international marine radio. The network covers the entire region of the water system of Saimaa extending from Lappeenranta to Iisalmi and Lake Pielinen. Channel 24 is the calling channel of the Saimaa Radio.

Two marine radio stations for general traffic have been built at Nuijamaa and Virolahti especially for navigation on the Saimaa Canal. Both radio stations are on duty and they are remote-controlled from the Coast Station of Kotka. The stations have the calling and safety Channel 16 and a calling Channel 24 for public traffic. The Nuijamaa Station operates on Channel 28 and the Virolahti Station on Channel 23. The range of the Nuijamaa Station extends from South of Viipuri to Southern Saimaa and the range of the Virolahti Station covers the entire Bay of Viipuri. The stations can be called either on Channel 16 or on the operating Channel. The Kotka Radio calls vessels either on Channel 16 or 24.

The principal purpose of both the Saimaa and the Kotka Radios is to ensure the communications of the safety service of navigation. These stations may also be used to transmit calls to the public telephone network – also to foreign countries – or vice versa, to receive calls from the public telephone network.

AUTHORITIES: Board of Management of the Saimaa Canal, Lappeenranta.

Viipuri section of Inflot. Vyborg, USSR.

National Board of Public Roads and Waterways in Finland. Waterways Department, Helsinki.

THE HARBOURS OF THE LAKE AREA OF SAIMAA:

Mustola Harbour: Situated between Mustola and Soskua locks in the Saimaa Canal:

4 quays, 80 m. each. Draft alongside 4.2 m. Roll-on/Roll-off facilities are provided. 1 Coles mobile diesel electric crane: arm 9.14 m., reach of arm 3.66 m., lifting capacity 35 tons. Arm 18.3 m., reach of arm 18.3 m., lifting capacity 4 tons. Grab of capacity 2,500 litres or 1,250 litres can be installed. Possibility to hire further mobile cranes.

Lappeenranta Passenger Harbour: Situated in Saimaa Lake at Lappeenranta town:

New concrete quay with passenger terminal. Draft alongside 4.2 m. Room for 2 ships with a draft of 4.2 m. and for 3 ships with a draft of 3.0 m. Pilotage distance from canal entrance 6 nautical miles.

Kaukas Oy Pulpmill Factory Discharging Place:

Draft alongside 4.2 m. (unofficial). Mobile crane for discharging wood into water. Pilotage distance from canal entrance 1.5 nautical miles.

Enso-Gutzeit Oy Paper Mill Quay: At Imatra Kaukopaa:

Length of quay 70 m., draft alongside 4.2. m. Pilotage distance from Canal entrance 25 nautical miles.

Joensuu Town Harbour (Ukonniemi):

Length of quay 140 m., draft alongside 4.2 m. Pilotage distance from canal entrance 38 nautical miles + 45 nautical miles + 60 nautical miles + 44 nautical miles.

Savonlinna Town Harbour (Haislahti):

Length of quay 80 m., draft 4.2 m. No cranes. Pilotage distance from canal entrance 38 nautical miles + 45 nautical miles.

Ristiina Harbour:

Quay can accommodate 1 ship. Permissible draft 4.2 m.

Oy Wilh. Schauman Ab Paaskylahti Harbour at Savonlinna is planned. Quay will be built to accommodate 1 vessel.

Kuopio Oil Harbour:

Harbour located at Kelloniemi in Kuopio Town close to Oy Esso Ab storage in rock. Harbour is owned and built by Oy Esso Ab.

One of the two planned berths for ships is completed. The harbour is provided with oil discharge equipment. Permissible draft 4.2 m.

Kuopio Town Harbour (Kumpusaari):

Berth for 1 dry cargo vessel and 1 tanker. Permissible draft 4.2 m.

Varkaus (Ahoniemi Oil Harbour):

Harbour is located on the East bank of the Southern entrance fairway about 6 km. from the centre of the town. There is room for 1 ship; permissible draft 4.2 m.

Varkaus:

Harbour located at the South end of Taipale canal at Westbank. The Harbour is not built for a harbour but as waiting berth for ships passing Taipale canal. 1 ship can be berthed and permissible draft is 4.2 m. There are no warehouse and loading equipment, but A. Ahlstrom Osakeyhtio is using the berth for shipping paper to England. Loading is effected by the factory's labour and machines. Goods are transported to the port by lorries.

TOLKKINEN (Tolkis): 60.20 N. 25.35 E.

PILOTAGE: Pilot arrives from port station at Emsalo (tel. 911-27710). Station equipped with VHF, radiotelephone and radar. Pilotage distance to port 22 miles.

APPROACHES: Max. draft of fairway from sea, 23 ft. 8 in.

TUGS: One tug available, 350 h.p.

BERTHING: Tolkis Cellulose Quay, depth 23 ft. Tolkis New Quay, depth 17 ft. Oil Harbour (see "Skoldvik").

CRANES: Tolkis New Quay equipped with 2 movable cranes. Lifting capacity 2.5 tons. with grabs.

DENSITY: 1004.

FRESH WATER: Available by lorry. Minimum quantity 5 tons.

TORNIO: 65.51 N. 24.09 E.

The outharbour of Tornio is Roytta situated about 6 miles S.W. of Tornio.

DOCUMENTS:

2 Crew Lists.
2 Provisions Lists.
Passenger List.
One set of Bills of Lading, Ship's Papers, Health Documents.

PILOTAGE: AJOS pilot station VHF Channel 16. Pilot to be taken on board by lighthouse "Kemi 2" in position 65° 30.3′ N., 24° 22.5′ E., 10 miles from Ajos.

ANCHORAGE: In Roads, depth is 24 ft.

MAX. SIZE: At same time there can be 2 vessels of 100-120 m. length, draft 21 ft.; 2 vessels of 50-60 m. length alongside Main Quay; and 2 vessels of 50-60 m. length, draft 14 ft. at Old Quay.

RADIO: Vaasa Radio/OHX or Harnosand Radio, Sweden/SAH.

TUGS: No tug available at Tornio. to be ordered from Kemi 12 hours before.
CRANES: Three 20 ton mobile cranes for general cargo and several cranes for discharging bulk cargo.
STEVEDORES: Ordered by Agent (Telex 32-512). Agent must be given 24 hours ETA. Normal working time 0700-1100, 1200-1600 hrs. Warning for overtime must be given before 1100 hrs., the final confirmation before 1400 hrs.
DENSITY: 1000.
FRESH WATER: Fresh water can be delivered by tank lorry (8 tons).
FUEL: Ordinary fuel by lorries from Kemi.
OPENING/CLOSING HATCHES: By the ship's crew.
CUSTOMS ALLOWANCE: 100 cigarettes or 100 grams tobacco and 1 bottle spirits.
CONSULS: France tel. 40473; Sweden tel. 41751; Norway 14411.
REPAIRS: No docks but accommodation for small repairs.
AIRPORT: At Kemi, 20 km. from Tornio; served by Finnair.
TIME: GMT plus 2 hours.
POLICE/AMBULANCE/FIRE: Police 003; Fire 005; Ambulance 006 and 40428; Salvage 47472.
AUTHORITY: Tornion Satamakonttori.

TURKU (Abo): 60.27 N. 22.15 E.

DOCUMENTS: See "Oulu".
PILOTAGE: Telegram to Agent with 24 hours ETA to Sea Pilot station (State Pilots) Uto, contact Pilot station via Hango Radio or at shorter distance by VHF. Coastal Radar service available. When approaching port ETA by VHF to Port Information Centre, international Channel No. 12 for Harbour Pilot. Cutter whilst in action, same channel, but takes orders from Information Centre only.

Pilot cutters painted red with white circular field marked "L" on the bows. Flying flag in daylight, showing red and white lights vertically at night. Coming out when required to Pilot station 0.75 mile from Main Harbour. Call signals: International flag "G", at night 3 long blasts. No special boarding measures. All ships arriving from sea will get necessary information from Sea Pilot, whose service is compulsory. Harbour Pilot not compulsory.
ANCHORAGE: Outer anchorage at Bay of Airisto, 2 miles from Port, 15-18 m. In practice all ships taken into port without anchoring or waiting.
MAX. SIZE: Maximum draft in Commercial Harbour 30 ft. fresh water. In Oil Harbour 29 ft. 6 in. fresh water. Length and breadth of minor importance. No tides.
HEALTH: International Quarantine flag required in case of suspected disease or fever including preliminary report by VHF, otherwise, ask Agent.
RADIO: Hango (Hanko) radio and Mariehamn Radio. In addition these have telephone and VHF service. Local telephone network on VHF Channel 26.
TUGS: Off Harbour Pilot station Pikisaari/Beckholmen, further out on application. Advisable apply for tugs in advance. 4 tugs available.
BERTHING: Priority given to arriving and departing passenger ships on regular lines. 6 hydraulic stern loading roll-on/roll-off berths and 3 without hydraulics..

Total length of quays 4,896 m.

Canal Bank quay	Depth 27 ft.
West quay	Depth 30 ft.
Coal quay	Depth 18 ft.
Oy Wartsila A/B	Depth 18 ft.
Linnanselka/Slottsfjarden quay	Depth 27 ft.

Container facilities available.
CRANES:

Quay	*No.*	*Capacity (tons)*	*Reach of arm (m.)*	*Type*
Canal bank	7	5.0	15	Movable
	1	7.0-5.0	5.5-12	,,
Linnanselka/				
Slottsfjarden	7	5	20	,,
	1	60-40	20-24	,,
	9	6	20	,,
Oy Wartsila Ab				
Crichton-Vulcan		80-40-10	17.5	Stationary
(only for dockwork)			35-36	
Valmet Oy				
Pansion Telakka	1	30-6	19-39	Floating for dockwork only

DENSITY: 1004.
STEVEDORES: Agent should be well informed about ETA and Master's Requirements. Normal working hours: 0700–2230 hrs.; Saturdays and days preceding public holidays 0700–1430 hrs. The Post Office: 0900–1600 hrs. Saturdays and days preceding public holidays 0900–1400 hrs.
MEDICAL: All medical and hospital facilities available. No special requirements regarding inoculations, etc.
TANKERS: No special requirements. Small slop discharge facilities. 1 berth, depth 29 ft. 6 in. for larger ships.
FRESH WATER: From pipe-lines along berths. Price approx. 5 fmk. per ton.
FUEL: Most grades available. No advance notice neccessary if ex. motor vehicles. In case of greater quantities: from Oil Harbour only. This requires advance notice to Agent.
DEVELOPMENTS: Entrance channel to Main Harbour is now dredged to 33 ft. Container Harbour being built. Outer Harbour planned. Recent acquirement: one 60-ton moveable electric quay crane. Draft alongside 30 ft.
GANGWAY/DECK WATCHMEN: Gangways to be rigged out so that they do not obstruct quay crane movements. Watchmen customary, but not necessarily hired.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
IDENTIFICATION CARDS: Not needed.
CONSULS: The following countries are represented by Consuls or vice-consuls in Turku: Austria, Belgium, Denmark, France, Great Britain, Greece, Honduras, Iceland, Italy, Norway, Portugal, USSR, Spain and Sweden.
REPAIRS: All types of repairs possible.
DRY DOCKS: Graving dock: length 600 ft. (183 m.), width of sluice gate 85 ft. (26 m.), depth on sill 26 ft. 3 in. (8.0 m.).

Floating dock: lifting capacity 4,000 tons, max. length of ship 358 ft. (109 m.), inner width 59 ft. (18 m.) max. draft 16 ft. 6 in. (5.0 m.). By agreement the shipyard's 80-ton crane can be used in port traffic if such is needed. Tel. 359 500, Telegrams "Wartsila". Telex 62-228.
REPATRIATION: Yes, good connections everywhere.
AIRPORT: 4 miles from port, regular lines.
TIME: GMT plus 2 hours. No alterations during the year.
HOLIDAYS: New Year's Day (January 1st); Twelfth Night (January 6th); Good Friday; Easter Bank Holiday; Midsummer Day; All Saints' Day; Independence Day (December 6th); Christmas Day; (December 25th); Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Fire 005; Police 002; Ambulance 006.
GENERAL: Ice-breakers maintain Winter traffic. 2,000 and 800 h.p.
TELEPHONES: Ships' telephones available.
AUTHORITY: Kanavaniemi, Turko/Abo.

UUSIKAUPUNKI: 60.48 N. 21.24 E.

APPROACHES: 3 fairways lead to harbour through sheltering archipelago; Uto-Uusikaupunki, 78 miles; Isokari-Uusikaupunki, 13 miles; Kylmapihlaja-Uusikaupunki, 24 miles.

Good sheltered anchorage in the roads. Depth of fairways 9 m.
DOCUMENTS:

Agent will prepare during clearance:
2 Ship's Report.
1 Declaration List, arrival (Board of Navigation)
1 Declaration List, Departure (Board of Navigation)
To be prepared before Arrival:
2 Provision Lists (own provision of the ship)
2 Special Lists (must be signed by each member of the crew)
2 Crew Lists
Bill of Admeasurement
Certificate of Registry
Ice-class Certificate (during Winter months, 1st December-30th April, issued by hull surveyor)
Bill of Beaconage (issued by Customs).

PILOTAGE: Embark Pilot at Isokari or Uto Pilot stations. Distance through archipelago Isokari-Uusikaupunki 13 miles, Uto-Uusikaupunki 78 miles. Under normal circumstances first fairway recommended. During Winter months, if ice-situation difficult in Gulf of Bothnia, traffic goes via Uto.

Both pilot stations equipped with radio 2182 kHz, Channels 16 and 24, VHF duplex-Channels 18, 20 or 22 and radar. Pilot-boat red, with letter "L" and fitted with VHF Channels 13 and 16. Pilot boards usually between Sandback-Isokari, to where "Hauteri" light leads in line 134.5°-314.5° (T). Notice of ETA at least 4 hours prior reaching station.
ANCHORAGE: Many areas of safe anchorages in Archipelago. Pilot advises.
RESTRICTIONS: No entry restrictions. No tide. During North and East winds sea-level can fall about 40 cm. below normal, which may sometimes delay deep loaded vessels reaching port.
MAX. SIZE: Longest quay 180 m. depth alongside 9 m.
HEALTH: Pratique not necessary. In the event of any disease/fever on board or in last port of departure, vessel has to inform before arrival, hoist quarantine-flags, or in darkness 2 lights, red light above white, showing all round horizon.
RADIO: Mariehamn Radio OFH; Helsinki Radio OHG.
TUGS: 2 available; normally tugs join vessel at port, ship's lines used.
BERTHING: *Kemira Quay:* 180 m. long, owned by fertiliser factory Kemira Oy, has depth 9 m. alongside, two 8 ton cranes, two discharging pipes, one for discharging ammonia at minus 32° C. and one for sulphur acid. Discharging capacity depending material 140-170 tons/hour/crane and loading/discharging bags 45-50 tons/hour/crane.

Esso Quay: 40 m. long, owned by Oy Esso AB, depth in channel and alongside 5 m. Terminal is used for discharging LP gas.

Telakka Quay: 140 m. long, owned by Uudenkaupungin Telakka Oy, has depth alongside 5 m. Quay is only used for ship repairs, and fitting works for new buildings. There is also a floating dock with 5,000 ton capacity.

Hepokari Pier: 90 m. long and 18 m. breadth, owned by town. Channel and alongside depth 7 m. There is terminal on South side for Ro-Ro traffic.

Saunasilta Quay: 60 m. long and depth 3.5 m., owned by town. Used only by small coasters.
STEVEDORES: Available. Contact Agent.
MEDICAL: Hospital facilities, vaccination, certificates, etc., available. Contact Agent.
TANKERS: For discharging liquid ammonia, diameter lines 6 and 10 in.

DENSITY: No tide, density 1004.
FRESH WATER: Water-hoses, about 20 t.p.h.
FUEL: Fuel available, contact Agent.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
SHIP CERTIFICATES: All certificates according to International Convention for the Safety of Life at Sea, Class Certificate, etc.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per each member of the crew. Wine and/or Spirit: 1 bottle wine or spirit per each member of the crew.
CARGO GEAR: No additional requirements.
IDENTIFICATION CARDS: Not needed.
CONSULS: None.
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: Uudenkaupungin Telakka Oy has a floating dock, lifting powers 5,000 tons, draft 6.1 m., breadth 19.6 m., and length 130 m.
REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriations.
AIRPORT: Distance to Turku Airport about 90 km. Airport is served by regular Airlines.
TIME: GMT plus 2 hours, no alterations during the year.
HOLIDAYS: Official Holidays are: New Year's Day (January 1st); May 1st; Midsummer Day (Saturday between June 20th and June 26th); Independence Day (December 6th). Usually no work on those days.
POLICE/AMBULANCE/FIRE: Police 002 or 3002; Ambulance 3005; Fire 005 or 3005.
TELEPHONES: Available.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Uudenkaupungin Satamatoimisto.

VAASA: 63.06 N. 21.36 E. (See Plan)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
2 Customs Documents.
2 Health Documents.
5 Manifests.
5 Bills of Lading.

PILOTAGE: Compulsory for ships arriving from abroad. 3 Pilot stations: From S. = Ronnskar Pilot for ships draft 18 ft. to 26 ft. From S.W.-W. & N.W., Norrskar Pilot = 26 ft. From N. Ritgrund Pilot = 16 ft.

Pilot signals: Letter "G" as flag – light or sound. Radio telephone call: Pilots watching 24 hours on 2182 kHz, also VHF.

Pilot vessel: 30 ft. motor yacht with wheelhouse and radar. Hull red all over with letter "L" painted on bow.

Pilot vessel not cruising in open sea. Meets ship well outside Archipelago indicated on charts.

Harbour Pilot available in port from Vasklot Pilot Station. Tel. 12 496.

ANCHORAGE: In the area of port – outside breakwater about 2 miles W. of port of Vasklot. Elsewhere according to Pilot's advice.
RESTRICTIONS: No locks. Fairway lighted all the way.

No tide, but water level may be reduced by up to 20 in. in Spring and early Summer, or increased by 10 to 25 in. in Autumn.
MAX. SIZE: Depth alongside piers up to 26 ft. 3 in. At the Oil Harbour, max. recommended LOA is 610 ft.
HEALTH: See "Documents" – no restrictions. Hospital and Doctor for any purpose available.
RADIO: Vaasa Radio – OFW 2803 kc/s.
RADAR/VHF: No radar service in port area. Pilot vessels at sea Pilot stations equipped with radar; also Ronnskar Pilot station on same island. VHF radios on Pilot stations and harbour tug-boat.
TUGS: Harbour tug-boat and ice-breaker m/s *Vaasa* available 24 hours round. 650 h.p. Radio telephone/VHF – call signs OGWE. Charge according to size. Harbour tug also operating as salvage vessel in open sea.
BERTHING: 2 piers of 180 m. length and the Reins Quay of 240 m. length. Depth 26 ft. 3 in. There are three 5-ton cranes on the South Pier.

The Ferry Pier, 106 m. length, depth alongside 5.7 m. with berths for Ro-Ro traffic.

A new Ro-Ro berth for cargo vessels at South side of South pier with depth of 6.2 m. in operation.

The Oil Harbour is at Vasklot. Depth alongside 26 ft. 3 in. Tankers discharge through three arms of 500 m/m and 400 m/m diameter.
STEVEDORES: ETA as usual according to C/P to Agent, etc.
MEDICAL: If serious illness advance notice to Agent necessary. Coastguard has an aeroplane stationed at Vaasa; coast radio station will advise and arrange.
DENSITY: Nearly fresh water 1002-1004. No tide.
FRESH WATER: Available, no limit. Direct from quay-side, through pipes, rate about 25 t.p.h.
FUEL: All grades of bunker fuel available – direct from oil jetty or by lorries to berth.
FIRE PRECAUTIONS: Dry-cargo ships; no smoking in holds. Tankers: usual restrictions. Tankers with petrol cargo not allowed to berth at dry-cargo piers.
GANGWAY/DECK WATCHMEN: Not compulsory, ship's own crew can be used. Police watchmen available.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES:
Safety Equipment Certificate.
Stability Certificate.
Load Line Certificate.
Derrick and Hoisting Gear Test Certificate.
Derating Certificate.
Nationality Certificate.
Measurement Certificate.
Ice-class Bill.

CUSTOMS ALLOWANCES: Tobacco: Max. 200 cigarettes per man or 50 gr. of tobacco. Wine/Spirit: Maximum 1 bottle of each per man to be opened and used on board only.
CARGO GEAR: Cargo gear test book to be in order – all gear to be tested within a year otherwise risks for breaks in discharging/loading.
IDENTIFICATION CARDS: Not needed.
CONSULS:

Belgium	Netherlands
Denmark	Norway
France	Sweden
Great Britain	

REPAIRS: Shipyard in Vaasa owned by Wartsila Oy. All deck and engine work can be carried out; slip for ships up to 1,500 d.w.t. Nearest dry dock Rauma. Harbour tug acting as salvage vessel, diver on board, all kinds of underwater cutting and welding, pumps, etc.
REPATRIATION: Can be carried out easily.
AIRPORT: Vaasa Airport (about 8 miles from town) served by regular airlines, domestic and abroad, Stockholm, U.K., Continent, etc.
TIME: Local time GMT plus 2 hours.
HOLIDAYS: Working hours in port: 0800-1200, 1300-1700 Monday-Friday, Saturday: 0800-1200. Sunday free. Working days in port: Monday-Saturday. Working days ashore: Usually Monday-Friday. All banks closed on Saturday. Shops open all weekdays. Other holidays: 6th December – Independence Day – Christmas, etc., as usual.
TELEPHONES: Can be arranged on board.
POLICE/AMBULANCE/FIRE: Tel. numbers Vaasa: Police 12 034, 12 374; Ambulance 005 12 641; Fire 005. Ambulance, aeroplane, coast guard: Vaasa 13 751, 14 859.
GENERAL: Ships approaching port of Vaasa in Winter time (January-May) when sea area icebound, have to call any of Government ice-breakers operating in area or to inform harbour authorities of exact ETA – engine power, size and nationality, and whether strengthened for ice or not. Call signs, etc., for Government ice-breaker can be obtained from nearest coast radio station.
SERVICES: Compass adjusting available.
DELAYS: Only Winter time when Government ice-breaker is arranging, waiting or assisting in outbound convoys of ships.
AUTHORITY: Harbour Master.

VALKO (Walkom): 60.25 N. 26.17 E.

PILOTAGE: Pilot arrives from Pilot station at Orrengrund (Tel. (915)–53334, radio telephone). Station equipped with radar. Distance to port 12 miles.
APPROACHES: Max. draft from sea to fairway 24 ft.
TUGS: 1 tug available, 200 h.p.
BERTHING: *Walkom Quay*:

New Quay, length 300 m., depth 24 ft. South Pier (outer side) length 140 m., depth 24 ft.

South Pier (inner side) length 105 m., depth 18 ft.
CRANES: 5 mobile cranes, lifting capacity 2–6 tons. 1 shore crane, lifting capacity 6 tons. 1 shore crane lifting capacity 5–25 tons.
DENSITY: 1003.

VEITSILUOTO: 65.42 N. 24.37 E. (See Plan)

DOCUMENTS: See "Oulu".
PILOTAGE: Inwards compulsory for vessel in foreign trade. Boarding at Kemi Lightship 17 miles S.S.W. of Kemi, and outwards at Ajos Pilot Station 4 miles S.S.W. of Kemi. Radio beacon at Ajos.
ANCHORAGE: Good holding ground in 3–4 fathoms of water half mile off-shore (inner roads) about 1 mile from Rautakallio, and by Koivuhauta 2 miles from harbour entrance.
RESTRICTIONS: Generally harbour open from latter part May until early December. No tide. Entry by day or night.
MAX. SIZE: See "Berthing".
HEALTH: See "Oulu".
TUGS: Available when required, charges according to net tonnage. Use ship's lines.
BERTHING: Length of Quay 552 m. plus Roll-on/Roll-off berth, depth 8.4 m., permitted draft 7.3 m.
STEVEDORES: Ordered by Agent, no ETA to stevedores necessary.
MEDICAL: Hospital at Kemi. Masters to advise if medical attendance required aboard.
FRESH WATER: Berth supply by shore installations.
FUEL: Ordinary fuel, diesel and gas oil. Deliveries by lorries only.
FIRE PRECAUTIONS: No special precautions. Company's fire-fighting corps.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed open and close.
IDENTIFICATION CARDS: Not required.
CONSULS: Norway and Sweden, others at Kemi.
REPAIRS: Available at Kemi.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Not normally expected.
AUTHORITY: Harbour Master.

France

AJACCIO: Corsica 41.55 N. 08.44 E.

DOCUMENTS:
Cargo vessels:
1 Crew List.
1 Passenger List.
1 Manifest.
Ship's Register.
Passenger Vessels:
3 Crew Lists.
3 Passenger Lists.
Ship's Register.
1 Manifest.
PILOTAGE: No advance notice required. Vessels call Pilot with 3 blasts on ship's siren. Pilot boat flies usual Pilot flag. Pilot joins approaching vessel at a line Isolella/Chapelle des Grecs. Available 24 hours a day. Pilot boat has VHF Channel 6.
ANCHORAGES: Several safe anchorages in harbour which can be indicated in advance by Ship's Agent.
MAX. SIZE: Length 200 m., draft 7 m. At anchor, no limit.
HEALTH: Health Officer boards on arrival. Pratique automatic unless suspected contagious disease on board, when it is necessary to notify Agent or Health authorities in advance by cable.
RADIO: ETA cables, etc., via Radio Grasse.
TUGS: Not required.
BERTHING: Regular vessels have priority at all berths.
STEVEDORES: Advice should be sent 24 hours prior to arrival. French vessels have priority of labour.
MEDICAL: No advance notice required in respect of medical attention unless case is urgent. All hospital facilities available. Except in the case of an epidemic in any country from which the vessel has sailed, no inoculations or vaccinations are necessary.
TANKERS: Max. draft 10 m., length 200 m.
FRESH WATER: Available at the berths.
FUEL: All grades available, 48 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: Ship's Register.
CUSTOMS ALLOWANCE: Tobacco, 2 oz. or 200 cigarettes per member of crew. Wine, no restrictions. Spirits 1×20 oz. bottle.
IDENTIFICATION CARDS: Required.
CONSULS: Greek, Dutch, Monaco, Italian, Danish, Swedish, Finnish.
REPAIRS: Minor repairs can be carried out.
DRY DOCKS: None.
REPATRIATIONS: Can be arranged by Ship's Agents.
AIRPORT: 8 km. from port. Served daily by Air France regular lines.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January; Easter Monday; Whit Monday; 1st May; 14th July; 15th August; 1st November; 11th November; 25th December. Cargo work can be arranged on all dates except 1st November.
POLICE/AMBULANCE/FIRE: Police 0.17; Ambulance 21.27.58; Fire 0.18.
TELEPHONES: Can be placed on board warships only.
GENERAL: Galley waste, etc., must not be discharged inside the bay.
DELAYS: In berthing can be expected in July and August up to 2 days. Delay in loading or discharging up to 5 days. At otner times of the year maximum delay normally 24 hours.
AUTHORITY: Capitaine du Port.
AGENT: Britiships, PO Box 55, Ajaccio, Corsica. Tel. 21.43.39. Cables "Britiships Ajaccio". Telex 46627 Corsica.

ANTIBES: 43.35 N. 07.08 E. **(See Plan)**

DOCUMENTS:
(a) For Harbour Master:
Ships Papers.
Declaration of Exit and Entry.
Crew List.
Passenger List.
(b) For Customs:
Health Declaration.
Provision List.
PILOTAGE: Not obligatory for yachts. Port cannot receive pleasure boats longer than 40 m. Ensure pilotage authorities advised of ETA. VHF Channel 9 day and night.
ANCHORAGE: In winds of N.E. to S.E. anchorage in front of Antibes not advised. Recommended anchor in Bay de Golfe-Juan, in shelter of Cap d'Antibes, in direction of Juan-les-Pins. In winds from N.W. to S.W., good anchorages on East face of Cap d'Antibes, Bay of Garoupe, Bay of La Salis, Bay of Ilette.
RESTRICTIONS: Night entry not advised.
MAX. SIZE: For yachts in the old port, length 23 m., width 6 m., draft 3.5 m. For tankers, 1 berth only in tanker outer port. Max. length 110 m., draft 7 m.
TUGS: None.
TANKERS: A berth against dolphins, in Outer Port and strictly reserved for unloading refined fuels. See "Max. Size".
FRESH WATER: Oil companies have water point on berth in Outer Port.
FUEL: For pleasure boats only.
CONSULATES: None.
REPAIRS: For pleasure boats only. 2 slipways for boats of max. length 30 m.
REPATRIATION: Must be arranged through Consulates at Nice.
AIRPORT: Nice, Cote d'Azur. 15 km.
TIME: GMT plus 1.
POLICE/AMBULANCE/FIRE: Tel. Police 33.58.58 and 17; Ambulance 18; Fire 18.
SERVICES: Water and electricity on each pier.
AUTHORITY: Capitainerie du Port d'Antibes.

BASTIA: Corsica: 42.41 N. 09.27 E.

DOCUMENTS: See "Ajaccio".
PILOTAGE: Address, Vieux Port 20, Bastia. Tel. 315095. VHF Channel 16. Pilot boats, 12 m. long, black and white with navigation and pilotage lights. Previous advice to Pilots necessary before arrival. Pilot boards in bay of Porto Vecchio, North of the citadel.
ANCHORAGE: Anchoring not recommended in Easterly winds. Depth 15 to 30 m. in Porto Vecchio Bay. Bastia harbour: up to 4.50 m. deep.
RESTRICTIONS: Ships may enter harbour any time.
MAX. SIZE: Max. length: 160 m.; draft 7 m.
TUGS: None available.
BERTHING: Ships berth in order of arrival.
STEVEDORES: Mooring carried out by watermen. Same address as Pilots.
MEDICAL: Medical controls made by Customs officer. Doctor available.
BERTHING: Accommodation for about 10 ships. General Cargo.
FRESH WATER: Supplied ashore.
FUEL: Available in small amounts.
FIRE PRECUATIONS: General rules. One wharf reserved for tankers.
GANGWAY/DECK WATCHMEN: Night watchman supplied by Agent.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: None on entry, 10 packets cigarettes when leaving. Wine/spirits unlimited when leaving.
IDENTIFICATION CARDS: Required.
CONSULS: Nearest at Ajaccio.
REPATRIATION: No facilities exist.
AIRPORT: Bastia 20 km. from ports. Departures every day to continent.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police, 1881; Ambulance, 2281 733–2686; Firemen, 018-088.
TELEPHONES: As a rule telephone is put only on naval ships.
SHORE LEAVE: Crew may go ashore.
AUTHORITY: Department of Civil Engineering.
AGENT: See "Ajaccio".

BAYONNE: 43.30 N. 01.28 W.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
3 Lists of Provisions on Board.
3 Individual Lists of Tobacco and Spirits.
3 Manifests of Cargo.
1 Set Bills of Lading.
PILOTAGE: Station extends 3 miles between the parallel of Ondres to the North and the limit of French territorial waters to the South. When weather permits, the pilot boat comes out of l'Adour and comes alongside ships near the light buoy situated W.N.W. of the port entrance. Contact Pilot at least 12 hours before arrival relaying through Bordeaux Arcachon Radio and stay on radio watch in the pilot zone.
ANCHORAGE: Ships must not anchor in the river.
RESTRICTIONS: In bad weather ships are led to take the Pilot at the pilot boat which is based on St. Jean-de-Luz and are led either towards l'Adour or to the anchorage of St. Jean-de-Luz.
MAX. SIZE: The Adour is accessible to ships of 160 m. length. Depth at the mouth varies with the seasons and are maintained by dredging. They are never less than 7 m. during Summer but during Winter can be reduced following Westerly storms. The height of the tide has to be added to these depths but the draft can never exceed 8.0 m.
HEALTH: A declaration of Health Form is lodged by the Customs Service on arrival; it must be completed by the Captain. In case of a suspect illness, advise Agent 24 hours in advance.
RADIO: Bordeaux – Arcachon Radio. The signal tower on the South side of the mouth, and the Harbour Master's Office, in the tower, has a VHF radio station.
TUGS: 1 tug available, 1,250 h.p., 10 tons bollard pull. Request for tug through the Agent. Tug waits at the entrance to the Adour.
BERTHING: When working berth is occupied, vessel is directed to a waiting berth. Large ships or those carrying dangerous cargo can be requested to wait outside the entrance.

Berth	*Max. Length Vessel*	*Recommended Draft*
Socadour	160 m.	25 ft.
Cement Wharf	160 m.	24 ft.
Satec Wharf	160 m.	24 ft.
Grain Silo	130 m.	24 ft.
SNPA Sulphur Quay	150 m.	25 ft.
Other berths	120 m	22 ft.

STEVEDORES: Arrival must be notified to Agent 24 hours in advance.
MEDICAL: Medical attendance can be organised by the Agent without advance notice, Hospital and private clinic available. However, if medical attendance required as soon as the ship arrives, particularly at night, it is advisable to send a radio message 12–15 hours before the arrival of the ship.
TANKERS: No installation to receive residues. Two berths for unloading of refined products. Refinery de Midi: max. length 120 m., max. draft 6 m. Total Oil berth: max. length 80 m., max. draft 5.7 m.
FRESH WATER: Available at each berth, minimum supply 3 cu.m.
FUEL: Available by arrangements in advance through Agent or suppliers.
GANGWAY/DECK WATCHMEN: Not obligatory except for ships with dangerous merchandise on board.
OPENING/CLOSING HATCHES: Generally carried out by the crew.
CUSTOMS ALLOWANCES: 200 grammes or 250 grammes of tobacco for each crew member and for 8 days (must without fail be declared in the individual list of provisions). 1 bottle of wine or spirits (must without fail be declared in the individual list of provisions).
IDENTIFICATION CARDS: Not necessary – seaman's identity card sufficient.
CONSULATES:

Belgium	Norway
Brazil	Peru
Chile	Portugal
Spain	Sweden
Finland	Uruguay
Great Britain	

REPAIRS: Running repairs to hull, machinery, radio, and radar can be effected.
DRY DOCK: Usable length 98 m. Length on stocks 94.1 m. Width of entry 15 m. Depth above sill, neap tides 4.5 m., spring tides 6 m.
REPATRIATION: Possible for all countries as well as crew changes.
AIRPORT: At Biarritz: 3 km. away. Regular service with Paris. Two services per week to and from London.
TIME: European Standard Time: GMT plus 1 hour.
HOLIDAYS: 1st January; Easter Sunday/Monday; May 1st; Ascension Day; Whitsun Sunday/Monday; 14th July; 15th August; 1st November; 25th December.
POLICE/AMBULANCE/FIRE: Police, telephone 17 or 25.50.21., Anglet: 17 or 25.94.24. Boucau: 17 or 31.80.37. St. Leon Hospital: 55.84.04. Fire Station: 18 or 25.21.84.
TELEPHONES: Telephones on board not possible.
SHORE LEAVE: Crew are authorised to go ashore.
AUTHORITY: Harbour Master.

BORDEAUX (inc. Verdon, Bassens, Ambes, Pauillac, Blaye): 44.50 N. 00.34 W. **(See Plan)**

DOCUMENTS:
Tonnage Certificate.
2 copies Provisions List.
2 copies Personal Effects List.
2 copies Crew List.
Customs Clearance.
Crew Manifests.

PILOTAGE: Vessels should announce their arrival at BXA Buoy at least 24 hours in advance to the Commandant du Port de Bordeaux through Coast Station Arcachon – Bordeaux Port Radio. In addition they should contact the pilot boat and confirm their ETA and speed 12 hours in advance The ship will be able to keep in touch with the pilot boat where radio watches are kept as follows.

1. On 500 kc/s (radio) and 2,182 kc/s (radiotelephone): permanent watches from 0800 to 1000 hrs. GMT. 1200 to 1400 hrs. GMT. 1600 to 1800 hrs. GMT. 2000 to 2200 hrs. GMT.

2. On 2,182 kc/s, a general RT call (both in French and in English) at the end of each radio contact with the Pilots' station at Le Verdon.

These contacts are made on 1743 kc/s at the following hours (GMT) 0030 – 0300 – 0500 – 0630 – 0717 – 0915 – 1030 – 1230 – 1430 – 1600 – 1715 – 2000 – 2124.

Upon request a special radio contact can be obtained at any time.

Under normal weather conditions, the pilot boat remains near the landing buoy and the West Channel entrance. In bad weather the Pilot is sent on board as soon as boarding becomes possible, usually around buoy No. 10.

Vessels less than 70 m. long, for which pilotage from the sea to Verdon is not compulsory, may embark river Pilot at Le Verdon providing Masters have advised the Pilot station accordingly. Pilots can be contacted on VHF Channels 12 and 16.

ANCHORAGE: The normal waiting anchorage area is the roadstead of Le Verdon, depth 10 to 12 m. and sand silt bottom. The big tankers with more than 10 m. draft find a good anchoring area in the Saintonge roadstead with a depth of 15 to 20 m. (sand silt bottom).

MAX. SIZE: Verdon Petroleum Harbour. Tankers up to 350 m. length or approximately 250,000 d.w.t. can be accepted, with 75% load.
Bec d'Ambes: Tankers up to 32 ft. 6 in. draft.
Pauillac: Tankers up to 34 ft. 6 in. draft.
Bassens: Vessels up to 32 ft. draft.
Blaye: Vessels up to 25 ft. draft.

RESTRICTIONS: The great entrance to the Gironde estuary (Western Entrance) is dredged to a depth of 13.50 m. under the zero of French sea charts. It permits the sailing in of ships with a draft of 15 m. (49 ft.) at practically all tides.
HEALTH: Vessel should ask for free pratique by radio at least 12 hours before arriving at port. Message should be addressed to Sanipor – Bordeaux routed via Bordeaux/Arcachon radio. Otherwise, pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.
RADAR/VHF: Port radar is in operation in the Gironde Estuary and approaches. Vessels may contact this station for navigation information by calling Verdon Port Radio on VHF Channel 14.
RADIO: Arcachon Bordeaux Port Radio: Radiotelephony 1,862 kc/s. Radiotelegraphy 421 kc/s.

Port Authority by VHF: Calling band 156.8 mHz Channel 16. Traffic band 156.6 mHz Channel 12 (port). Traffic band 156.7 mHz Channel 14 (radar).

Pilots: Telegraphy: watch on 500 kc/s at the prescribed hours. Telephony: continuous watch on 2,182 kc/s. VHF: continuous watch on Channel 16.

TUGS: Tug assistance is available as ordered by the Pilot. Tugs will join vessels at the following places: In Verdon Roads for vessels mooring at Verdon. In Pauillac Roads for vessels mooring at Pauillac. At Buoy BA1 for vessels mooring at Ambes. Off the Harbour Basins for vessels mooring at Bordeaux Docks.

As a rule ship's tow-lines are used; when a tug line is required there will be an additional charge.

BERTHING: *Le Verdon Deep Water Terminal:* 2 containership berths depth alongside 13 m. at low water; slip for quarter ramp ro/ros. (handling operations carried out 24 hours a day 7 days a week). 100 power points for reefer containers. Two container gantry cranes of 36 tons and 44 tons hoisting capacity. Two 24 ton cranes which can work in tandem.

Riverside Quays. 20 berths depth alongside 7.50 m.–9 m. at low water.

Enclosed Docks. 2 basins joined by a lock 25 m. wide. Entrance effected by two locks of the following dimensions: Large lock 152 m. long 22 m. wide. Small lock 136 m. long 14 m. wide. Depth of water in the basins is maintained at 7.50 m.

Queyries. 493 m. long, depths offered are 7–8 m. alongside.

Bassens-Amont. 770 m. long, depth alongside at LW. 10.0 m. (5 berths)

Bassens-Aval. 11 berths, total length 1,475 m. Depth alongside more than 9.50 m. at low water.

Blaye: Private berth for coasters. Public berth at present being renovated. Also private berth for tankers.

Pauillac: Public berth for vessels drawing up to 10 m. Total quay length 290 m.

TANKERS: *Verdon Terminal:* Main berth. The ship is berthed on elastic dolphins (steel pipes) with an available depth of 17 m. Ship makes fast with own hawsers on four mooring dolphins, two up and two down on the wharf and set back about 35 m. from the face. This mooring is strengthened by very flexible steel warp hawsers of 55 and 60 mm. diam. Five hawsers of this type may be placed at each end of vessel according to needs and weather conditions. Ships must have strong chain or claw-stoppers for turning on bitts.

For crude oil, the berths have following equipment: one 30 in. line connecting the main berth to storage; one 16 in. line connecting the coaster berth to the foresaid lines; 2 lines for bunkering.

Arms for connecting pipe-lines to ship. Connecting of the crude oil pipe-lines is made by ASA type, 16 in. Mannesmann arms (4 at main berth – 1 at the coaster berth). The Port Authority has a number of connecting collars in various dimensions and types. Ships are requested to inform before arrival on the type and data of their own collars. Connecting to the bunkering line is made by flexible hoses (ships must use their own handling gear).

Fire wire must be rigged on forecastle and poop, the eye 1 metre (3 ft.) above the water (all the time) when ship is light. Each fire wire must have a 10 metres (30 ft.) coil laying between bitts and fair lead.

If no other request, the ship is assisted by 2 tugs (with Kortnozzle 23 ton thrust) one of which stays at disposal during the call.

Secondary berth. This berth is for the use of shuttle-service ships, lighters and coasters, depth of 6.50 m. alongside.

Fire-fighting line. A 12 in. line supplies the wharf and the 2 berths with sea water under pressure. At each berth there are fire-fighting hydrants. The first help material for fire-fighting is ready to use at each call. It includes spray nozzles, water and foam hoses, emulsion liquid containers, powder extinguisher systems (movable and portable).

Bunkering. Supply is made by lighters mooring at the coaster berth. Tying lighters alongside tankers is forbidden, except with special permission of the Port Authority.

Telephone. Telephone is connected to every ship on arrival. In that way the ship is regularly connected to the French telephone network (tel. No. 596243 – Le Verdon).

Pauillac. Oil installation operated by Shell, 33 ft. alongside.

Ambes. Terminal for tankers up to 200 m. length, 32 ft. 6 in. draft. Operated by Societe Elf and Esso.

Blaye. Small tankers are accommodated at the private jetty of La Societe Total.

DENSITY: Verdon 1023 to 1015. Pauillac 1005 to 1000. Ambes approximately 1000. Bordeaux approximately 1000.
MEDICAL: All facilities available. Smallpox, malaria, and cholera vaccinations can be performed at the Military Hospital or at the Port Vaccination Centre.
DRY DOCKS: There are 3 dry docks and 5 small covered docks. Dimensions of the largest graving dock are 247 m. length 34 m. width 13.40 m. depth.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of alcohol per man.
IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.
AIRPORT: Situated 10 km. from Bordeaux. Frequent and Daily flights to most parts of Europe and North Africa. Good internal service.
POLICE/FIRE/AMBULANCE: Police 17; Ambulance 17; Fire 18.
TELEPHONES: Can be connected on board vessels moored at quays in Bordeaux, Bassens, Ambes, Pauillac, and Verdon.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

Le Verdon Container Terminal: Operational 24 hours per day, 365 days per year.
AUTHORITY: Port Autonome de Bordeaux.
AGENT: See "Paris".

BOULOGNE SUR MER: 50.43 N. 01.35 E. (See Plan)

DOCUMENTS: As for "Calais".
PILOTAGE: Compulsory for vessels over 60 m. length. Vessels can communicate with Pilot station, tel. 31.36.08, through Boulogne Radio. When pilot launch is at sea, contact by VHF Channel 12.

The most favourable boarding point is between the sea buoy and the wreck buoy situated 1.5 miles to the South, or slightly nearer the land if there are strong Westerly winds. In any event, the surf created by the Carnot breakwater must be avoided by keeping at least 1 mile off shore. If Pilot is not immediately available, vessel must wait in Outer Roads, if necessary at anchor, until further instructions received. On no account should vessel attempt to enter Carnot Roads without Pilot.
ANCHORAGE: The outer anchorage for large vessels is midway between Bassure de Baas and the Carnot breakwater. Anchorage prohibited in the main approach channel.
RESTRICTIONS: Entrance depends on tidal conditions. For larger vessels best to enter the breakwaters at slack water which occurs 2 hours before time of high tide. Arriving vessels are obliged to contact Harbour Master's office immediately by radio, or VHF Channel 12.
MAX. SIZE: For outer harbour: length, 205 m.; draft, 10.5 m. springs 11.00 m. neaps. Max. d.w.t., 31,000 tons. Bassin Loubet: length, 100 m.; draft, 7.5 m. springs, 7.75 m. neaps.
RADIO: Boulogne Radio, call sign FFB, also on VHF Channel 25.
HEALTH: Pratique given by Customs officers who board on arrival. In case of suspected disease on board, Master should radio Agents prior arrival advising details.
TUGS: Will meet vessel as requested by Master on Pilot's advice.
BERTHING: Main berths situated inside Carnot breakwater. Mooring length of 1,000 m. available, depths vary from 5.5 m. to 10 m.

A marine terminal in the inner harbour, for landing vehicles with passengers. This terminal has 2 mobile ship-to-shore ramps.

These ramps have a load capacity of 30 and 35 ton, and the availability of parking areas allows for development of roll-on/roll-off traffic. However, the characteristics of the inner port can just accommodate ships up to a max. length of 130 m. with a draft of 4.50 m. Plans are being studied for considerably improving these facilities.
CRANES: Floating crane 150 ton capacity. Also 1 crane 25 ton capacity, 9 cranes 3–6 ton and 18 cranes 6–15 ton.
DEVELOPMENTS: Lengthening of the Quay de L'Europe which will then have a total length in excess of 800 m.

A third roll-on/roll-off position is being studied which will be located in the sheltered roadstead, on the Western side of the Sarraz Bournet mole, and will be able to handle a mixed traffic of accompanied cars and general cargo. In addition, a quayside installation equipped with a ramp is being planned in the dock for berthing Ro–Ro ships with both horizontal and vertical handling capability.

A 240 m. quay may also be available along the Western side of quay when the increased traffic warrants its construction.

The port offers 58,800 sq.m. covered area, of which 4,500 sq.m. (18,000 cu.m.) are cold stores, and 82,100 sq.m. of open area.

A clinker silo of a capacity of 42, 500 tons is currently in course of construction; its rate of loading will be 1,000 t.p.h.
FRESH WATER: Supplied by pipe-line to all berths.
FUEL: SMCL quay can supply marine fuel. Quay is limited to vessels less than 100 m. length and 5 m. draft, otherwise fuel obtainable by tanker lorry from Dunkirk.
OPENING/CLOSING HATCHES: Performed by crew.
REPAIRS: Only quick repairs may be effected because of congestion at the quays. Slipway for vessels up to 2,500 tons.
TIME: GMT plus 1 hour.
HOLIDAYS: No work Sundays and legal holidays.
POLICE/AMBULANCE/FIRE: Police, tel. 31.58.07; Ambulance/ Fire, tel. 18.
TELEPHONES: Can be connected on board vessels at Quay de L'Europe.
SHORE LEAVE: Permitted, no restrictions.
AUTHORITY: Direction du Port.
AGENT: See "Paris".

BREST: 48.24 N. 04.30 W. (See Plan)

DOCUMENTS: See "Dunkirk".
PILOTAGE: Pilots do not stay out at sea, but only go to meet ship at estimated time of arrival as sent by ship. Normally pilot boat positioned on the line Toulinguet lighthouse and Beuzec (or Charles Martel) buoy, about 2.5 miles N.W. Toulinguet lighthouse. If strong S.W. wind, pilot boat waits for ship at entrance of Camaret Bay, about 1.5 miles N.E. Toulinguet lighthouse. If sea too rough to allow pilot boat to sail out, boat waits for ship at entrance of Brest Roads, near Portzic lighthouse.

Ships proceeding Brest must send last message giving ETA Pilot station (stating if *local time or GMT*), about 5 hours before arrival. Message to be addressed *"Brest Pilot Office"* through Brest Le Conquet radio station (call sign FFU). Day and night watch at pilot office. Radio station phones message direct as soon as received. Any alteration in ETA should be passed pilot office immediately.

Pilot boat sails from Brest harbour about 1.5 hours before ship's ETA, and 0.5 hour later pilot boat takes radiotelephony watch on 2182 kc/s, calling ship from time to time on same frequency. Ships fitted with radiotelephony should listen and call on 2182 kc/s. Pilot boat also equipped VHF Channels 16, 9, 6, 12 and Pilot office Channel 9.
ANCHORAGE: At Pilot's discretion. Anchoring in main approaches restricted as indicated on charts.
RESTRICTIONS: Entry subject draft and height of tide on day in question. Two entrances to port, one dredged to 6 m. below zero of charts and the other 5.8 m. below zero. Depth at quays varies according berth from 6 m. to 11 m. below zero.
MAX. SIZE: Inside harbour, max. length 320 m. Draft up to 35 ft. subject to tide.
HEALTH: If from foreign port, cable Maritime Health Service 48 or 24 hours prior arrival requesting free pratique. If risk of contagious disease exists, vessel will be held in roads until cleared. If from another French port, free pratique automatic.
RADIO: Brest Le Conquet – FFU.
TUGS: Two port tugs of 1,250 h.p. Tugs join vessel at main entrance to port. Marine National places tugs at ship's disposal for all port movements. Generally, tow rope supplied by tug at additional charge.

The German salvage tug *Le Pacific*, or another tug of the German Bugsier Company, is stationed at the port, but only gives assistance for vessels requiring aid outside the port area.
BERTHING: According to draft, ships may have to wait in roads before berthing, depending on height of tide in fairways. Also see "Restrictions".
STEVEDORES: Agent has responsibility of making all arrangements for unloading, and is in touch with stevedores who arrange necessary gangs.
MEDICAL: Hospitals and clinics available. In the case of ship needing medical assistance, request should be addressed to Maritime Health Service through Conquet Radio Station, advising ETA, where vessel coming from and state of patient.
TANKERS: One berth for receipt of refined products destined for local storage tanks. Berth length 142 m., dredged alongside to a depth of 10 m. below zero of charts over an area 250 m. long and 30 m. wide.
FRESH WATER: All berths have fresh water supply. Apply to Chamber of Commerce who make necessary arrangements. Loading rate 13-15 t.p.h.
FUEL: Bunkering station operated by Societe de Depots de Petrole Cotiers, on the South side of the East Mole. Loading rate up to 200 t.p.h.
TANK CLEANING: Station situated at the Southern extremity of the East Mole. Can operate 4 Victor Pyrate machines simultaneously. Equipped with 3 boilers to supply steam, 3 pumps, oily water separator and an extractor for solid residues.

The tank-cleaning station is connected by pipe-line to Repair Quay No. 2 where tankers of 100,000 to 250,000 d.w.t. may be accommodated.
DEVELOPMENTS: Two large projects are currently under construction:

The first consists of a new port industrial zone with an area of 100 hectares, and frontage of approx. 1,800 m. which will enable the construction of quays with depths of 10 – 12 m.

The second consists of the construction of a large dry dock able to receive vessels of 550,000 d.w.t. and 2 floating repair quays.

The dry dock will have a length of 420 m. and width of 80 m.

The quays will have a length of 418 m. each and will be dredged to 11 – 12 m.

These new developments will be put into service by the end of 1979, and will be equipped with the most modern means to repair large vessels.

Furthermore, the Port is studying a vast plan to develop the commercial port, so that the latter may adapt itself to the requirements of modern maritime transport.
WATCHMEN: Compulsory for ships carrying dangerous materials, non gas-free tankers, vessels with chemical products, munitions, etc.

CERTIFICATES:
Nationality.
Gross Tonnage.
Classification.
Deratisation.
Vaccination.

CUSTOMS ALLOWANCES: Tobacco, Wine/Spirit. Ship's provisions must be under seal.

CONSULS: The following countries are represented by Consuls at Brest:

Belgium	Netherlands
Chile	Norway
Denmark	Portugal
Finland	Spain
German Federal Republic	Sweden.

REPAIRS: Repair Quay No. 1 at the East Quay of Basin No. 5 can accommodate vessels up to 200 m. length. Dredged to depth of 10 m. over an area 300 m. long, 52 m. wide.

Repair Quay No. 2 can accommodate vessels up to 350,000 d.w.t. Quay is 320 m. long, dredged to depth from 10 m. at the bow to 12 m. at the stern.

Repair Quay No. 3 Adjacent to Repair Quay No. 2 Length 280 m. Depth 12 m.

Quays No. 2 and 3 are equipped with modern and complete plant necessary for tanker repairs.

Vessels may also be permitted to make repairs at other quays according to their availability.

DRY DOCKS: *No. 1:* Dimensions 225 m. by 26.77 m., entrance sill 4 m. below datum, situated at the Northeast angle of Basin No. 5. The entrance lock can receive 2 vessels simultaneously, 1 of 75 m. length and the other of 150 m. length, with some adjustments.

Max. draft, at Spring tides: 11.50 m.; at neap tides: 10 m.

No. 2: Dimensions 342 m. by 55 m. Can accept tankers of up to 250,000 d.w.t. Entrance sill 7.25 m. below datum. Dock situated in the Southeast of the Industrial Port Zone. Can accept vessels of the following dimensions.

At mean Spring tides: length 335 m.; beam 50 m.; draft 12.50 m.

At neap tides: length 335 m.; beam 50 m.; draft 10 m.

AIRPORT: At Guipavas, 7 km. from Brest – 3 daily services to Paris.

TIME: Local time GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Police 444850 and 445861; Police Secours 17; Ambulance and Fire Brigade 18 or 442766.

TELEPHONES: Can be placed aboard at certain berths.

SERVICES: Degassing station, tank-cleaning and slop discharge, adjustment of chronometers, chart and document department, weather forecasting, permanent daytime service for signing on crew, barometer adjustment. Also Compass and D/F adjusting.

Port Weather Service: Port Office, 30 Bis, Quai Commandant Malbert. Health Service: Quai Commandant Malbert.

AUTHORITY: Ingenieur des Ports et Chaussees, Arrondissement de Brest, Direction Departmentale de l'Equipement.

AGENT: Jolasry (France), 6 Quai de la Douane. Telex 73080. Tel. 44.32.10

CAEN: 49.13 N. 00.21 W. (See Plan)

DOCUMENTS:
3 copies Crew List.
3 copies Provisions List.
3 copies Crew Personal Effects List.
Derat. Certificate or exemption.

PILOTAGE: Pilot boat is on station from 2.5 hours before high water until 3 hours after high water. Vessels can contact the Pilot by radio on 2182 kHz or by VHF Channels 12 and 16. The pilot boat is stationed in the outer port of Ouistreham and goes out to the roads on vessels approach. International code flag signals are used to call Pilot.

Caen Pilot boat has a black hull with white stripe. The words "Pilote Caen" are written in white letters on the hull. During the Summer months the pilot boat is replaced by a launch bearing the same markings. As soon as the Pilot boards he will hand the Master an Entry Declaration to be completed.

ANCHORAGE: While waiting the tide vessels may anchor in the vicinity of the light-buoy in Ouistreham roads. The position of this buoy is 49° 19′ 50″ N. 00° 14′ 18″ W. The buoy is positioned in depth of 10 m. Anchorage is open to winds from West through South to East; good holding ground. Currents do not exceed 2 knots at spring tides.

RESTRICTIONS: Dimensions of locks – East lock length 181 m., depth 18 m. West lock length 225 m., depth 28.45 m.

The locks are open to navigation from 2 hours before high water to 3 hours after high water. The locks can be used up to a maximum of 1 hour before/after these times by special permission of the Harbour Master and payment of additional dues.

Maritime Canal, length 14 km. The canal is dredged to 9.89 m. depth. Vessels proceeding to the docks at Herouville and Calix must pass 2 bridges: Herouville 30 m. wide and Colombelles 30 m. wide.

Ships proceeding to new dock must also pass the bridge at Calix, 21.76 m. wide. Maximum speed authorised in the Maritime Canal is 7 knots.

Maximum air draft for New Dock and St. Pierre Dock, 33 m.

MAX. SIZE: Daytime, length 205 m., beam 23 m., draft 29 ft. sea water.
Night-time:

Herouville	length 170 m.	Beam 17 m.	Draft 24 ft. SW.
Calix	length 150 m.	Beam 17 m.	Draft 24 ft. SW.
New Dock	length 140 m.	Beam 15.3 m.	Draft 21 ft. 2 in. SW.

HEALTH: Free pratique is automatic for all ships. Health control is carried out by customs officers under the direction of the Havre Port Health Office. For ships coming from ports in Africa, Asia, or Pacific Islands a Maritime Declaration of Health is required.

In case of suspected epidemic or fever on board Master must advise the port authorities who will instruct him to proceed to an appropriate anchorage to be boarded by the Port Health doctor.

RADIO: Nearest radio station Boulogne Radio, call sign FFB.

VHF: Vessels may communicate with the Harbour Master's Office by VHF Channel 12. This service only operates during the hours when the locks are operating.

TUGS: The use of 1 or 2 tugs is compulsory for vessels over 16.50 m. beam.

BERTHING:

Dock	*Quay*	*Facilities*	*Length (m)*	*Sea level chart*
Saint Pierre	Vendeuvre de la Londe	1 crane 5 tons 1 apple silo of 250 t	280 250	4.5 4.3
	Cafarelli	unloading rate 50 t.p.h. Cider storage of 3,200 hectl capacity	150	4.5
Nouveau Bassin	President	3 cranes 5 t	150	7.9
	Hippolyte Lefevre President	Cereals machinery rate: two 100 t.p.h. one 200 t.p.h.	550	6.5
	Gaston Lamy	4 cranes 3 t; 2 cranes 5 t 2 cranes 10 t; 2 cranes 15 t		
	De Normandie	3 cranes 5 t; 1 crane 8 t 1 crane 10 t	375	5.8
De Calix	Calix	4 cranes 6 t Storage of Molasses: 13,500 t	165	9.9
D'Herouville	President	2 cranes 5 t; 4 cranes 6 t	370	9.9
	Delaunay	Private berth, 3 cranes 8 t	200	
	Mole a charbon	for General cargo: 9 silos of 19,600 cu.m.		
Blainville	Blainville	Cereals machinery rate 400 t.p.h.	150	9.9
	Blainville	3 cranes 20 tons	180	9.9

STEVEDORES: Arranged by Agent on basis of ETA provided by vessel before arrival.

MEDICAL: Doctors and hospital facilities available.

TANKERS: There are 2 tanker berths D.P.C. berth in Calix Dock, max. draft 8.60 m. and SONEC berth on the left bank of the Canal, max. draft 5.60 m. Gas-freeing and discharge of residues is prohibited.

FRESH WATER: Available at all berths, rate about 5–10 t.p.h.

FUEL: Can only be supplied by tanker lorries.

WATCHMEN: Not compulsory.

OPENING AND CLOSING HATCHES: This work is normally carried out by the crew.

CUSTOMS ALLOWANCES: Amount of tobacco and alcohol for crew consumption must be declared on the stores list. Quantities held out of bond are at Customs discretion.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries are represented locally:

Denmark tel. 82.00.67	Norway tel. 82.05.42
Finland tel. 83.33.27	Sweden tel. 82.21.76

REPAIRS: Deck and machinery repairs can be carried out by local workshops. Nearest dry docks at Havre or Cherbourg.

REPATRIATION: Can be arranged.

AIRPORT: Situated 12 km. from the port. There are no regular services, but an air taxi with 5 seats can arrange connections to International airports.

TIME: GMT plus 1 hour or GMT plus 2 hours.

HOLIDAYS: Work is carried out on legal holidays. No work on "Jours de Fetes".

POLICE/FIRE/AMBULANCE: Police tel. 17; Fire 18; Ambulance 18.

TELEPHONES: Can be connected on board ships. Quayside telephone situated in the Calix dock, Herouville and Blainville.

SHORE LEAVE: Allowed.

AUTHORITY: Ingenieur des Ponts et Chaussees, Chef de l'Exploitation, Direction Departmentale de l'Equipment.

AGENT: See "Paris".

CALAIS: 50.58 N. 01.50 E. (See Plan)

DOCUMENTS:
Ship Register.
Manifest of Cargo.
Bill of Lading
3 Lists of Provisions on board.
4 Lists of Articles held by Crew.
3 Lists of Crew.
List of open spaces.
Health Certificate, endorsed by Master on arrival.
Deratisation or Exemption.
For tankers, Certificate of Cargo Specification and Certificate of vessel's suitability to transport inflammable liquids in bulk.

PILOTAGE: Compulsory when entering or leaving harbour, except for ships less than 50 m. length. Pilotage area: 3 miles from piers. Ships required to give notice of their arrival 18 hours before, through Boulogne Radio. Pilot waits between buoys CA4 and CA6. Pilot boat: Black, white side stripe, bearing the inscription "Pilote Calais". She is equipped with VHF, Channel 6 and Channel 16.

ANCHORAGES: Between CA6 and CA8, 15 to 17 m. deep, sand and

gravel. Good anchorage. When bad weather from North, ships are advised to stand out to sea or anchor in the roads of Les Dunes. Ship will receive instructions from Pilots or Harbour Captain's office when to enter roads of Calais.
RESTRICTIONS: Harbour channel 130 m. wide. In channel and outer harbour, depths are maintained at 8.40 m. MWL. Vessels should enter harbour preferably about 2.5 hours before high tide or half an hour after high tide. Because of the shape of sluice at the entrance larger vessels cannot have direct access to the Bassin Carnot at certain tides. These vessels may lighten in outer port, at "Quai Paul Devot", where depth is 9 m. LWOST.
MAX. SIZE: "Bassin Carnot", 150 m. max. length; "Bassin Ouest", (West Dock) 110 m. max. length; "Quai P. Devot", 175 m. max. length; "Bassin Carnot", 19 m. max. beam; "Bassin Ouest", 16 m. max. beam. Max. draft: 8.23 m. (27 ft.). Port accessible to vessels of 20,000 d.w.t.
HEALTH: Sanitation controls can arrange deratisations and exemptions. International Vaccination Certificates required for ships coming from an epidemic zone.
RADIO: Messages through Boulogne Radio. ETA must reach pilotage station or Harbour Captain's offices 18 hours before arrival. Near Calais, ships equipped with VHF can call Harbour Captain on Channel 12 or pilotage station on Channel 16.
TUGS: Generally join ships at end of the piers. Towing ropes are generally ships own but can be supplied by tug.
BERTHING: Max. height of tide 7.30 m. Depth on dock sills 2 m. LWOST.

At West dock, entrance between 1.5 hours before and half an hour after high tide. In Bassin Carnot, entrance between 3 hours before and 1 hour after high tide.

There are 2 berths equipped for handling roll-on/roll-off traffic, situated in Bassin Carnot.

CRANES:

Maritime Station Quay	Electric cranes – 6 tons	3
Paul Devot Quay	Electric crane – 6 tons with automatic scoop	1
	Electric crane – 12 tons with automatic scoop	1
	Electric cranes – 15 tons with automatic scoop	2
Transit Station	A block of 2 gantries able to handle a load of 40 tons (containers)	
West Basin		
South Quay of the	Electric cranes – 3 tons	3
West Basin	Electric cranes – 6 tons	2
Carnot Basin		
Vistule Quay	Electric cranes – 6 tons	2
Rhone Quay	Electric cranes – 3 tons	4
Loire Quay	Electric cranes – 6 tons	3
	Electric cranes – 6 tons with automatic scoops	8
	Electric cranes – 12 tons with automatic scoop	2
	Electric gantries – 6 tons with raisable forepeak and equipped with weights and automatic scoops	2
Crespin Quay	Electric cranes – 6 tons with automatic scoops	3
Fournier Quay	Electric cranes – 6 tons	5
	Electric crane – 12 tons with automatic scoop	1
Volga Quay	Electric cranes – 6 tons	2
	Electric cranes – 6 tons with automatic scoops	2

Dry Dock: One electric crane – 15 tons. 2 mobile cranes of 1/9 tons complete the lifting machinery of the Public Equipment of the Port.
BRIDGES: Swing bridges (West Dock) and draw bridges (Bassin Carnot) are situated on sluices.
STEVEDORES: Informed by Shipbrokers of tonnage, nature and condition of cargo.
MEDICAL: All facilities available.
TANKERS: Two posts provided for tankers: "Quai Paul Devot" for middle-sized tankers. "Bassin Ouest" (West Dock) for small tankers. "White and black" products can be accepted at "Bassin Ouest". Only "black" products admitted at "Quai P. Devot". Tankers are allowed to enter harbour only by daytime. They must leave as soon as operations are finished. Hoses 10 and 12 in. in diameter. Barges discharged with a 10 in. hose.
DENSITY: Salt.
FRESH WATER: Supplied from hydrants on wharves.
FUEL: Any fuel can be supplied by tank lorry of large capacity.
GANGWAY/DECK WATCHMEN: Ships must be guarded.
OPENING/CLOSING HATCHES: As a rule hatches are manoeuvred by crew.
CUSTOMS ALLOWANCES: Tobacco: No limit for foreign ships, but the quantity must be declared on the lists of articles held by crew.
IDENTIFICATION CARDS: Identification cards and seamen's books are required.
CONSULS:
Consuls:
Netherlands, M. G. Dumont, 12 Bd. des Allies, Calais.
Monaco, M. C. H. Loze, 38 Quai Gustave, Lamarie.
Vice-Consuls:
Denmark, M. J. Mulard Jr., Place de Suede.
Finland, M. H. Ravisse, 12 Bd. des Allies.
Great Britain, E. J. Evans, 9 Rue Felix Cadras.
Greece; M. H. Ravisse, 12 Bd. des Allies.
Italy, M. T. Simonini, 64 Rue Royale.
Norway, M. Y. Lefebvre, 12 Bd. des Allies.
Portugal, M. R. H. Delanghe, 16 Rue Ovide.
Sweden, M. T. Pagviez, 198 Rue des Quatre Coins.
REPAIRS: Deck and engine repairs possible.
DRY DOCKS: One, 153 m. long, 21 m. wide. Depth at sill, 7.45 m.
REPATRIATION: Pilot boats and tugs may trans-ship equipment or hands in outer roads.
AIRPORT: Calais, Dunkirk (International), 7 km. away.
TIME: GMT plus 1 hour. Spring and Summer GMT plus 2 hours.
HOLIDAYS: 1st January; Easter Monday; 1st May; Ascension Day; Whit Monday; Tuesday afternoon following 1st Sunday of July (local feast); 14th July; 15th August; 1st November; 11th November; afternoon of 24th December; 25th December; Sundays.
POLICE/AMBULANCE/FIRE: Police 17; Ambulance 34.39.24; Fire 18.
SHORE LEAVE: Crew are allowed ashore.
AUTHORITY: Directeur des Ports de Boulogne-sur-Mer et Calais.
AGENT: See "Paris".

CALVI: Corsica 42.34 N. 08.46 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Provisions List
1 Cargo List.
1 List of Articles (new and customs-barred) in possession each Crew member – carneras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.
PILOTAGE: Not compulsory.
ANCHORAGE: Outside port for cruise vessels.
MAX. SIZE: Draft 5 m.; length 160 m.
RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.
TUGS: None available.
STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.
CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.
FRESH WATER: Available at very slow pumping rate.
FUEL: Not available.
REPAIRS/CONSULS: None.
TIME: GMT plus 1 hour.
AGENT: Lloyd's Agent W. Tschumi, POB 55, Ajaccio. Tel. 21 43 39. Telex 46627. Cables: "Britiships Ajaccio".

CANNES: 43.33 N. 07.01 E.

DOCUMENTS:
To be sent on departure from previous port.
3 copies of Passenger List.
1 copy of Crew List.
Required on arrival:
4 copies of List of Passengers, showing Christian name, surname, age, date and place of birth, nationality.
2 Crew Lists.
5 copies of a Special Arrival form (supplied on arrival).
PILOTAGE: No Pilot station at Cannes. A tender with Company's flag on top of its mast will meet the vessel: *(a)* If ship is proceeding to anchorage No. 1, in Golfe de la Napoule, about half a mile South of the lighthouse at end of Cannes port Pier (Quai Lauboeuf); *(b)* If ship is proceeding to either anchorage No. 2 or 3, in Golfe-Juan, half a mile North of Ile Ste Marguerite.

The tender will lead to anchorage and will give 1 blast of the siren when correct position has been reached. At night, tender has a fixed white light at top of its mast, which replaces the flag. Should it not be possible to advise by wireless before arrival at anchorage and weather conditions making it necessary for ship to anchor at either position No. 2 or 3, boat will meet ship in Golfe de la Napoule, 2 miles South of Cannes port lighthouse. In this event, ship must proceed to anchorage No. 2 or 3 as appropriate, steaming to South of Ile St. Honorat, whilst tender will proceed by channel between Ile Ste Marguerite and the mainland.
ANCHORAGE: Advice of anchorage is passed to Captain via Grasse Radio or Monaco Radio, VHF Channel 16 usually about 1 hour before arrival. There are 3 anchorages, any of which may be used according to the weather:

No. 1 off the port of Cannes, approximately half a mile South of end of breakwater, used by calm sea or by East or N.E. winds.

No. 2 is situated to North of Ile Ste Marguerite, used by S.E. or S.W. or South winds.

No. 3 to the East of Cap de la Croisette, used by West or N.W. winds.

It could happen during the call, winds may change direction and movement from anchorage No. 1 to No. 2 or No. 3 become necessary. Shift takes about 1 hour.
HEALTH: Port officials will embark immediately the ship anchors. Free pratique may be granted by wireless telephone 1 hour before arrival at ship's surgeon request stating: "no illness on board".
FRESH WATER: 3 tankers of respectively 65, 75, and 95 tons capacity are available with 72 hours' notice. Water can be pumped at an average of 1,500 tons per 24 hours, with 2 hoses of 2.5 in. diameter on each tender.

GANGWAY/DECK WATCHMEN: Watchmen for gangways should be provided by ship and passengers are requested to present their landing cards every time they use the gangways.

AGENT: Agence Generale de Navigation et de Tourisme, Building du Casino, Cannes, France. Tel. 39.32.80 and 39.39.84. Telex: 47783 – back signal: Agent Cannes. Telegraphic Address: Agent-Cannes.

CHERBOURG: 49.38 N. 01.38 W. (See Plan)

DOCUMENTS:
Declaration of Health.
Manifest of Provisions on Board.
Manifest of Crew's Possessions.
Manifest of Cargo – in certain cases.
Manifest of Equipment.

DEEP SEA PILOTAGE: Pilots board off CH1. Buoy. Radio ETA to "HUTCHINSON GRAVESEND". (48 hours notice.) On approaching Cherbourg contact Cherbourg Signal Station on VHF Channel 16 confirming ETA.

PILOTAGE: Requests for pilotage must indicate arrival time at the buoy CH1. They may be addressed to Agent or direct to pilot station, telegraphic address "Pilotage Cherbourg" or through the Homet look-out station by means of the usual signals. To avoid delay it is well to warn the pilot station 4 hours in advance of arrival. As a general rule, the pilot boat always comes out, whatever the weather. In bad weather, it follows the vessel and Pilot boards as soon as shelter permits.

ANCHORAGE: Anchoring must be made strictly according to the instruments of the Pilot so as not to get in the way of movements and anchorage of steamers. Depths vary from 6 to 12 m. in safe anchorages.

RESTRICTIONS: In the wet dock, the bridge is opened one hour before until one hour after high water.

MAX. SIZE:

			Depth (m.) average tide	
	Length (m.)	*Breadth (m.)*	*Spring*	*Neap*
In the Roads	No Limit	No Limit	11	12.50
Trans-Atlantic Dock	No Limit	No Limit	7.0–12.5	8.5–14.0
Mielles Dock	150		5.00	6.50
Oil/Oil berth at Querqueville	200	31	9.0	10.50
Berth Amiot	100		3.0	4.50
RO/RO No. 1	130	20	7.0	8.50
RO/RO No. 2	200	30	8.0	9.50

HEALTH: From French port to French port, no formalities. From foreign port to French port, request for free pratique (yellow flag). In case of sickness on board, warn the Agent in advance. No crew member may leave ship before consultation and agreement of Port Doctor.

RADIO: The stations which offer the best facilities are Boulogne Radio, Brest le Conquet Radio, and St. Lys for ships which are a long way off.

TUGS: Tugs generally join vessel in the main approaches. With regard to the tow rope, a charge is made.

BRIDGES: Only the swing bridge at the entrance to the wet dock, which is opened on request from 1 hr. before until 1 hr. after high tide for the entry and exit of ships.

STEVEDORES: Agent needs ETA, to arrange personnel and equipment to be used for handling cargo.

CRANES: 2 floating cranes, max. capacity 90 tons. 1 shore crane, max. capacity 25 tons. The French Navy have 2 floating cranes, 1 of 30 tons and 1 of 90 tons capacity.

MEDICAL: Warn Agent of any requirements at the same time as ETA. There are 2 hospitals, civil and military, both very well equipped.

TANKERS: There is only one discharge berth, max. draft 9 m.

WATER: Water points on all quays.

FUEL: Available from local suppliers – Esso, Shell, etc.

WATCHMEN: Every ship in port must have a watchman, usually a crew member.

OPENING/CLOSING HATCHES: At the discretion of Master, crew may perform this.

CUSTOMS ALLOWANCES: Free allowance for each crew member – 200 cigarettes or 50 cigars, and 1 litre of alcohol.

IDENTIFICATION CARDS: Each crew member must carry his seaman's card.

CONSULS:

Belgium	Finland and Norway	Greece
Portugal	Haiti	Sweden
Denmark	Venezuela	Great Britain

REPAIRS: All types of hull and engine repairs are possible.

DRY DOCK: Commercial Port's dock: length 75 m., width 14 m.

The Naval Dry Docks	*Length*	*Width*
Homet Dock	258.50 m.	36 m.
No. 1	103 m.	19.85 m.
No. 2	113 m.	19.85 m.
No. 3	113 m.	19.85 m.
No. 4	103 m.	19.85 m.
No. 5	209.90 m.	29.75 m.
No. 6	187.50 m.	187.50 m.
No. 7	80.95 m.	19.10 m.

REPATRIATION: Can be arranged.

AIRPORT: At Moupertuis, 12 kms. from Cherbourg. There are no regular services in the immediate vicinity.

TIME: Local time throughout the year is the time zone 1 hr. East., i.e. Central European Time.

HOLIDAYS: January 1st; Easter Sunday/Monday; May 1st; Ascension; Whitsun Sunday/Monday; July 14th; Assumption; 15th August; November 1st; Victory Day, November 11th; Christmas Day, December 25th.

POLICE/AMBULANCE/FIRE: Police: 53.14.50. Ambulance: 53.13.29. Fire: 53.01.23.

TELEPHONE: Generally, ships do not request the installation of a telephone line, unless for a prolonged stay. It is only possible on the steamer berth, price 15 F.

AUTHORITY: Ingenieur des Ponts et Chaussees, Department de la Manche.

AGENT: Jolasry (France), 9, Quai de l'Entrepot, Cherbourg. Telex: 77723, Telephone: 53.24.35.

CONCARNEAU: 47.52 N. 03.55 W.

DOCUMENTS:
Ship's Registration Certificate.
Cargo Manifest.
Stores List.
Crew Personal Effects List.
List of Crew and Passengers with dates of Vaccinations.

MAX. SIZE: *Tankers:* By day: 90 m. overall; by night: 80 m. overall. *Other vessels:* By day: 95 m. overall; by night: 90 m. overall.

RADIO: Contact Conquet Radio.

TUGS: Available on demand, meet vessels near Cochon Light.

CUSTOMS ALLOWANCES: *Tobacco:* Fixed at 30 grams per day, at sea, per person. *Alcohol:* The equivalent of 5 centilitres of rum at 42° per day, at sea, per person.

These allowances are free of tax for use on board, but may not be landed.

IDENTIFICATION CARDS: Any National Identity Documentation will suffice.

POLICE/AMBULANCE/FIRE: Police, tel. 970071; Ambulance, tel. 17; Fire Brigade, tel. 19.

REPAIRS: There is a slipway which can accommodate 6 boats of 350 metric tons.

AUTHORITY: Officier de Port.

DIEPPE: 49.56 N. 01.05 E. (See Plan)

DOCUMENTS:
4 Crew Lists.
2 Lists of Stores.
1 Loading Manifest.
1 Passenger List.
1 Declaration (furnished by Agent) stating that ship possesses up-to-date Safety Certificates.
1 Bill of Health.

PILOTAGE: Compulsory. Pilot boards 4 miles from breakwaters. Pilotage is compulsory in this area except for vessels less than 65 m. long equippped with VHF (Channel 12). Pilot boat is ready to put to sea from 2.5 hours before to 1 hour after high tide. During this period maintains radio telephone watch. VHF Channel 12.

APPROACHES: Coming from the West, immediate landfall is Cap d'Ailly which is passed at 3 miles distance and then vessels proceed to the landfall buoy of Dieppe marked D.1. with black and white stripes, with a flashing light every 6 seconds and a bell:

Location: 49° 57′ 15″ N., 1° 01′ 40″ E., or 2.5 miles to the N.W. of the port entrance.

The cliffs which surround Dieppe give very good radar echoes.

ANCHORAGE: It is recommended to anchor in zone bounded by following points: *(a)* 49° 56′ 55″ N. 01° 04′ E.; *(b)* 49° 58′ 40″ N. 01° 02′ 45″ E.; *(c)* 49° 57′ 42″ N. 00° 59′ 20″ E.; *(d)* 49° 55′ 50″ N. 01° 00′ 30″ E.

This anchorage area includes buoy D.I and depths are from 6 to 12 m. with sand and broken shell bottom. Larger vessels anchor approximately half a mile to North of buoy D.I in depths of 10 to 12 m. To keep access to port free, it is forbidden to anchor in front of port entrance.

RESTRICTIONS: All except very small vessels enter port only at full tide slack water (−2 hr. to +1 hr.). In principle passenger ferries have priority. The Pilot is rarely prevented from turning out by bad weather, but it can happen once or twice a year, with a strong wind from the North. In this case ships seek shelter near the English coast. Entering and leaving signals are made day and night at the following stations:

(1) Signal station of the West jetty; (2) station signal mast in the Outer Harbour; (3) signal station of the Canada lock and of the Colbert bridge.

Sound signals: (1) To request entry to the port when in roads, or exit when in the outer harbour – 2 long blasts; (2) to request opening of Colbert Bridge – 3 long blasts; (3) entrance to Canada basin – 3 long blasts; (4) entrance to Duquesne basin – 2 long blasts.

MAX. SIZE: Colbert Lock: 230 m. length, 40 m. width, controls entrance to Inner harbour, where depth maintained about 7.50 m.

Canada Docks: length 154 m.; width, 21 m.; draft 8 m.

Paris Dock: length 154 m.; width 21 m.; draft 8 m.

Opening of Canada and Paris basins: 2 hours before to 1 hour after full tide, night or day. The port is accessible to vessels up to 10,000–12,000 d.w.t.

HEALTH: Pratique given by Customs officers who board on arrival. In case of suspected disease, Master required to radio details to Agent in advance.

RADIO: Transmitter-receiver VHF at Dieppe Post Office. Ships call it on Channel 24. Boulogne-Radio (FFB) working on service 192. Harbour Master, Radio telephone 27180 kHz. Port Captain listens on VHF Channel 12.
TUGS: 3 tugs available (1,400 h.p., 750 h.p., 600 h.p.). One is a sea-going tug. No lighters in the port.
BERTHING:

Dock	*Quay*	*Facilities*	*Length (m.)*	*Sea level chart*
Paris	Norvege	6 cranes 3 t; 2 cranes 3/6 t; 1 roll-on/roll-off ramp	715	7.5/9
	Maroc	1 crane 6.5 t; 3 cranes 5 t 6 gantry cranes 6 noria conveyors for banana handling 25 handling devices for direct transhipment on to rail and road	600	7.5/9
Canada	Indes	2 cranes 6/12 t; 2 cranes 2.5 t	150	7.5/9
	Quebec	4 cranes 3 t; vegetable oil and grains	160	7.5/9
Avant-Port	Henri IV	2 cranes 3 t; 2 cranes 3/8 t 1 Roll-on/roll-off ramp	380	4.5/5 minimum

CRANES: One 30-ton crane at Quay de Tonkin. Two 40-ton jib cranes.
STEVEDORES: Normal hours are 0800–1200 and 1400–1800. Overtime currently from 1200–1400 to finish operation and 1800–2200. Meal breaks from 0800–0830 and 1745–1830 when work has to continue past 1800 hrs. No work Sundays, Bank holidays, except Ascension Thursday.
MEDICAL: All medical facilities available.
FRESH WATER: Is supplied by pipe-line. There are a great number of outlets on the quay.
FUEL: Available in small quantities; delivered by tanker lorry.
GANGWAY/DECK WATCHMEN: Available if required.
OPENING/CLOSING HATCHES: Stevedores or crew.
CUSTOMS ALLOWANCES: 200 cigarettes and limited amount (say 1 opened bottle wine/spirits) per man.
IDENTIFICATION CARDS: Required.
CONSULS:
Norway — Denmark
Sweden — Holland
REPAIRS: Good facilities exist, all types carried out.
DRY DOCKS: Dry dock in the inner harbour, dimensions 130×18 m. It can receive ships 129×17 m.
REPATRIATION: Good facilities.
AIRPORT: Nearest at Paris.
TIME: GMT plus 1 hour. No alterations.
HOLIDAYS: 1st January; Good Friday; Easter Monday; Whit Monday; 1st May; 14th July; 15th August; 1st November; 25th December.
SERVICES: Compass adjusting, etc. available.
SHORE LEAVE: Allowed.
AUTHORITY: Commandant du Port.
AGENT: Jolasry (France), 6, Quai de Norvege – Dieppe. Telex 77965. Tel. 84–24–40.

DONGES: Refer to Nantes. (See Plan)

DUNKIRK: 51.03 N. 02.24 E. (See Plan)

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" is the Dyck lightship or the roads if the ship comes from the East.
DOCUMENTS:
Entry Bill (all information about ship), given by Pilot to Captain, who fills it in and gives it to Harbour Officer.
To be given to Customs:
3 Crew Lists.
3 Passenger Lists.
Manifest or copy.
Form for increase of tonnage.
Declaration of open spaces.
3 Lists of objects held by crew.
PILOTAGE: Pilotage station limits – there are 2 pilotage zones.
1. The outer zone which is limited:
To the West by the meridian of Calais lighthouse;
To the East, by the meridian of 2° 27′ of Long. East;
To the North, by the line situated 3 miles seawards of the low water mark;
To the South, by the Calais pilotage zone, the coast and the inner zone defined below.
2. The inner zone limited:
To the West by meridian 02° 08′ East;
To the North, by a continuous broken line constituted by the parallel 51° 03′ N., the line of the coast, the meridian 02° 2′ E., the parallel 51° 04′ 30″ N.;
To the East by the meridian of Dunkirk lighthouse;
To the South by the end of the water levels of the autonomous port of Dunkirk.

Pilotage is compulsory in inner zone for ships over 150 n.r.t. or ships of max. length 50 m, or with dangerous cargo.
Pilotage compulsory in outer zone for ships not fitted with VHF, or over 1,000 nett tons or max. length 100 m.
Vessels coming from the West should call Pilots 12 hours before arrival. Vessels coming from the East should call Pilots 2 hours before arrival. ETA based on time of arrival at Dyck lightship, should be given through Boulogne Radio (telegraphy) or by radiophone (2182 kHz). In vicinity of pilot boat, vessels may communicate with Pilots by VHF Channel 16, or by Aldis lamp or flag signals when pilot boat is in sight. Telegraphic address of Pilot: Piloduk. Telex 82902.
Pilot boat is about 50 m. long, black hull with white horizontal stripe, "Pilot Dunkerque" written on hull. Black funnel with white anchors insignia.
Pilot boat is positioned between Dyck lightship and buoy CA.2. In bad weather, pilot boat may heave to on a parallel South of wreck buoy (*British Liberty*) and buoy DC, or put into port.
ANCHORAGES: Large vessels waiting for entrance must anchor in the area West of Dyck Light vessel. In bad weather, ships may anchor off English coast, in the roads of Les Dunes, with good mooring ground of sand and mud 20 m. deep. On the Roads of Dunkirk, ships must anchor East of buoy E.11 so as not to disturb the entrance of ships.
RESTRICTIONS: Vessels more than 180 m. length, or of more than 10 m. of draft, normally enter only at slack water, i.e. between 3 hours before high water and 2 hours after high water.
MAX. SIZE: The new lock can now receive ships with a draft of 12 m. at slack water before high tide and ships with draft of 14 m. at slack water after high tide. At night these permissible drafts are reduced to 11.5 m. and 12.5 m. In normal conditions of work, max. length of ship 270 m. (Turbine), or 280 m. (Motor), max. width 42 m. For entry of larger ships, Director of Harbour should be consulted beforehand.
Entrance through Watier Lock: max. length 235 m., max. beam 33 m., max. draft 11.50 m.
Maximum salt water draft at Charles de Gaulle Lock is 14 m., for vessels berthing at public wharf appontement No. 1 and 2 and at private Usinor berth No. 5 and 6.
Outer Port West: V.L.C.C.s up to 470,000 d.w.t. on a max. draft of 22 m. can use the new access channel to the Flanders Oil Berth in the outer harbour.
HEALTH: For ships coming from *(a) All European countries:* Declaration of health is not obligatory but general international certificates are controlled. *(b) Other Harbours:* Admission subject to declaration of health and usual controls of certificates. Admissions in free pratique only in daytime except special cases (intervention of a physician). Request for free pratique may be made to Sani-Port, Dunkirk, through Boulogne Radio. In case of necessity, health service can – on request – intervene at night.
RADIO: Dunkirk Harbour Station (FFF) for messages about port service through VHF Channel 12 and 11. Communications other than in VHF made through Boulogne Radio (FFB).
RADAR: There is radar at the control tower of harbour. It is not a guiding radar.
TUGS: Tugs normally join vessel between buoys DW.28 to DW.30. and DW.16. Smaller vessels are joined by tugs in the outer port.
BERTHING: Berthing priority is decided by Port Captain's office. Ship is informed by radio of the location and priority given to her.

Dock	Quay	Length	Min. Depth of water
1	Freycinet I	495.7 m.	6.00 m.
1	Freycinet II	251.5 m.	5.00–7.00 m.
1	Freycinet III	496.7 m.	6.50–7.00 m.
	Front du mole 1	187.3 m.	6.50 m.
2	Freycinet IV	426.3 m.	6.50 m.
2	Freycinet V	630.0 m.	6.50 m.
	Front du mole 2	139.5 m.	7.50 m.
3	Freycinet VI	524.1 m.	7.50–9.00 m.
3	Freycinet VII	509.6 m.	8.00 m.
	Front du mole 3	95.9 m.	8.00 m.
4	Freycinet VIII	552.2 m.	8.50 m.
4	Freycinet IX	507.2 m.	8.00 m.
	Front du mole 4	118.3 m.	10.00 m.
5	Freycinet X	474.1 m.	10.00 m.
5	Quai du silo	120.2 m.	10.00 m.
5	Freycinet XI	448.0 m.	10.00 m.
	Front du mole 5	390.5 m.	9.00–9.50 m.
6	Freycinet XII	706.5 m.	13.00 m.
6	Fond de darse 6	207.6 m.	13.00 m.
6	Freycinet XIII	703.2 m.	13.00 m.
	Front du mole 6	171.0 m.	8.00 m.
	Upstream West Watier Lock	131.5 m.	8.50–12.00 m.
	Quai de Douvres	172.2 m.	8.50 m.
	Quai de Suez	244.0 m.	8.00 m.
	Quai des Monitors	241.3 m.	5.00–7.00 m.
Oil Port	N. station	105.0 m.*	13.00 m.
Oil Port	N. central station (1)	95.0 m.*	13.00 m.
Oil Port	S. central station (1)	95.0 m.*	12.00 m.
Oil Port	N. coasting station (1)	200.0 m.	8.00 m.
Oil port	S. coasting station (1)	200.0 m.	4.00 m.
Bassin Maritime	Grain berth	205.6 m.	14.00 m.
Bassin Maritime	Quai Usinor No. 5 & 6	703.5 m.	16.00 m.
Bassin Maritime	Quai Usinor No. 2, 3 & 4	649.1 m.	13.00 m.
Bassin Maritime	Quai Usinor No. 1	277.3 m.	7.00 m.
Bassin Maritime	Heavy cargo berths No. 1 & 2	507.5 m.	16.00 m.
Bassin Maritime	Heavy cargo berth No. 3	183.3 m.	13.00 m.
Bassin Maritime	Heavy cargo berth No. 4	262.0 m.	13.00 m.
Bassin Maritime	Berths for general cargo (E. section for barges)	308.0 m.	4.00 m.
Bassin Maritime	General cargo berth	400.0 m.	14.00 m.
Bassin de Mardyck	Appt C.F.R. Poste Est (2)	170.0 m.	14.00 m.
Bassin de Mardyck	Appt C.F.R. Poste Quest (2)	65.0 m.	16.00 m.
Bassin de Mardyck	Quais des C.M.P. (3)	85.0 m.	7.50 m.
Fore-port – West	Appt petrolier C.F.R. (4)		23.50 m.

(1) Maximum length of vessels permitted:
North berths 260 m.
Central N. berths 240 m.
Central S. berths 240 m.

(2) Maximum length of vessels permitted:
E. station of CFR berth 250 m.
W. station of CFR berth 280 m.
(3) Maximum length of vessels permitted: 105 m.
(4) Maximum length of vessels admitted: approx. 360 m.
*platform

Cranes:

Electric Cranes: 125	Cranes of 3 t	Cranes of 6 T	Cranes of 10 T	Cranes of 15 T	Cranes 7.5/10 T*
Quai de reparations			2		
Quai a marchandises diverses		1		3	
Freycinet I		5	2		
Freycinet II		3			
Freycinet III		3	2		
Freycinet IV		8			
Freycinet V		9			
Freycinet VI	1	9			
Freycinet VII	2	6	1		
Freycinet VIII	9	4			
Freycinet IX	2	7	2		
Freycinet X		4	4		1
Feycinet XI		3			6
Freycinet XII		5			9
Fond de Darse VI		3			
Freycinet XIII		2			4
Quai de Suez	3				
	17	72	13	3	20

Floating Cranes:

Number of cranes	Lifting power	Outreach measured from the pontoon max.	Outreach measured from the pontoon min.	Height under hook	Power agent	Type	Equipment hooks	Equipment tonnes
1 (bigue)	250	7.20	5.00	32.00	Steam	Construc-	2	125
	125	15.70	8.00	50.50		tion	2	62.5
						hollandaise	1	10
							1	5
1 (Dravo)	90	13.10	5.20	30.00	Diesel	Dravo	1	90.7
	68.90	23.10	5.20	17.10	electr.		1	15
	15	30.10	7.70	41.4/20.6				
1 (Turney)	30	6.75	6.75	29.80	Diesel	Turney	1	30
	11	26.75	6.75	7.30	electr.			
	9	30.35	7.75	34.0/13.0			1	9

BRIDGES: Bridges of locks and wet docks are closed to navigation to allow trains or work hands to go. The maritime traffic is practically never disturbed.

BULK HANDLING FACILITIES: Bulk Quay No. 1, formerly known as the ore quay. Equipped with 3 gantry cranes. Principally used for iron ore destined for Usinor Dunkirk and Usinor Valenciennes.

Bulk Quay No. 2, a common quay with 2 berths belonging to the Dunkirk port authorities. Equipped with 2 polyvalent iron ore/coal gantry cranes. A third gantry crane is under construction. This quay is accessible for largest ships able to enter the port. Used to discharge coal destined for the Usinor coke mill, also receives coal for other operators, manganese ore and all iron ores for receivers other than Usinor.

Bulk Quay No. 3, an extension of the Usinor Quay for iron ore cargo. Equipped with 1 gantry of 50 tons capacity. Permissible draft at present 13.50 m. planned to be increased to 14.50 m. in the future.

Phosphate Quay, situated West of Bulk Quay No. 2. Berth is 600 m. long with a min. depth alongside of 14 m. Bulk carriers of 80,000 d.w.t. with a draft up to 41 ft. can be accommodated.

Unloading equipment consists of 3 cranes with grabs, each with a max. discharge capacity of 565 t.p.h.

Cereal berth is accessible to 80,000 d.w.t. ships. Along its internal face, coasters, lighters and 3,000 ton pushed convoys can be tied up. Handling operations are secured by 2 pneumatic gantries at a max. rate of 600 t.p.h.

CONTAINER FACILITIES: Quay Freycinet XIII, situated in Dock 6, has a quay length of 350 m. (1,150 ft.) with a depth of water alongside of 13 m. (42.7 ft.). It is equipped with container gantry cranes capable of lifting 45 tons on a telescopic spreader for 20 to 40 ft. units.

ROLL-ON/ROLL-OFF FACILITIES: Dover Quay is equipped for direct transhipment of vehicles, trailers and wagons.

Quay Freycinet XIII is provided with a movable steel ramp 43.28 m. (142 ft.) long with a width of 7.31 m. (24 ft.) which enables two lines of vehicles to be loaded or discharged at the same time. The axis of the ramp runs parallel to the quay 11.58 m. (38 ft.) away from it, which enables ships with a beam of up to 23.16 m. (76 ft.) to be berthed.

Quay Freycinet VII, the berth South of Freycinet VI, has been provided with a fixed ramp for roll-on/roll-off for ships up to 8 m. draft and 22 m. beam.

TANKERS: The following tanker berths are available:

Flanders Oil Berth: max. draft 22 m. Discharge lines to Total Refinery, and shortly to the B.P. Refinery. The access channel has been dredged to a depth of 22 m. at L.W. The turning circle at the entrance to the Outer Port West has a diameter of 1,400 m. Max. discharge rate 20,000 cu.m./hr.

North wharf, max. draft 12.50 m. Loading/discharging pipes 26 in. diameter, bunker line 10 in. diameter.

Middle wharf North, max. draft 12.50 m. Loading/discharging lines 2 of 22 in. and 3 of 16 in. lines, bunker line 16 in. diameter.

Middle wharf South, max. draft 12 m. Dimensions of lines as for Middle wharf North.

Coasters Wharf, max. draft 7.50 m. Diameter of loading/discharge lines 6 in.

Facilities for discharge of dirty ballast are available at all main tanker berths.

STEVEDORES: Each captain will contact his consignee.

MEDICAL: Hospitals and all medical facilities.

DENSITY: Salt.

FRESH WATER: Available in unlimited quantities. Numerous hydrants on all wharves. Price of a ton of water for ships, 2.50 Fr.

FUEL: Supplied by barges or tank lorries if no connection at wharf. Fuel, diesel and gas oil available. Requests for bunkers must be made 48 hours in advance to Agents.

FIRE PRECAUTIONS: The following preventive measures are taken for tankers: Steel rope hung fore and aft along the side (a quick tow in case of hauling out the ship). Deck scuppers plugged. Hoods open on tanks with anti-fire device. Earth connection. Rounds of the port officers. Fire hose connected. Ship's captain is given instructions of the harbour concerning tankers. In case of storm, the Harbour Officer can stop loading or discharging.

GANGWAY/DECK WATCHMEN: Guarding is strongly advised.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES:

Certificate of Nationality.
International Certificate of Tonnage.
Certificates from the Classification Office where ship is registered, especially:
Certificate of Freeboard.
Classification Certificate, engine and boiler.
Classification Certificate, hull.
Classification Certificate, electric equipment for tankers.
List of Hoisting Apparatus.
Deratisation Certificate.
TOVALOP Certificate or similar for tankers.

CUSTOMS ALLOWANCE: Tobacco: Amount allowed for each member of crew: 200 cigarettes or 200 gramme tobacco. Wine and/or Spirits: 1 bottle.

IDENTIFICATION CARDS: An official identity certificate is compulsory ashore (passport, identification card, sailor's book, etc.).

DEVELOPMENTS: The new outer harbour covers 1,400 acres and is designed for vessels with drafts of up to 73 ft.

Unloading for tankers at Total Pier at a rate of 20,000 cu.m.p.h.

The new commercial port, "Rapid Transit Port" operational in 1976. The port is tidal. Facilities include a 260 m. quay for Load on/Load off and ro/ro berth. A container vessel of 400 ft. length and a ro/ro vessel of similar size can operate simultaneously. Also berth for ferry with rail sidings, parking and all other services.

In September 1976 a 500 m. container quay is expected to become operational. 2 large container vessels will be able to berth at the same time, min. depth 45 ft. In December 1976 a second container quay of 500 m. is expected to be operational, min. depth 45 ft. The container quays will be served by 4 container cranes. Others will be added at a later date to meet requirements.

CONSULS:

Belgium	Gt. Britain	Norway
Brazil	Greece	Portugal
Denmark	Italy	Spain
Finland	Luxembourg	Sweden
Germany	Netherlands	

REPAIRS: All repairs possible.

DRY DOCKS:

	Usable length at top	Usable length at bot.	Level sill m.	Admissable draft of ships	Max. length of ships m.	Max. beam of ships m.
Dry Dock No. 1	112.72	108.05	2.05	6.25 m. for tide of 5.20 m.	107	14
Dry Dock No. 3	90.36	86.40	0.55	5.40 m. for tide of 5.20 m.	80	13
Dry Dock No. 4	192.98	190.77	2.10	6.95 m. for tide of 5.20 m.	180	21

Floating Docks:

Characteristics of the dock	Dock 13.000 T	Dock 20.000 T
Overall length	170.20 m.	206.00 m.
Length on blocks	159.80 m.	185.00 m.
Width	24.60 m.	32.00 m.
Optimal characteristics of ships which can be docked		
Overall length	165.00 m.	205.00 m.
Overall beam	22.60 m.	30.00 m.
Maximum draft	6.70 m.	8.50 m.
Variation of draft allowed	3 cm./m.	2 cm./m.
Cranes	2 of 10 t.	2 of 7 t.

AIRPORT: Calais, Marck, 35 km.; Lille Lesquin, 80 km.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January; Easter; Whitsuntide; 1st May; 14th July; 15th August; 1st November; 11th November; Christmas. On public holidays, handling operations can be carried out from 0600 to 1200 hrs.

POLICE/AMBULANCE/FIRE: Police 66.59.01; Ambulance, Firemen 18.

TELEPHONES: In wet dock 6, in the tankers' harbour, at the quay for minerals, at the wharf for cereals, a telephone on board can be obtained and connected to the general system.

SERVICES: No specific port equipment for gas-freeing. Dirty ballast can be received at terminal of Societe Francaise des Petroles B.P. Compass adjustment, radio repairs.
SHORE LEAVE: Crew are allowed ashore.
AUTHORITY: Port Autonome de Dunkerque.
AGENT: Jolasry (France), 11 Rue des Arbres. Telex 82911. Tel. 66–99–01.

FECAMP: 49.46 N. 00.21 E.

DOCUMENTS:
2 Crew Lists.
2 Custom Lists.
1 Health Form.
Ship's Register.
Cargo Manifest.
Bills of Lading.
PILOTAGE: Pilots informed of arrivals by Agents. Pilots wait at port station 2 hours before high water each tide. Inform Harbour Master by VHF Channel 16.
ANCHORAGE: Half mile West of jetties.
MAX. SIZE: 100 m. length, 16 m. breadth and 18 ft. draft, entry any tides.
HEALTH: Pratique obtained when Customs Officer boards few minutes after berthing.
RADIO: Boulogne Radio. VHF at Harbour Master's Office, Channel 16.
TUGS: None.
STEVEDORES: Informed by Agents (available).
MEDICAL: Notice not required for medical attention. Doctors and hospital always ready. But it is better in case of urgency.
FRESH WATER: Available from shore (pipes each 50 m. on quay).
FUEL: No fuel in port. Available only by lorries for bunkering.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: In accordance with international regulations:
Load Line.
Radio Equipment.
Safety Equipment.
Deratisation, etc.
CUSTOMS ALLOWANCES: About 200 cigarettes per man; wine/spirits at Customs Officer's discretion.
IDENTIFICATION CARDS: Not required.
CONSULS:
Vice-Consulate of Norway tel. 0.03.
Vice-Consulate of Denmark tel. 0.95.
REPAIRS: Possible.
DRY DOCKS: 1 slipway for vessels of maximum 1,500 tons displacement.
REPATRIATION: Agents carry out these operations.
AIRPORT: Paris is the nearest.
TIME: Local time is GMT plus 1 hour, no alterations during year.
HOLIDAYS: Arrangements for working during holidays can be made if necessary.
POLICE/AMBULANCE/FIRE: Police, tel. 0.17; Ambulance, tel. 9.33; Fire, tel. 0.18.
TELEPHONES: No arrangements for placing telephone on board.
SERVICES: No possibilities for tank cleaning, etc. Compass adjusting available if necessary.
SHORE LEAVE: Always possible for crew members to go ashore.
AUTHORITY: Ingenieur des Ponts et Chaussees.
AGENT: Andre Marsolet, 13a Quai Berigny. Cables: Marsolet Fecamp. Tel. 003 and 288.

GRANVILLE: 48.50 N. 01.35 W.

DOCUMENTS: See "Calais".
PILOTAGE: Pilotage not compulsory for ships of less than 45 m. length, except for those carrying dangerous cargo. Pilots board from fishing boats carrying regulation marks of a pilot boat, and maintain position at Videcoq buoy when a vessel is expected.

Limits of Granville pilotage are: 1. On entering, towards the West, the line joining "la Pierre d'Herpin", and Chausey lighthouse. To the North, alignment of Chausey lighthouse and "le Pignon". 2. On leaving, alignment of Mont. St. Michel through Champeaux Point. Ships bound Granville required notify ETA 18 hours in advance. Telegraphic address, "Telex 77777 Usaport Granville".

1 hour before to 1 hour after high tide contact with Port Officer (tel. 50.12.45 Granville) can be established by relay through "Marines" Stations. During same hours contact can be made with pilot boat and with Port Office by VHF Channel 12 (port wave band 156.6).
ANCHORAGE: At landfall buoy of Le Videcog.
RESTRICTIONS: Draft restrictions apply at slack water.
MAX. SIZE: Largest vessel admitted length 119.0 m. Draft 6.6 m. Depth of water in channel 8 m.
HEALTH: Pratique arranged by Customs.
RADIO: Boulogne Radio for ships coming from the North. Brest-Le Conquet Radio for ships coming from the South.
TUGS: Port not equipped with tugs. Pilot boats used as "pushers" for port manoeuvres, or for carrying hawsers to tying-up points.
BERTHING: Dependent nature of cargo and ETA. Depth of water at zero tide is between 4 m. and 5 m.
STEVEDORES: Work hours 0800/1200, 1400/1800.
HOLIDAYS: See "Calais". Local holiday, Mardi Gras afternoon.
MEDICAL: Hospital available. Tel. 50.11.37.
TANKERS: 2 berths for unloading domestic fuels through 8 in. pipes.
DENSITY: 1025.
WATER: Available.
FUELS: No fuels readily available. 2 days notice required for tank lorry 200 km. distant.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: Tobacco. 200 cigarettes. Wines and spirits. 1 bottle spirits. No ship's chandler.
CONSULS: None.
DRY DOCKS/REPAIRS: None.
REPATRIATION: Paris, 3.5 hours by train.
AIRPORT: 10 km. from the port. Air-taxi and commercial fights.
TIME: Local Time GMT plus 1 hour in Winter and GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police Tel. 50.11.16; Fire Service 18; Ambulance 50.11.37.
AUTHORITY: Officer Du Port.

HONFLEUR: 49.25 N. 00.14 E.

DOCUMENTS: See "Rouen".
PILOTAGE: Served by "Pilotage de la Seine" (address 9 Chaussee Kennedy, 76 le Havre). Ships bound for Honfleur are received on the Carosse Roads (Rade de la Carosse) where the following signals should be made for summoning a Pilot. By day – flag "G" of the international code of signals. By night – in Morse by signalling lamp.

Complementary signals which can be used on arriving on the roads. By day – globe or ship's national flag hoisted at masthead. By night – red light at main masthead. At all times, sound signal of 5 long blasts.

Advice of ETA and draft in salt water is to be given to Rouen Port at least 5 hours prior arrival roads, as well as to Agent.

Similarly, vessels anticipating a delay of more than 2 hours after their reported ETA should notify Rouen Port or the pilot boat of this at least 3 hours before the time originally reported.
RESTRICTIONS: Access to port made through channel 100 m. wide, protected by 2 dykes about 500 m. long, which leads to outer harbour. A tidal port, Honfleur possesses 3 floating basins:

Dock	*Length*	*Width*	*Sluice width*
West Dock	128 m.	77 m.	10.50 m.
East Dock	295 m.	71 m.	16.50 m.
Carnot Dock	788 m.	108 m.	13.00 m.

East Dock joins outer harbour: ships of more than 70 m. long must anchor in Carnot Dock which spans from East.
MAX. SIZE: Port can receive ships 100 m. long and 15.50 m. wide berthing in East Dock; but with Carnot Dock, only ships less than 12.50 m. wide can enter. Drafts vary according to tides: 6.00 m. with average tide, 4.70 m. in average slack water, and subject to variations because of silting up of harbour which necessitates frequent dredging.
HEALTH: Bill of Health is under the jurisdiction of Customs office of Honfleur. Hospital nearby.
RADIO: Vessels may use radio telegraphy to communicate all necessary information to the Information Centre of the Port of Rouen (Rouen Port) or to the pilot boat (call sign: FORI) These two keep each other mutually informed of all information received. A permanent watch is maintained by Rouen Port on Channel 16. Disengagement frequency after call on Channel 16: Channel 11 or Channel 12.

A Pilot is obligatory for every ship of more than 55 m. length.
TUGS: If necessary are provided by "La Societe des Abeilles" of Le Havre.
TANKERS: Berth "Miroline" on dolphins in River Seine for tanker of 18,000 tons eventually after lightening according to the depth conditions.
FRESH WATER: Available. Supplies arranged through Agent.
FUEL: Supplies arranged through Agent.
AIRPORT: 12 km. from Port.
AUTHORITY: Directeur du Port.

ILE ROUSSE: Corsica 42.39 N. 08.56 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 Cargo List.
1 List of Articles (new and Customs-barred) in possession each crew member – cameras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.
PILOTAGE: Not compulsory.
ANCHORAGE: Outside of port for cruise vessels.
ENTRY TIME RESTRICTIONS: None.
MAX. SIZE: Draft 5 m; length 160 m.
RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.
TUGS: None available.

STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.
CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.
FRESH WATER: Available at very slow pumping rate.
FUEL: Not available.
REPAIRS/CONSULS: None.
TIME: GMT plus 1 hour.
AGENT: Lloyd's Agent W. Tschumi, POB 55, Ajaccio. Tel. 214339. Telex 46627. Cables: "Britiships Ajaccio".

LA NOUVELLE: 43.01 N. 03.04 E.

DOCUMENTS:
1 Passenger List.
4 Crew Lists.
2 Stores Lists.
1 Cargo Manifest.
Bill of Health.
Safety Certificates.
PILOTAGE: Vessels call Pilot on VHF Channels 15 and 16. 3 pilot boats available. International Code pilot signals used.
MAX. SIZE: For port entry: length 135 m., beam 25 m., draft 6.50 m. Tanker sea line: max. draft 18m.
HEALTH: Pratique is given by Customs officers who board vessel on arrival. In case of suspected disease on board, Master should radio Agents advising details before arrival.
TUGS: Not available. There are several launches to assist in mooring.
BERTHING: Is effected in the order in which ships arrive. Specialised berth for Roll-on/Roll-off available.
STEVEDORES: Arranged by consignees.
MEDICAL: Doctors available at La Nouvelle. Nearest hospital is at Narbonne, 27 km. away.
TANKERS: 1 sea line berth at buoys in depth of water greater than 18 m. 4 dolphin berths in the oil dock, max. draft 6.50 m. One of these berths is used for LPG cargoes. No slop disposal facilities.
DENSITY: 1025.
FRESH WATER: Supplied at all town berths.
FUEL: Available from several suppliers.
FIRE PRECAUTIONS: Usual safety regulations strictly applied. A barrage can be positioned across the channel to contain burning oil.
OPENING/CLOSING HATCHES: Optional, performed by stevedores or crew.
CUSTOMS ALLOWANCES: Each crewman allowed to retain only sufficient for his own consumption while in port. It is forbidden to take alcohol ashore.
IDENTIFICATION CARDS: Any man going ashore should carry a passport or identity card.
CONSULS: No local representation.
REPAIRS: Not possible ashore, except very minor ones.
REPATRIATION: No difficulties.
TIME: GMT plus 1 hour. No changes.
HOLIDAYS: In principal, no work done on legal holidays.
POLICE/FIRE/AMBULANCE: Police, tel. 332011; Fire, 332017; Ambulance, 332011.
TELEPHONES: No connections can be made on board.
SHORE LEAVE: No restrictions.
AUTHORITY: Ponts et Chaussees, Service Maritime.
AGENT: See "Marseilles".

LA ROCHELLE/LA PALLICE: 46.10 N. 01.14 W. (See Plan)

DOCUMENTS:
4 Cargo Manifests, or Manifest of Ballast.
Certificate of Cargo Space.
3 Bills of Lading.
Ship's Provisions List.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Certificate of Crew Personal Effects.
PILOTAGE: Access from sea is through Pertuis d'Antioche, the strait between Isle of Re and Isle of Oleron. Pilotage compulsory for all vessels over 55 m. length. Pilot launch named *Armeria*, meets vessels at Chauveau Buoy in position 46° 06' 05" N. 01° 16' W. Contact Pilot via VHF Channel 16, 2 hours before arrival. ETA should be given to Agent 12 hours before arrival.
Vessels which do not receive berthing instructions on arrival should wait in the vicinity and South of Chauveau Buoy, keeping watch on VHF Channel 16.
ANCHORAGE: About 330 yds. South of the end of the outer mole in depths of 36 ft. Mud bottom, good holding ground. In Westerly winds may be preferable to shelter nearer Isle of Re where water depth is 59 ft.
RESTRICTIONS: Vessels in excess of 360 ft. length can enter Inner Basin only from 2 hours before to 1 hour after high water. Loaded tankers over 5,000 d.w.t. may enter tidal harbour in daylight hours only.
MAX. SIZE: Outer pier mole, draft 30-40 ft. Tidal harbour, length 560 ft., draft 29 ft. Wet dock (inner basin), max. beam 69 ft., draft 25 ft. 6 in. neaps, 30 ft. springs.
HEALTH: Pratique given by Customs officers who board on arrival. In case suspected disease on board, radio Agent in advance advising details.
RADIO: Bordeaux-Arcachon Radio.
TUGS: Join vessels either in outer roads or inner roads of La Pallice. Normally tugs' lines are used.
STEVEDORES: Normal working hours for stevedoring are: 0800 to 1200 hrs. and 1400 to 1800 hrs. 2 hours overtime may be worked from 1800 to 2000 hrs. When a quick despatch must be given to a vessel, an 8-hour shift can be arranged, from 0500 to 1300 hrs. and 1400 to 2200 hrs. during the week, and 0500 to 1300 hrs. on Sundays and holidays.
MEDICAL: All facilities available. Advance notice should be given if assistance required on arrival.
TANKERS: Only refined products are discharged at La Pallice.
1. Oil berths situated at West side of outer pier mole, in depths of 31 to 36 ft. low water.
Service Essence Aux Armees: flexible hoses 250 mm. diameter.
Petroles de L'Ouest: pipe-line of 200 mm. diameter. Metal loading arm of 200 mm. diameter.
Picoty: pipe-line of 200 mm. diameter.
2. Oil berths at North quay in tidal harbour in depths of 26 ft.
Raffineries du Midi: Pipe-line of 250 mm. diameter, hoses 200 mm. diameter.
Petroles de L'Ouest: Pipe-line of 300 mm. diameter, hoses 250 mm. diameter.
Total: Pipe-line of 200 mm. diameter, hoses of 150 mm. diameter.
Essence Aux Armees: Pipe-line and hoses of 200 mm. diameter.
FRESH WATER: Available from all wharves. No barges available. Loading rate from the quay 60-75 t.p.h.
FUEL: Available by pipe-line at North Quay in Tidal Harbour. Otherwise supplied by tank trucks only.
FIRE PRECAUTIONS: Tanker berths are enclosed or surrounded by a barrier system. Smoking is prohibited on the tanker berths. The presence of a fire guard or representative of the fire service is necessary while a tanker is alongside the quay.
OPENING/CLOSING HATCHES: Performed by ship's crew.
GANGWAY/DECK WATCHMEN: Available from shore if required. Necessary for tankers loading/discharging cargo.
CUSTOMS ALLOWANCES: 200 cigarettes and bottle wine/spirits per man.
IDENTIFICATION CARDS: Crew men going ashore should carry passports or identity cards.
CONSULS: No local representatives.
REPAIRS: All kinds of deck, hull and engine repairs can be carried out by Ateliers et Chantiers de La Rochelle-Pallice.
Vessels not exceeding 21 m. beam may be repaired in the inner basin. Larger vessels are repaired at berths outside the inner basin.
DRY DOCKS: 2 dry docks in Inner Basin: 577 ft.×72 ft. and 351 ft.×41 ft.
REPATRIATION: Can be arranged without difficulty.
TIME: 1 hour ahead of GMT. No change.
HOLIDAYS: New Year (1st January), no labour available; Easter Sunday, possibility of labour with overtime; Easter Monday, no labour available; Labour Day (1st May), no labour available; Ascension Day, possibility of labour with overtime; Whit Sunday, possibility of labour with overtime; Whit Monday, no labour available; National Day (14th July), no labour available; Assumption Day (15th August), no labour available; All Saints' Day (1st November), no labour available; Armistice Day (11th November), possibility of labour with overtime; Christmas Day (25th December), no labour available.
N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100% extra.
POLICE/AMBULANCE/FIRE: Police Secours 17; Commisariat Central 41.22.44; Ambulance 18; Fire Service 18.
TELEPHONES: Telephones are available at all berths at the mole, and are obligatory for vessels handling dangerous cargo.
SHORE LEAVE: Allowed, no restrictions.
GENERAL: Old harbour at La Rochelle is used only by fishing vessels and pleasure craft.
AUTHORITY: Capitainerie du Port de La Rochelle-Pallice.
AGENT: See "Paris".

LE HAVRE (Including Antifer): 49.30 N. 00.07 W. (See Plan)

DOCUMENTS: At arrival in-bound bill tendered by Pilot to be filled up and signed by Master specifying ship's data and more especially open spaces occupied (shelter) and dangerous cargo on board. After berthing:
For Custom's Officers
1 Crew List.
1 Crew Declaration List (personal effects, camera, radio set, cigarettes, cigars, tobacco, etc.).
1 Ship's Store List.
1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).
For Health Officers
1 Crew List.
1 Health Declaration.
Deratisation Certificate.

1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).
Individual international Certificates of Vaccination.

For Custom Broker
1 Crew List.
1 Crew Declaration List (personal effects, camera, radio set, cigarettes, cigars, tobacco, etc.).
1 Ship's Store List.
1 Certificate of open space occupied by cargo.
1 Passengers' Manifest (disembarking).
1 Baggage Manifest (non-accompanied).
Tonnage Certificate.

For Agents
1 Crew List.
2 Passengers' Manifests (disembarking).
2 Passengers' Manifests (in transit).
2 Baggage Manifests (accompanied).
2 Baggage Manifests (unaccompanied).
2 Dangerous Cargo Manifests and usual cargo documents.

For Immigration Office
1 Crew List.
1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).

PILOTAGE: ETA to be sent to Harbour Master (see Radio). Advisable then to confirm directly either to Pilot boat *Francoyse de Grace* (call sign FNZH) or to Havreport between 24 and 12 hours before arrival (see Radio). Pilot boats have black hull with "Pilote Havre" in white letters on both sides, white funnel with black top stripe, green flag with white anchor on fore-mast. Located off Le Havre channel entrance East of the intermediate landfall buoy (LH). Pilot boat on continuous service, a helicopter is also available.

Vessels may anchor near LH South of entry alignment in good weather and further off in bad weather.

Light or sound signal to be made by vessels requiring a Pilot, letter "G" in morse code.

ANCHORAGES: Anchoring forbidden in the channel between both parallels 100 m. South and North of channel and in a zone 1 nautical mile long and 500 m. wide in prolongation of channel.

RESTRICTIONS: Depth in main channel 51 ft. LW. Depth in tidal basin 49 ft. LW.

Main lock entrance to enclosed basins, length 1,312 ft. width 220 ft., depth 49 ft.

Vessels berthing in tidal docks (Bassin Theophile Ducrocq) dependent on tide if draft in excess of 30 ft.

Quinette de Rochemont Lock open from 2 hours 20 min. before high tide until 40 min. after. During this period vessels of max. length 210 m. and max. breadth 26 m. may pass through. Otherwise max. length authorised is reduced to 180 m. In some circumstances some locks are completely closed around low tide.

CIM Berth No. 10 may receive tankers up to 300,000 d.w.t. with draft varying between 63 and 68 ft. depending upon tide. Such vessels enter only by daylight and must arrive at Lightvessel at least 3 hours before high water.

MAX. SIZE: Tankers: length 1,300 ft., draft (approx.) 65 ft. subject tide. Largest vessel recorded is a tanker, length 370 m., beam 64 m., draft 20.67 m. and deadweight 290,875 metric tons.
Bulk Carriers: Up to 90,000 tons.
Antifer: "See Tankers."

HEALTH: Free pratique automatic for vessels coming direct from Continent or Italy and "Q" flag not to be flown. From other countries including Spain and Portugual usual applies. Free pratique may be obtained by radio message to Sanipor Le Havre specifying name of vessel – where coming from – total number of Crew members, number of Crew members vaccinated (smallpox, yellow fever, cholera).

Tankers: For tankers it is advisable to ask free pratique by radio in order to start operations as soon as vessel berths.

RADIO: Masters of ships are requested to send to Le Havre Harbour Master their expected time of arrival at Le Havre lightvessel.

The message will be sent through radio stations of: Boulogne-radio/FFB (working frequencies 1771 kHz and 2747 kHz) or Brest le-Conquet radio/FFU (1806/2726 kHz).

It will give the date and time GMT of ETA, and the maximum draft. It will be sent about 12 hours before arrival and corrected by another message if necessary. This service is free. Same stations of Boulogne and Brest to be used to contact Agent and in addition Saint Lys/FFL.

Port operation radio service: The Havreportradio station keeps a permanent watch on the following frequencies: 156.6 mHz (Channel 12); 156.8 mHz (Channel 16); 157.0-161.6 mHz (Channel 20 duplex). This station sends and receives all messages for the port operations control.

Ships call Havreportradio directly on Channels 12 or 20. Ships arriving, leaving or moored on roads *must keep watch on Channel 16.*

Ships with Pilot on board must keep watch on Channels 12 or 20 from Pilot on board until arrival at berth, and from departure of berth until disembarking Pilot. Havreportradio/FFY keeps watch on 2.182 kc/s. This frequency will be used only in a radius of 22 miles from Havre lightship and only when it is not possible to use VHF.

RADAR/VHF: Radar assistance may be obtained by calling Le-Havre-Radar on Channel 16 (156.80 mHz). Then working frequencies are Channels 14 and 22.

TUGS: 19 tugs available, from 650 to 4,000 h.p. Normally join vessel inside the jetties in outer harbour. Ship's lines or tug's lines used at ship's option. Extra charge for use of tug's line.

BERTHING: Agents generally inform Master by radio of berthing prospects, arrival time limits and any special requirements.

Dock	*Quay*	*Facilities*	*Length* m.	*Sea level chart* m.
Arriere Port	Southampton	1 crane 3/6 tons	70	−5.00
	Roger	5 cranes 5/10 tons	500	−9.5
	Meunier	5 cranes 4/10 tons		
Theophile Ducrocq	Floride	4 cranes 5/10 tons	598	−10.00
	Joannes Couvert	3 cranes 4/10 tons; 19 cranes 5/10 tons 1 crane 6/10 tons	1,528	−10.00
	Mazline		428	−10.00
	Mole Central 3		120	−10.00
	Mole central 4	4, 15 ton gantry cranes Coal+minerals	194	−12.00
	C.I.M.1		84	−11.00
	C.I.M.2		84	−11.00
	C.I.M.3		85	−10.00
	C.I.M.4		83	−11.00
	C.I.M.5		152	−11.00
	C.I.M.6		120	−12.00
	C.I.M.7		120	−12.00
	C.I.M.8		75	−18.00
	C.I.M.10		56	−21.00
Nouveau Bassin	Atlantique	4 cranes 40 tons	800	−10.00
de Maree	Mole Central			−9.00
Bellot	Hermann du Pasquier	4 cranes 6 tons; 19 cranes 3 tons Cereals+fruits+general cargo	1,524	−4.00
	Jean Reinhart	3 cranes 10 tons; 4 cranes 3 tons General cargo; wood	486	−2.50
	Tonkin		100	−1.50
	Colombie		80	−1.00
	Bresil	2 cranes 6 tons; 2 cranes 10 tons	525	−2.00
Leure	Cameroun	3 cranes 6 tons	224	−1.00
	Marseille	2 cranes 6 tons	135	−1.00
	Malakoff	Bulk liquid - non oil	140	(0)
	Guinee	2 cranes 6 tons	317	−1.35
Dixieme Bassin	Rochambeau	1 crane 6 tons	237	−0.50
Citadelle	Yser	3 cranes 6 tons	360	+1.00
Bassin	Antilles		555	−0.75
Dock	Reunion		555	−0.75
Vetillard	Gironde	10 cranes 6 tons; 6 cranes 10 tons; 5 cranes 10 tons; 2 cranes 10 tons	931	0 to −1.0
	Garronne	12 cranes 3 tons	955	+1 to −1
Marcel	Rhin	4 cranes 10 tons	628	−1.50
Despujoles	Moselle	2 cranes 6 tons; minerals	317	−1.50
Lancement Canal	Ship	Liquid gas	103	+3.00
Tancarville	Orcher	Refined oil	85	+1.00
Canal de	Europe I	1 crane 40 tons	270	−2.00
Jonction	Europe II	3 cranes 40 tons	630	−6.00
	Appontement Jonction I	Crude oil	9	−1.00
	Appontement Jonction II	Crude oil	14	−1.00
Canal	S.N.A.	Bulk fertilizers	140	−3.00
Central	Sogestral 1	Chemical	10	−3.70
Maritime	Sogestral 3	Products		(0)
	Petrochimie	Chemical products	40	−4.00
	Lafarge	Cement	95	−3.00
	Roll-on/roll-off	Ro/Ro 1		−3.50
		,, 2		−4.00
		,, 3	230	−3.30
	Cofaz 1	Fertilizer	230	−5.00
	Cofaz 2	Fertilizer	15	−3.50

BULK HANDLING FACILITIES: *Ore Berth:* Situated South side of Mole Centrale. Accessible to 90,000 d.w.t. ore carriers. Equipment includes 4 unloading gantries, each with max. capacity 500 t.p.h.

Grain: Quai Hermann du Pasquier for ships up to 30,000 d.w.t. 3 elevators capacity each 280 t.p.h.

Quai Joannes-Coubert: for ships up to 60,000 d.w.t., 2 elevators each 600 t.p.h. capacity.

Containers: Quai de l'Atlantique: Length 800 m., 3 berths for large vessels, one of which is also equipped to handle roll-on/roll-off traffic.

4 gantry cranes of 40 ton capacity with 35 m. extension, at quay's edge. 2 French Railway's gantries for handling on to wagons. 1 7,000 sq. m. shed under construction near to terminal for container groupage and breaking bulk. 16 hectares open air areas. Extensive parking facilities.

Quai de l'Europe: Length 900 m. 4 berths for large vessels, one of which is also equipped to handle roll-on/roll-off traffic.

4 gantry cranes of 40 tons with 40 m. extension, at quay's edge. 1 shed 10,108 sq. m., 1 shed of 7,023 sq. m., already used for groupage and break-bulk of containers and 1 shed of 10,000 sq. m. under construction.

2 S.N.C.F. gantry cranes for loading and unloading of wagons. 45 hectares of open air areas. Extensive parking facilities.

Methane: The Gaz de France Methane Terminal situated at Western end of tidal basin with one berth for vessels up to 755 ft. length.

Roll-on/roll-off: Three berthing places in the tidal basin, five berths in the wet dock, eight berthing places in the non-tidal docks.

Liquid Chemicals: at the berths of "Societe Normandie de L'Azote", "Sogestrol", and "Petrochimie" along the "Canal Central Maritime".

BRIDGES: No special restrictions. Opened upon request. Master will be informed as above in case any bridge stopped for repairs.

STEVEDORES: 2 Normal shifts (0700-1500 hrs. and 1500-2300 hrs.) every week-day including Saturday. Night shift in overtime 2300-

0700 hrs. For fruits and reefer cargo and passenger ships possible working 2 hours overtime before morning shift to start at 0500 hrs. subject ordering gang the previous day at 0600 hrs., with 23 hours notice to stevedores. Night gang ordered the same day at 1400 hrs. with 9 hours notice to stevedores (same consequently involves 36 and 12 hours notice to Agents for morning and night overtime respectively).

For vessel completing loading/discharging may order 2 hours overtime from 1500 to 1700 hrs. after morning shift or only 1 hour overtime from 2300 to 2400 hrs. after afternoon shift. No possibility of dividing the shift of 8 hours. Consequently time lost between completion of work and end of shift is charged to the vessel at the cost of about Frs. 560.00 per hour (depending upon type of cargo).

No work possible on Sunday and legal holidays nor during night between Sunday or holiday and next working day. Necessary to give Agent soonest possible accurate ETA and hatch partition in order to enable his arranging work at the best, keeping in mind that shift cannot be split.

Work done with shore crane. Ship's derricks used only exceptionally. No hatch tents available from shore.

It is compulsory to put a net under the gangway before starting work, for lack of which stevedores refuse to go on board.

MEDICAL: It is not necessary for Agent to receive advance notice of required medical attention except when Master requests a doctor on board. The Master must after berthing inform Agent of number of patients and nature of disease, name of patient, rank, in order Agent may arrange corresponding appointment with doctors, dentists, specialists, etc. Hospital facilities available provided admission ordered by local doctor.

Inoculation. Yellow fever – effected only at the hospital once per week on Thursdays 1400 to 1500 hrs. Other inoculations may be effected by local doctors (with appointment) but smallpox may also be effected at the Town Hall sanitary office on Tuesday and Saturday from 0900 to 1200 hrs.

TANKERS: Berth at C.I.M. piers No. 1 to 10. Diameter of connections at different berths of C.I.M.: No. 3, 4 and 5, 10 in.; 6 and 7, 12 in.; 8 and 10, 16 in.

Tankers calling first time at Le Havre recommended to inform Agents of position of manifold connection. Slop reception facilities available up to 1,000 t.p.h.

Antifer:

The port of Le Havre – Antifer, attached to the port of Le Havre which covers it administratively, is a port on the coast, located 4 km. South of Cape Antifer, at Saint-Jouin-Bruneval.

It is an oil terminal, designed to accommodate during a first stage vessels of 540,000 d.w.t. and of 28.5 m. draft.

The port comprises: A breakwater 3,500 m. long protecting the port in its Northern area and starting at Groin Point, 3 km. South of Cape Antifer. A manoeuvring zone. A dry-land area of 35 hectares at the foot of the cliffs intended for hydrocarbon storage and for port operation installations. A 8 hectare service port. A mooring installation with 2 positions for tankers. The oil discharged into storage tanks is pumped away to installations in Le Havre port, by means of a pipe-line of 42 in. dia. and 25 km. long.

Tides and Currents: At Antifer, the influence of the Seine estuary is much less than at Le Havre. The tidal curve is of the sinusoid type, without, however, being perfectly symmetrical. Slack water only lasts a short while (about 20 minutes). With winds from the North to East, there is a drop of about 0.25 m. to 0.50 m. increasing with the amplitude of the swell.

With winds from the South to N.W., passing through a Westerly point, there is either a slight drop (0.15 m.) or a rise corresponding to the extent of swell and sometimes reaching 0.75 m.

Tidal currents are alternating in their direction and generally parallel to the coastline. With Spring tides they reach a speed of 3 knots.

The breakwater protects the port from the action of ebb currents.

Access: Vessels coming into the Port of Le Havre-Antifer will find 35 miles from the coast landfall buoys "A0", "A1" at the limit of the 50 m. depths.

Access is as follows: *An Approach Route* of a width of 3 miles and extending from the landfall buoys "A0" and "A1" on a bearing of 118.5° for 22.7 miles.

A Waiting Area which has the approach route on its Southern edge. It has the form of a trapezium 2 miles in length. The Western commencement of the large base of this area is marked by buoy "A3". It incorporates 2 anchoring areas: the N.W. area for vessels of more than 25 m. draft, and the S.E. area for vessels of less than 25 m. draft. The 2 areas are separated by buoy "A5".

A Connecting Area trapezoidal in shape and 2.5 miles in length, connecting the approach route to the approach channel.

An Approach Channel, 1,000 m. wide, marked on its Northern edge by buoys "A8", "A12", "A14", "A16", "A18", and on its Southern edge by buoys "A7", "A9", "A17". This channel is orientated in the same direction as the approach route on a bearing of 118.5°. Buoys "A7", "A8" and "A9" form at the entry of the channel a triangle easily identifiable by radar.

An Access Channel 3.5 miles long, 700 and then 550 m. wide and on a bearing of 127.5°. It is marked by 4 pairs of buoys: "A19/A20", "A21/A22", "A23/A24", "A25/A26". Its depth varies from 25 to 22 m. By dredging, during 1976 it will be brought to a uniform depth of 25 m.

A Separation Area adjacent to and to the South of the access channel, allowing vessels on entering to make a half-turn to come out of the channel and then come if necessary to the waiting area. The centre of this area is marked by buoy "DA".

A Swinging Area sheltered by the main breakwater, marked to the South by buoy "A27", and to the East by buoy "A29". This area is dredged to a depth of 21 m. and this will be increased in 1976 to 25 m.

The conditions of current (direction and force) and the height of the tide determine, in terms of the drafts of vessels, the periods during which the port may be entered, and which are somewhere between full and low tides.

Vessels must, therefore, on leaving the separation area, follow entry instructions given to Captains by the Pilots, with the agreement of the Port Captaincy of Havre-Antifer.

Pilotage: The Pilot is taken onboard in the waiting area in the disengagement area by means of a pilot boat, a launch or the helicopter allocated to the Le Havre pilotage service.

Port: To the N. of the swinging area, is the mooring area dredged to 26 m. allowing access to 2 alongside berths which have depths of water of 29.80 m.

The service port is reserved for the mooring of tugs, pilot boats, anti-pollution equipment (barrages) and servicing equipment.

Arrival Advice: Captains of vessels destined for Antifer, as well as those whose vessels may enter either Le Havre or Antifer, must send to the Port Commandant of Le Havre a message stating the date and time GMT of their arrival at the Antifer landfall buoys or at the Le Havre lightship and stating the draft of their vessel.

This message must be sent via a coastal station at least 12 hours in advance and confirmed by a VHF message 3 hours prior to arrival at the landfall buoys of Antifer or at the lightship. In return, the vessel will receive from the Havre Port station all information and necessary instructions.

Radio: The Antifer port captaincy (call sign HAVRE-ANTIFER) listens out permanently on the following frequencies:

156.8 mHz. (Channel 16)
157.10 – 161.7 mHz. (Channel 22). VHF

If Channel 22 is not available on board the vessel, Channel 14 (156.7 mHz) can be used after having first called up on Channel 16.

Radio communications are used for: Port operations (movements of vessels) and guiding vessels during times of fog.

Radar Assistance: During times of fog, radar assistance is supplied to vessels by the radar located on La Heve lighthouse (guidance provided by the Semaphore Lookout of Le Havre) as well as by the radar of the Oil Terminal (guiding provided by the Captaincy of Antifer). Vessels requiring radar guidance must start by requesting it on the call-up frequency (Channel 16). Only after an affirmative reply can they switch in to the connections affected by radar, taking necessary precautions (listening out in advance) not to disturb a guiding process already taking place. Assistance is given in strict rotation of requests. Information is supplied free of charge in French and in no way renders the Port Authority responsible. Such information covers the following: route clear or not, vessels anchored or under way in the vicinity, successive positions in relation to the landfall buoys, possible position of the pilot vessel, then guidance in the channel as far as the swinging area and mooring area.

Syledis: A system of aid to navigation and to manoeuvring, covering the receipt on board the vessels of parameters covering in particular the position, the speed, is in the course of being tried out. It requires the Pilot bringing on board a small transmitter/receiver.

Aids to Manoeuvring: In order to facilitate swinging manoeuvres and mooring of large tankers, the port of Antifer has 3 lights of different colours, the positions and characteristics of which are as follows:

Access guiding light (on the open storage area at the foot of the cliffs) – light with red, white, green sectors, regularly flashing (4 s.) the red sector to the North the green to the South.

Guiding lights for coming alongside (on the breakwater).

West light (position 3) – light of red, white, green sectors, regularly flashing (4 s.) – Red sector to the East, green to the West.

East light (position 2), light of red, white, green sectors, flashing twice (6 s.), red sector to the West, green to the East.

Each quay berth is equipped with aids for mooring comprising luminated panels showing the distance to the berthing point of the bow and the stern of the vessel; the speed (in cm/sec.) of approach or pulling away of the bow and stern of the vessel in relation to the berthing point.

Fresh Water/Fuel: Supplied by pipe-lines on the berth (S.H.M.PP. depot).

Cranes: 2 cranes of 2.5 tons capacity on the berth (1 per position). Berth for heavy items in the service port – handling by mobile crane.

Floating Equipment: Pontoon for transporting heavy items.

Tugs: Stationed in the service port 1 or 2 tugs of 3,600 h.p. Other tugs required for manoeuvring come from Le Havre.

Pollution: Barrages laid on pontoons in the service port can be very quickly placed into service.

General Information:

Port Captaincy: In the operating building of the C.I.M. (2nd floor) located in the open area at the foot of the cliffs. It will be transferred in 1976 to the operating building of the Port Authority, on the open land area of the Service Port.

Telephone: Port Officers 22.54.28 – Operating 22.54.64 and 22.56.27.

Pilot's office: In the C.I.M. operational office (2nd floor).

Customs: In the C.I.M. operational building (1st floor).

Towing: The Les Abeilles company on the pontoon in the service port.

Pilotage: In the C.I.M. operational building (1st floor).

Police: In the C.I.M. operational building (1st floor).

C.I.M. Depot: 27.21.10 – 21.21.77.

S.H.M.PP. Depot: 27.20.73.

Communications: By buses from Saint Jouin. The airport of Le Havre – Octeville is 16 kms. to the South of Antifer.

Control tower: Tel. 46.38.02.

Operating: Tel. 46.09.81.

DENSITY: In outer port and tidal docks: salt water. In inside docks brackish. Density depending upon season and amount of fresh water brought in by river Seine and Canal de Tancarville.

FRESH WATER: Most berths supply by shore hydrants. Otherwise by barge minimum quantity invoiced then being 50 c.b.m. Overtime charged in addition. Late cancellation of barge invoiced.

FUEL: All grades available, viscosities from 200 sec. to 3000 sec. Redwood. Minimum 48 hours advance notice required to prepare barges.

FIRE PRECAUTIONS: Dangerous cargo must be declared on "Inbound Bill" and in order not to delay vessel's entry it is highly recommended to inform Agent of quantity and exact nature of dangerous cargo on board 48 hours prior to arrival, thus enabling Agent to get in touch with Harbour Master and take necessary steps which may go from a single smoking prohibition up to a fire-picket on the quay during all the call.

Tankers: A "notice to Master's of ships loading/unloading hydrocarbons" is handed to Master upon arrival. This notice specifies *inter alia:* repairs, ventilation/cleaning of tanks, handling of goods subject to Harbour Master's authorisation. All naked lights and fires prohibited, boiler furnaces and galley ranges excepted, such exception cancellable on simple order of Harbour Master or Depot Manager.

DEVELOPMENTS: The new oil terminal of Havre-Antifer, built to the South of Cape Antifer will have 2 installations enabling vessels of 550,000 d.w.t. to be received at all states of the tide. Shelter will be created by a protective mole 3,520 m. in length. At the foot of the cliff, there will be a service port and open-air work areas. An access channel 550 m. wide to a depth of 25 m. will be dredged.

A second stage will see the provision of 2 further installations after further deepening of the sea to 30 m. in order to take vessels of 1,000,000 d.w.t.

GANGWAY/DECK WATCHMEN: Not compulsory. Sworn watchmen in uniform and equipped with a VHF set may be obtained from the Port Authority per hour for day and night, working days and holidays. Some other companies may also supply watchmen (not sworn) at lower prices.

OPENING/CLOSING HATCHES: May be done by stevedores at the same price as shifting of cargo depending upon the type of cargo and consequent number of men included in the gang.

It is highly recommended to carry out opening by the crew before beginning of shift to avoid both loss of time and expensive charges and also risk of accident to stevedores who are sometimes not well aware of vessel's closing system.

It is emphasised that for reefer cargo stevedores wait for cold exhaust half an hour after opening hatches before getting down in the holds. Consequently it is strongly advised to stop ventilation and start opening hatches with crew about 1 hour before beginning of shift keeping in mind that for reefer cargo, the morning shift may commence at 0500 hrs.

CERTIFICATES:

Tonnage Certificate.
Safety Construction Certificate.
Loadline Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Deratisation Certificate.
Cargo Gear Register.

(Fresh water analysis certificate may also be requested.)

CUSTOM'S ALLOWANCES: 200 cigarettes or 200 grammes tobacco plus 1 bottle spirit (must be mentioned on crew declaration list). Crew members may obtain extra allowance but only after 5–6 days' call.

CARGO GEAR: Cargo handling usually carried out by means of shore cranes. Hatch-tents to be supplied by vessel.

CREW IDENTIFICATION CARDS: Not required. Recommended to have passport or seaman book to go ashore.

CONSULS: The following countries have representatives at Le Havre:

Brazil	Haiti	Peru
Colombia	Netherlands	Salvador
Dominica	Argentina	Uruguay
Guatemala	Switzerland	Chile
Italy	South Africa	Costa Rica
Portugal	Panama	Ivory Coast
Sweden	Denmark	Spain
Germany	Belgium	Finland
Mexico	Norway	Japan
Great Britain	Greece	Liberia
Ecuador	Honduras	Madagascar
Venezuela		

REPAIRS: Several companies including Ateliers et Chantiers du Havre available to handle all types of hull and engine repairs. 5 berths available for repairs afloat.

DRY DOCKS: 7 dry docks available, largest of which is 1,095 ft. working length and 125 ft. width for vessels up to 80,000 d.w.t.

REPATRIATION: Except if airplane chartered by Owners, all crew have to pass through Paris.

AIRPORT: Le Havre airport 7 km. from the centre of the town, with a runway of 1800 m. × 40 may receive chartered planes up to 40 tons total weight (50 T. with special authorisation). Regular flights from and to Orly (Paris Airport) twice a day, holidays excepted.

TIME: GMT plus 1 hour from 26th September to 28th March and GMT plus 2 hours 28th March to 26th September.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; National Holiday (July 14th); Assumption B.V. Mary (August 15th); All Saint's Day (November 1st); Armistice Day (November 11th); Christmas Day (December 25th). No work possible except for passenger ships and tankers the latter being loaded/discharged round the clock every day.

POLICE/FIRE/AMBULANCE: Police 17 or 48.15.20; Fire Brigade 48.05.77 or 18; Ambulance 42.30.68 or 42.46.46; Hospital 42.77.83.

TELEPHONE ON BOARD: Possible at most berths.

SHORE LEAVE: Authorised within port and town area. Foreign seamen wishing to go further and more especially to Paris must obtain police authorisation and consequent pass.

REGULATIONS: Vessels carrying dangerous cargo must when on roads or in the entrance channel, show the red flag by daylight or 1 red light by night-time. When leaving the port they must keep their Pilot up to the end of the channel.

AUTHORITY: Port of Le Havre Authority.

AGENT: Jolasry (France), 10 Place Leon Meyer, PO Box 846, 76060 – Le Havre. Telegraphic address "Jolasry". Tel. 42.18.32 and 42.12.05. Telex 19708.

LORIENT: 47.45 N. 03.21 W.

DOCUMENTS:

Cargo Manifest or Manifest of Ballast.
Certificate of Cargo Space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.

PILOTAGE: Compulsory for all vessels over 60 m. length. Vessels must contact pilot station advising ETA at least 6 hours before arrival by radio to the pilot station. On arrival at the outer roads or Groix vessels should call Pilot by VHF Channel 16. The pilot launch will be standing by from 1 hour before to 1 hour after the ETA previously advised by the ship. The pilot station is manned 24 hours per day. Pilot station telephone number 210678.

ANCHORAGE: The outer roads of the port are open to winds from the Southeast to Southwest. Vessels waiting to enter the port may anchor in depths of 15–20 m., sand and shell bottom, good holding ground.

Mooring buoys are positioned off Port Tudy on the North coast of Ile de Groix. These buoys are reserved for the use of the French Navy. There are prohibited zones for anchoring due to presence of submarine cables, marked on chart.

RESTRICTIONS There are 2 entry channels to the port. The South channel, depth 3.6 m. is used exclusively by local fishing boats. The West channel is marked by the alignment of Kerbel Light and Lohic Light. The depth in this channel is 6.25 m. Both channels are very well marked.

Traffic signals are hoisted at Port Louis Citadel as follows: Red flag or red light – entry prohibited. Green flag or green light – exit prohibited. Red over green flags or lights – port closed.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessels should not receive free pratique, Master should radio Agent before arrival, advising full details.

RADIO: Use local station Radio Conquet or Radio Saint-Nazaire.

TUGS: 2 tugs up to 700 h.p. – 3 tugs up to 200 h.p. They belong to the French Navy.

BERTHING: Kergroise Quays, 568 m. berthing length can accommodate vessel up to 220 m. length, draft 7.50 m. at the Northern part of the quays. Draft 7.2 m. at the Southern part of the Quays. Quays are being dredged to a projected draft of 9.0 m. in the Northern part.

7 cranes in service including 16-ton crane.

TANKERS: The oil jetty is 112 m. long and can accommodate tankers up to 180 m. length, max. draft 10 m.

FRESH WATER: Can be supplied from the quays at Kergroise and at the Oil Jetty. Rate 10 t.p.h.

REPAIRS: Minor deck and engine repairs can be carried out. Slipways can accommodate 4 fishing boats at the same time. There are 3 dry docks the largest of which is 186.20 m. long×26.33 m. wide.

MEDICAL: All facilities available. Local maritime and civil hospitals.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

CONSULS:

Norway
Denmark
Netherlands
Sweden.

TIME: GMT plus 1 hour – no alterations.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July no labour available); Assumption Day (15th August no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December,

no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.
POLICE/FIRE/AMBULANCE: Police 21 19 16; First Aid 17; Ambulance (97) 65.33.44; Fire 18.
AUTHORITY: Ingenieur des Traveaux Publics de l'Etat, Ponts et Chaussees.
AGENT: See Paris.

MARSEILLES: 43.18 N. 05.25 E. (See Plan)

(a) Old Port to Estaque
(b) Port de Bouc/Lavera/Caronte/Etang-de-Berre
(c) Fos

(a) OLD PORT TO ESTAQUE

DOCUMENTS:
Ships Register.
Declaration of Health.
3 Crew Lists.
2 Provisions Lists.
2 Lists of Passengers in Transit.
2 Lists of Passengers disembarking.
1 List of Ports where cargo is loaded for Marseilles.
Cargo Manifests and Bills of lading.
1 List of Crew Personal Effects.
PILOTAGE: *Arrival:* Contact port authority by VHF on Channel 16, changing to Channel 12. M.W. Station, call on 2049 kHz. Station on 1933 kHz. ("Marseille Port") Compulsory. 21 pilot launches, mostly painted black, wooden hulls with white anchor insignia on the bow.
Contact pilot station and pilot boats by VHF Channel 8.
Southern Entrance: Pilot boards between "Le Frioul" and "Chateau d'If" island. Max. recommended draft 27 ft. in good weather.
Northern Entrance: Pilot boards at Estaque roads. In case of strong N.W. winds or for all deeper draft vessels the Northern entrance is preferred.
Vessels anchoring in roads without a Pilot will still incur full pilotage fee.
On departure, 15 to 30 minutes notice sufficient to order Pilot and tugs.
ANCHORAGE: Estaque Roads.
MAX. SIZE: Draft dependent on berth depth up to max. of 47 ft. 6 in.
HEALTH: Free pratique automatic vessels coming direct from continent or Italy and Q flag not to be flown. From other countries – including Spain and Portugal – usual procedure applies. Unless special arrangement for passenger liners free pratique not given by radio also practice issuing Health or Customs clearance on sailing now discontinued.
RADIO: Within 150 miles Marseilles Radio/FFM – otherwise St. Lys/FFL.
TUGS: About 40 tugs available, from 250 to over 3,000 h.p. Ship's lines normally used.
BERTHING: When specific side alongside berth required. Agents radio Master prior arrival also advise Pilot. Otherwise side alongside at discretion Master after conferring with Pilot.

Docks:	*Max. depth:*	
Grande Joilette	9.80 m.	24 berths
Arene	8.00 m.	10 berths
National	10.50 m.	15 berths
Pinede	10.00 m.	14 berths
Leon Courett	14.50 m.	6 berths
	10.5–12 m.	8 berths
Mirabeau	15.00 m.	15 berths
North and South outer harbours	—	5 berths
Ship repairs:		30 berths

BRIDGES: Turning bridge near Southern end of port – Pont d'Arenc – opens on requests. Bridge further North – Pont de la Pinede – opens: 0600 to 2200 hrs. twice each hour between 5 minutes before the hour and 5 minutes afterwards, and between 5 minutes before half hour and 5 minutes afterwards. Open continuously 2200 to 0600 hrs.
STEVEDORES: Enable Agent order gangs important obtain in good time accurate ETA from vessels. Latest times to order gangs; normal and deferred shifts 0530 hrs. same morning – night shift 1600 hrs. same day – Saturday and Sunday, 1600 hrs. Friday. Failure give precise ETA may result in ship losing 12/24 hours also cost gang waiting time includes waiting vessel's arrival – free pratique – opening/closing hatches – rain – shifting cargo or dunnage – crane or derrick break-downs – time lost between finishing and end of shift. Work can be arranged on following official holidays – New Year's Day, Easter and Easter Monday, Whitsun, 14th July, 15th August, 1st November, Christmas Day, 1st May holiday when no work takes place, Stevedoring hours (normal shift) Monday to Saturday, 0630–1310 hrs. and 1320–2000 hrs. (Two shifts). Sunday, 0630–1310 hrs., if required – one shift 0800–1130 hrs. and 1300–1620 hrs. Night work if required 2200–0400 hrs. One hour overtime may be worked before 0630 or after 0730 hrs. No work allowed Sunday night. All necessary gear supplied by stevedores except rain tents which vessel must supply.
MEDICAL: Yellow fever inoculations only in hospital. Tuesdays and Friday. Masters to advise by radio prior arrival if medical attendance required aboard.
TANKERS: See "Port de Bouc", and "Fos".
DENSITY: About 1028.
FRESH WATER: Can be obtained from hydrants or quays or from water-boats. When delivered by barge, min. quantity invoiced is 50 tons. Preferable order prior arrival to avoid delays. Min. pumping rate 50 t.p.h.
FUEL: Ordinary fuel, also fuel oil max. 1000 secs., Diesel and Gas oil. Deliveries by barge only.
FIRE PRECAUTIONS: Special harbour fire-fighting corps, with two fire-fighting Vessels.
DEVELOPMENTS: See "Fos".
WATCHMEN: Available but not compulsory.
HATCHES: Crew allowed open and close.
SHIP CERTIFICATES: On first call Registered Tonnage Certificate; thereafter not required unless Gross/Net tonnages changed.
CUSTOMS ALLOWANCES: About 200 cigarettes and limited amount spirits per man.
CARGO GEAR: No additional requirements; all gear supplied by stevedores except rain tents.
IDENTIFICATION CARDS: Not required.
CONSULS: The following countries are represented in Marseilles:

Algeria	Guatemala	Panama
Argentina	Haiti	Peru
Austria	Honduras	Philippines
Belgium	Iceland	Portugal
Bolivia	Israel	Senegal
Brazil	Italy	Spain
Canada	Ivory coast	Sweden
Colombia	Japan	Switzerland
Costa Rica	Lebanon	Thailand
Cuba	Liberia	Tunisia
Cyprus	Madagascar	Turkey
Denmark	Mauritania	U.S.A.
Dominica	Mexico	U.S.S.R.
Ecuador	Morocco	Uruguay
Egypt	Netherlands	Venezuela
Finland	Nicaragua	West Germany
Great Britain	Norway	Yugoslavia
Greece		

REPAIRS: Most repairs and overhauls possible. Pre-advice recommended.
DRY DOCKS:

	Working lengths	*Entry width*
No. 1	561 ft.	63 ft. 3 in.
2	441 ft. 6 in.	56 ft. 8 in.
3	326 ft.	51 ft.
4	262 ft. 8 in.	44 ft.
5	400 ft.	41 ft.
6	410 ft.	50 ft. 8 in.
7	656 ft.	80 ft. 8 in.
8	1,049 ft. 7 in.	164 ft.
9	820 ft. 6 in.	121 ft. 3 in.
10	1,525 ft.	276 ft. 11 in.

Depth 9.50 m. (31 ft. 2 in.)

POLICE/FIRE/AMBULANCE: Police 91 90 40; Ambulance 17; Fire Brigade 18; Special Port Fire Brigade 50 36 70 and 62 36 58.
GAS FREEING STATION: Suitable for tankers up to 28 ft. draft.
The Station is equipped with:
Boilers able to supply 34 tons of steam per hour.
A pumping station supplying hot water for cleaning, fresh water for ballast, and which is also used for transfers.
A separator for the discharge of dirty ballast able to work at 1,200 cu.m. per hour.
Two receiving tanks of 2,000 cu.m.
One tank of 500 cu.m. for treatment and 1 for subsequent storage with a capacity of 2,000 cu.m.
One extractor for removal of all traces of oil including sludge.
The Station can supply all the necessary fluids for cleaning and gas freeing (salt water, hot and cold water, fresh water, compressed air and electric current.)
From the vessels the installation receives dirty ballast and water which goes through separators.
AUTHORITY: Le Port Autonome de Marseille.
AGENTS: Jolasry (France), 6 Boulevard de Dunkerque. Tel. (91) 20 39 17, Telex. 410821. Cables: Jolasry.

(b) PORT DE BOUC, including Port de Lavera 43.23 N. 05.00 E., Port de Berre 43.27 N. 05.10 E., Port de la Mede 43.24 N. 05.07 E. Caronte 43.24 N. 05.02 E.

DOCUMENTS: On arrival:
1 Cargo Manifest or manifest in ballast.
Certificate of open spaces occupied by cargo in cu. ft. or cu. m. or in registered form if shelter deck.
Bill of Lading.
Ship's Register (if required).
6 Crew Lists (8 if Spanish or U.S.S.R. ship or ship bound for these countries).
3 Passenger Lists.
Health Declaration.
Deratisation Certificate.
Bunker's Supply (3 forms).
1 Crew Declaration of Personal effects – cameras, binoculars, radios, cigarettes, tobacco, etc. If on inspection articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.

PILOTAGE: Call "Port de Bouc Control" on Channel 16. Channel 12 for traffic. Pilot must be taken to enter Port de Bouc, Fos and Port St. Louis du Rhone. Contact by Marseilles Radio or pilot boat VHF (Channel 16 for calling, Channel 14 for traffic). Pilot boards in the Roads between 2 and 2.5 miles S.W. of Bouc Tower or further out if required, for entering Port de Bouc and Fos. Motor launch black hull, white cabin, white anchor on bow, "H" flag.
ANCHORAGE: It is recommended to ask for Pilot before anchoring in outer Roads to avoid forbidden places for ships bound for Port de Bouc and Fos.
RESTRICTIONS: No entry restrictions for Lavera. Night transit of Caronte Canal to Etang de Berre forbidden to tankers above 6,000 g.r.t. Transit of Caronte Canal to Etang de Berre is forbidden for vessels over 180 m. (598 ft.) overall and over 24 ft. draft.
MAX. SIZE:
Lavera: Berths A1, A2, 35 ft. draft. Berths A4, D and E, 40 ft. draft. Berth B, 38 ft. 6 in. draft. Berth C, 39 ft. draft. Berths F and G, 43 ft. 6 in. draft. Berth H, 37 ft. 8 in. draft. Coastal Berths K1 to K8 18 ft. draft.
Kuhlmann, 24 ft. draft and length 427 ft.
Caronte, 29 ft. draft.
Croix-Sainte (Verminck), 24 ft. draft and length 459 ft.
Canal de Caronte (for entering Lake of Berre, for Terminals of La Mede and Berre), 26 ft. and 25 ft. 9 in. for tankers over 18,000 tons.
HEALTH: Pratique given by Customs officers who board on arrival. In case of suspected disease on board, notify Agents by radio before arrival.
RADIO: Within 150 miles traffic through Marseille Radio/FFM, otherwise St. Lys (FFL).
Port de Bouc Radio (Harbour Office) VHF used for navigation purposes only – Channel 16 for call, Channel 12 for traffic.
TUGS: Eleven tugs available from 90 to 1,800 h.p. Normally join vessel in entrance channel off Port de Bouc. Only ship's lines used.
BERTHING FACILITIES:
Lavera:

Berths for sea tankers	*Depth*	*Draft*
A1 – A2 – A3 Sud	11.00 m.	10.70 m.
A4 Nord	13.00 m.	11.20 m.
B	12.30 m.	11.90 m.
C	12.30 m.	11.90 m.
D	12.30 m.	12.20 m.
E	12.30 m.	12.20 m.
F	13.30 m.	13.27 m.
G	13.30 m.	13.27 m.
H *for liquid chemical products*	12.00 m.	11.50 m.

Berths for small tankers and barges	*Draft*
K1	7 m.
K2	4 m.
K3	6 m.
K4	6 m.
K5	6 m.
K6	6 m.
K7	4 m.
K8	4 m.

Caronte – Port de Bouc
Quai de Provence Industrie: length, 140 m.; width, 20 m.; draft, 5 m.
Quai Kuhlmann: length, 130 m.; width, 25 m.; draft, 24 ft.
Quai de Caronte: length, 170 m.; width, 25 m.; draft, 29 ft.
Quai Verminck: length, 140 m.; width, 20 m.; draft, 24.5 ft.
Berre
Two private oil harbours:
La Mede (CFR): length, 110 m.; draft, 7.20 m.; 2 berths for sea tankers Draft, 5.18 m.; 2 berths for small tankers.
Draft, 2.30 m.; 2 berths for barges.
Flow, 100 to 600 cu.m. per hour.
Pointe de Berre (Shell):
Draft, 7.20 m.; 3 berths for sea tankers.
Draft, 3.50 m.; 1 berth for small tankers.
Draft, 4 m.; 1 berth for barges.
Flow, 120 to 250 cu.m. per hour.
BRIDGES: 1 railway bridge and 1 road bridge across Caronte Canal each having special times for opening. Ships of less than 21 m. height clearance may pass below the railway bridge. Motorway bridge over Caronte Canal with 44.60 m. clearance.
STEVEDORES: To enable Agent order gangs important obtain accurate ETA between 24 hours and 48 hours in advance. 2 shifts 0500 to 1300 hrs. and 1300 to 2100 hrs. normally 6 days a week. Confirmation to be made at 0900 hrs. for afternoon shift, and 1700 hrs. for next day morning.
MEDICAL: All hospital and medical facilities. Yellow fever inoculation made by appointed doctors. Masters to advise by radio prior arrival if medical attendance is required on board.
TANKERS: Each of the 8 large berths, North and South, A, B, C, D, E, F, G, is fitted with lines for crude oil and all refined products. Pipe-line system leads to distributors (7 for refined products, 2 for crude oil) connected to neighbouring refineries, and to South European pipe-line (crude oil only).
Terminal hose handling: Each berth is fitted with metal gantries hanging up flexible hoses for ship's connection. They are handled with compressed-air winches and ship's boom which should be rigged before arrival.
Flexible hoses diameter: crude oil, four 12-in.; fuel oil (or crude), two 12-in.; white products, one 8-in.; ballast (or crude), one 12-in.; bunkers, one 8-in.; liquefied gas, one 4-in.; special products, one 4-in.
Decanting installation: Tankers may pump out their ballast at all berths – except tank-washing water and slops.
DENSITY: About 1028. Variable in Canal de Caronte and Etang de Berre owing to discharge of hydraulic plant of St. Chamas.
FRESH WATER: Available generally by pipes and hoses at the berths. Water barges available from Marseille.
FUEL: By barges for cargo ships and vessels in the Roads. Tankers at Lavera refuel by pipe-line at the berths. All grades available.
FIRE PRECAUTIONS: Oil Harbour is fitted with a system of 203 mm. (8 in.) or 254 mm. (10 in.) sea water pipes at 5 bars permanent pressure. It may be increased by pumping station up to 9 bars, and supply 500 c.m./h. Each wharf has 5 fire hydrants with first-aid equipment: fire hoses and spray nozzle, foam nozzle with powder cans. If fire breaks out on a ship, the hose handling gantries are protected by a screen of sprayed water. All fire equipment and installations are painted red.
There is a special fire-fighting Corps with fire vessel. Call for firemen 06.21.29 or 26.28.37. In case of fire call Port de Bouc Control – phone 05.22.25 or 06.63.39 or VHF Channel 16.
GANGWAY/DECK WATCHMEN: Available but not essential.
OPENING/CLOSING HATCHES: Always by crew.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes every 5 days; wine/spirit: limited amount per man.
IDENTIFICATION CARDS: Seamen going ashore should carry passport or identity card.
CONSULS: Norwegian, Swedish, Danish and Spanish consuls at Port de Bouc. Others at Marseille.
REPAIRS: Permission must be granted by Port de Bouc Harbour Master only.
DRY DOCKS: Nearest at Marseille.
REPATRIATION: All facilities for crew change and repatriation by railway or planes.
AIRPORT: Marignane Airport 40 km. and Nice Airport 230 km. (this last for SAS lines).
TIME: GMT plus 1 hour. No changes.
HOLIDAYS: Same as "Marseille".
POLICE/AMBULANCE/FIRE: Police, 06.23.74 or 07.03.31; Fire, 06.21.29 or 06.28.37.
TELEPHONE: On application can be connected on board at Lavera. Telephone ashore in other places.
SHORE LEAVE: Allowed.
AUTHORITIES: Port Autonome de Marseille (Director General and Managers). Capitainerie de Port de Bouc (Harbour Master).
AGENT: Agence Maritime et Fluviale Maurice Pomme, 20 Cours Landrivon, 13 Port de Bouc. Tel. 06.09.89. Telex. 420555. Cables: "Pomme".

(C) FOS: 43.24 N. 04.53 E.

DOCUMENTS:
1 Cargo Manifest or Manifest in Ballast.
Certificate of open spaces occupied by cargo in cubic feet or cubic metres, or in registered form if shelter deck.
Bill of Lading.
Ship's Register (if required).
6 Crew Lists (8 if Spanish or U.S.S.R. ship or ship bound for these countries).
3 Passenger Lists.
Health Declaration.
Deratisation Certificate.
3 Bunker Supply Forms.
Declaration of crew personal effects, cameras, binoculars, radios, cigarettes, tobacco, etc.
If on inspection, articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.
PILOTAGE: Compulsory. Contact by Marseilles radio or direct to Pilot boat by VHF Channel 16 for calling, Channel 9 for traffic. Pilot boards in the roads between 2 and 2.5 miles S.W. of Bouc tower or farther out if required. Motor launch, black hull, white cabin, white anchor on bow, flying "H" flag.
Port de Bouc Port Control, call on Channel 16, Channel 12 for traffic. Pilot boat on Channel 16 for calling and Channel 14 for traffic.
ANCHORAGE: It is recommended to ask for Pilot before anchoring in outer roads to avoid prohibited anchorages.
RESTRICTIONS: When large tankers are proceeding in the Fos channel, other vessels' entrance may be delayed.
Access channel for very large vessels dredged to 22 m. over a width of 250 m.
MAX. SIZE:
Tankers: Maximum permissible dimensions

Berth	*Depth*	*Draft*	*Length*
0	13.00 m.	12.80 m.	900 ft.
0 BIS	13.00 m.	12.80 m.	900 ft.
1	21.50 m.	20.58 m.	1150 ft.
2	20.00 m.	18.90 m.	1100 ft.
3	23.50 m.	22.00 m.	1150 ft.
4	Completion Expected 1977		

Container Berth: No. 1 Basin (West side) max. length, 948 ft., max. draft 41 ft.
No. 2 Basin (West side) max. draft 38 ft. Depth 39 ft. 6 in.
Liquid Methane: Gaz de France Terminal, No. 1 basin, max. draft 31 ft. 02 in. Depth 34 ft. 06 in.
Ore Carriers: Private Bulk Berth, No. 1 Basin, East side, length 2,100 ft., max. draft 61 ft. Depth 65 ft. 06 in.
Private Berth, South basin, North side, length 1,300 ft. max. draft 39 ft. Depth 42 ft. 06 in.
Public Ore Berth, No. 1 Basin, West side, max. draft 49 ft. Depth 52 ft. 06 in.

Ore and Containers: Max. length 984 ft., draft 42 ft. 06 in. Depth 46 ft.
HEALTH: Pratique given by customs officers who board on arrival. In case of suspected disease on board, notify Agent by radio before arrival.
RADIO: Within 150 miles, traffic should be routed through Marseilles radio, FFM, otherwise via St. Lys. FFL.
VHF: Channel 16 for calling. Channel 12 for traffic and Channel 14 for pilot.
TUGS: Tugs normally join vessel in the entrance channel. Ship's lines are used.
BULK HANDLING FACILITIES: Ore berth, depth alongside 42 ft. 8 in. Discharge rate 600 t.p.h. 2 portico cranes with grabs.
CONTAINER HANDLING FACILITIES: Porticos for containers of 20 ft. and 40 ft. Another Portico will be built in 1977. Draft 38 ft. Depth 39 ft. 06 in.
TANKERS: Chicksan loading/discharge arms fitted at all berths. Ballast discharge ashore through pipe-line. Tank cleaning slop or oil residue not accepted through shore line, but can be disposed of by barge from Marseilles. Possibility of crude cleaning for vessels with inert gas system if cleaning does not exceed time of discharging operations.
FIRE PRECAUTIONS: A special fire fighting corp. operates at Fos. Tel. 05 04 40.
FRESH WATER: Available by pipe-line at all berths.
FUEL: Available by barge only.
MEDICAL: All hospital and medical facilities. Yellow fever inoculation made by appointed doctors. Masters to advise by radio, prior arrival, if medical attendance required on board.
REPAIRS: Ore berth can be used as a repairs berth when not required for cargo operations. Permission must be obtained for tanker repairs. No tankers repairs if vessel is not gas free. Permission given by Harbour Master only.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes every 5 days. Wine/Spirits: limited amount allowed per man.
CONSULS: Norwegian, Swedish, Danish and Spanish Consuls at Port de Bouc. Others at Marseilles.
AIRPORT: Marseilles/Marignane Airport about 60 km. distance.
TIME: GMT plus 1 hour. No changes during the year.
TELEPHONES: On application, telephones can be connected on board.
AUTHORITY: Le Port Autonome de Marseilles. Capitainerie de Port de Bouc (Harbour Master).
AGENT: See "Port de Bouc".

NANTES: 47.14 N. 01.34 W., inc. Donges 47.18 N. 02.04 W. and Montoir 47.18 N. 02.08 W. **(See Plan)**

DOCUMENTS: See "St. Nazaire".
PILOTAGE: Compulsory for vessels over 225 ft. length on river Loire. Starts about 4 miles North of lighthouse of Le Pillier, on lightbuoy SN 3. Pilot boat on station day and night, if weather conditions permit, West of a line drawn between SN 3 lightbuoy and lightbuoy of "La Couronnee" about 2 miles N.N.E. If Pilot unable to come aboard, he may invite ship to follow his boat until they have reached a better shelter. Ships heading for one of Loire estuary ports should give ETA at least 24 hours ahead to Port Captain of Saint-Nazaire. Approximate time of arrival at SN 3 buoy, the further destination and speed should be given. VHF contact can be made direct with St. Nazaire Pilot boat or "Estuaire de la Loire" Pilot station.
ANCHORAGE: When Pilot service withdrawn, anchor near SN 3 lightbuoy or in "Rade des Charpentiers". In rough sea ships heave to off harbour. In case of doubt contact pilot boat by VHF or phone. Sometimes Pilot taken aboard on SN 3 is relayed by another who will board near the outer port of Saint-Nazaire to bring ship upstream. It is not allowed to moor before and below quay Emile Cormerais and Chevire Power Station Embankment (cables).
MAX. SIZE: Nantes: max. length 600 ft., breadth not limited, draft 27 ft.
Donges: max. length 760 ft., breadth 116 ft., draft 39 ft.
RADIO: Stations at: Saint-Nazaire; Brest-le Conquet and Bordeaux; Arcachon.
RADAR/VHF: Radar, none. VHF, Donges Port Operations Network—European frequencies.
TUGS: Nantes: 3 "Abeille" tugs 500 to 700 cv. Donges and St. Nazaire: Tugs are provided by "Union des Remorqueurs de l'Ocean" at Saint-Nazaire (2,000 h.p.); also "Les Abeilles".
BERTHING: Nantes: Vessels may be moored with bow facing up or downstream. During heavy flood periods, however, bow to face upstream. Donges: Mooring of vessels to the docks No. 0, 1, 2, 3 is performed with ship's ropes. On docks No. 4, 5 and 6, Port Authority use own steel cables to which ship is fastened in supplement to her own ropes.
Montoir: Port Authority use own steel cables to supplement ship's ropes.
BRIDGES: The first bridge on the estuary is upstream of Nantes.
STEVEDORES: Available.
MEDICAL: Facilities available at any time.
BULK CARGO FACILITIES: Between St. Nazaire, Donges and Montoir, berths equipped to handle bulk carriers up to 40,000 tons, subject to channel draft.
TANKERS: Channel to Donges 39 ft. Depths, Berth 0 and 1 less than 18 ft.; Berth 2, 21 to 24 ft; Berth 3, 28 to 31 ft.; Berth 4, 32 to 39 ft.; Berth 5 over 39 ft.; Berth 6 over 40 ft. Pipes: according to the berths and products, diameters from 100 m/m to over 850 m/m (crude — Berths 4, 5 and 6).
Berth No. 6 can accommodate tankers up to 200,000 d.w.t., part loaded subject to channel draft.
Donges: Berths Nos. 5 & 6: To reduce the time of mooring a special mooring gang can be put at Master's disposal for arrival and departure. Arrangements must be made 48 hours in advance of this service. Permanent watch on VHF Channel 16 is recommended.
Crude connections: No. 5 Berth 1×12 in. Chicksan arm, 12 holes type 150 pounds. No. 6 Berth 5×12 in. Chicksan arms, 12 holes type 150 pounds. Reducers available, notice required prior to arrival.
Bunkering Lines: No. 5 Berth 8 in. Chicksan arm with 6 in. connection. No. 6 Berth, 6 in., 8 in. or 12 in.
Drinking water available at both berths.
Telephone: Placed aboard as soon as vessel berths. The vessel is connected both to the Post Office and Antar Refinery. No. 5 Berth – Tel. No. 70.70.95. No. 6 Berth – Tel. No. 70.72.71.
Mobile crane available for hire for loading stores, provisions and spares. Request to be made upon arrival by Agent to Harbour Master or Port Authority Workshop.
There is a Seaman's Club at No. 4 Berth for crew and families, equipped with restrooms and accommodation.
FRESH WATER: Available on docks in Donges, Montoir, Saint-Nazaire and Nantes.
FUEL: Available in any grade or viscosity. Advance notice of at least 2 days must be given if vessel has to bunker on Saturday or Sunday. Otherwise, delivery within 36 hours by barge.
FIRE PRECAUTIONS: Usual precautions for tankers in neighbourhood of refineries; no fire, no smoking. Ground wire for ship.
DEVELOPMENTS: The access in Donges will be progressively dredged to be able to receive very large tankers during next 10 years. At Nantes the channel will also gain around 3-5 ft. during next 5 years, so as to welcome cargo-ships up to 15,000 tons. Installations to receive cereals, bulk cargoes, roll-on/roll-off ships and container-carriers are also foreseen in the near future.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Done by crew.
IDENTIFICATION CARDS: Not needed.
CONSULS:
Algeria, tel. 75.50.96
Belgium, 4 bis, Place du Sanitat, tel. 71.57.10
Denmark, 56 Quai de la Fosse, tel. 71.33.35
Germany, tel. 71.93.18
Spain, 2 Place Roger-Salengro, tel. 71.87.33
Finland, 1 Quai de Tourville, tel. 71.23.33
Haiti, 21 Rue Gambetta, tel. 74.35.14
Italy. 11 Rue Contrescarpe, tel. 73.40.52
Holland, 1 Rue Maurice Duval, tel. 71.16.31
Norway, 92 Quai de la Fosse, tel. 71.23.93
Sweden, 11 Rue de la Brasserie, tel. 71.87.31
Switzerland, tel. 71.82.11
United Kingdom, tel. 71.08.50
REPAIRS: Very good facilities exist for all types repair work.
DRY DOCKS: Dry docks at Nantes for vessels under 4,500 tons.
AIRPORT: Good connections with French internal network (Air Inter) and also international mainly with stop-over in Paris. 5 daily flights to the capital. Direct flights to Bordeaux, Lorient, La Rochelle, Lyons, etc.
TIME: Paris time GMT plus 1 hour; seasonal alteration.
HOLIDAYS: Most firms close in August. National Days: May 1, July 14, August 15, Nov. 11
POLICE/AMBULANCE/FIRE: Nantes and St. Nazaire: Police 17; Ambulance 18; Fire 18.
TELEPHONE ON BOARD: Arrangements are possible.
SHORE LEAVE: No restriction.
AUTHORITY: Port Autonome de Nantes-St. Nazaire.
AGENT: See "St. Nazaire".

NICE: 43.42 N. 07.17 E.

DOCUMENTS: Master required make declaration of entry at Port Office, Harbour Master's Office, Quai Entrecosteaux, where he must present to Authority (Commissariat du Port) Crew List and Passenger List. If coming from foreign port he is also required to furnish a Customs Declaration.
PILOTAGE: Compulsory for Nice-Villefranche Station and applies to ships of more than 50 m. length. Pilot station extends 3 miles from coast between meridians of left bank of Var river (07.12.5 E.) and Cap Ferrat. Request for Pilot made by Regulation Signals day or night or through radio station Grasse on 2321 kc/s. and 2182 kc/s.
ANCHORAGES: Approaches have no practical anchorage zones and it is preferable to proceed Villefranche approaches 1 mile distant which can offer sheltered anchorage for ships of all sizes.
MAX. SIZE: Port accessible to ships of 137 m. length and 6.50 m. draft.
RADIO: Grasse Radio Station. Ships call on 2321 kc/s. and 2182 kc/s. Meteorological reports on 2649 kHz broadcast at 0833, 1330, and 1745 hrs. Port Office on VHF Channels 16, 12 and 9.
TUGS: None.
BERTHING: 9 berths for merchant vessels. Ocean-going yachts desiring berth before entering Admiral Infernet and Lympia docks must ask Harbour Master's Office about available positions. At night, a notice fixed at entrance to Harbour Master's Office indicates berths to be occupied on following day by steamers and cargo vessels. These berths must not be occupied by ocean-going yachts.

STEVEDORES: Require (if possible) 24 hours notice in advance of arrival.
MEDICAL: No port doctor. In case of emergency tel. no. 18. Ambulance and doctor on call.
FRESH WATER: Available on all quays.
FUEL: Distribution by tank lorries.
FIRE PRECAUTIONS: Town Fire Service, tel. 18 and 85.21.21.
REPAIRS: Minor engine repairs possible at local yards.
AIRPORT: 5 km. from port.
TIME: GMT plus 1 hour.
EMERGENCIES: Ambulance, tel. 18 and 85.21.21; Police, 17.
TELEPHONES: Two lines on Traverse and Commercial Quays can be connected on board on request.
AUTHORITY: 4 Quai des Docks.
AGENT: See "Paris".

PARIS

AGENTS: Enquiries relating to agency at French ports may be addressed to Jolasry (France) S.A., 14, Avenue de l'Opera, Paris, 1er. Tel. 296 1415. Telex: 210905 Paris. Cables: "Jolasry Paris".

PORT-VENDRES: 42.31 N. 03.07 E.

DOCUMENTS:
3 Crew Lists.
5 Passenger Lists.
2 Store Lists.
1 Maritime Health Declaration.
4 Cargo Manifests.
2 Bills of Lading.
Ship's Papers: Nationality Act, International Tonnage Certificate.
PILOTAGE: Three long blasts. ETA required for Agent, Pilot usually taken on outside unless in very bad weather.
MAX. SIZE: Max. length 150 m. max. draft 25-26 ft.
HEALTH: Usually Customs give free pratique. In event of suspected disease or fever on board must advise naval doctor.
RADIO: Marseille Radio (or St. Lys Radio) or Perpignan Radio.
TUGS: None available.
CRANES: 1 shore crane available only of 20 tons.
SPECIALISED CARGO-HANDLING FACILITIES: 3 roll-on/roll-off berths and 1 refrigerated warehouse 11,000 cu.m.
STEVEDORES: ETA to be given to Agent in order to arrange gangs (usual rate per day. 8 normal working hours). 200 tonnes per gang.
MEDICAL: Perpignan Hospital (30 km. away).
TANKERS: Berth for wine tankers with pipe-line.
DENSITY: Salt water.
FRESH WATER: Supplied by Chambre de Commerce, Port-Vendres.
FUEL: For small craft only, otherwise delivery by trucks.
CONSULS: Sweden.
DRY DOCK: 1 travelift for craft up to 150 tons.
SURVEYORS: Lloyds Sub Agent and Vessel's and Cargo Surveyors.
OPENING/CLOSING HATCHES: Normally to be carried out by crew (or as per charter party if any).
CARGO GEAR: Load/discharge effected by ship's gear.
GANGWAY/DECK WATCHMEN: Recommended if loading dangerous cargo.
CERTIFICATES: Load Line Certificate.
International Tonnage Certificate.
Deratisation Certificate.
CUSTOMS ALLOWANCE: See "Calais".
IDENTIFICATION CARDS: Only seamans book required.
REPAIRS: Minor repairs only.
AIRPORT: Perpignan Rivesaltes (30 km.)
TIME: Normal GMT plus 1 hour but commencing from 1976 plus 2 hours in summer.
HOLIDAYS: As for whole France – cargo work can be arranged on those days as overtime.
POLICE/AMBULANCE/FIRE: Tel. 38 00 40 or five long blasts.
SERVICES: Workshop for small repairs, radio/radar repairs available, ship chandler for bound stores, laundry.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Directeur du Port.
AGENT: See "Paris".

PROPRIANO: Corsica, 41.40 N. 08.54 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 Cargo List.
1 List of Articles (new and Customs-barred) in possession each crew member – cameras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.
PILOTAGE: Not compulsory.
ANCHORAGE: Outside port for cruise vessels.
MAX. SIZE: Draft 5 m.; length 160 m.
RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.
TUGS: None available.
STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.
CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.
FRESH WATER: Available at very slow pumping rate.
FUEL: Available.
REPAIRS/CONSULS: None.
TIME: GMT plus 1 hour.
AGENT: Lloyds Agent W. Tschumi, POB 55, Ajaccio. Tel. 21 43 39. Telex 46627. Cables: "Britishships Ajaccio".

QUIMPER-CORNIQUEL: 47.58 N. 04.07 W.

DOCUMENTS:
Crew List.
Passenger List.
Customs Documents.
Port Health Documents.
Manifest of Cargo.
Stores on Board.
Ship's Papers.
PILOTAGE: Pilot Station, tel. 910640. Contact via Le Conquet Radio or St. Nazaire Radio.
If vessel's ETA changes, telephone either the Agent or the Pilot at least 3 hours before arrival.
The pilot boat is a small black launch, white bulwarks with anchor painted on bow of each side, white cabin at the stern, one mast.
Only one Pilot on duty, but will meet ship at the time given in their ETA. Pilot boards either on the bearing 346° with Lighthouse of Benodet and du Coq in alignment, or on the bearing 000° with Lighthouses of Benodet and Combrit in alignment. Vessel should come as near as possible to the entrance, Vessels are anchored at the port entrance, or in the river, and await the tide, or proceed directly to the port.
In case of bad weather, when the Pilot may not embark vessel to follow the pilot launch on the bearing 346° up to Plage du Trez, where boarding is possible. Vessels at anchor awaiting Pilot should get under way to approach the pilot boat on the bearing 346° when they see the launch approaching.
ANCHORAGE: Depths of 11 m. in position with the Taro Tower, bearing 245°; distance 0.8 miles.
Depths of 6 m. in position with the Point of Combrit bearing 000°; distance half a mile.
Depth of 9 m., bottom sand and mud, in Du Trez anchorage at the mouth of the Odet.
RESTRICTIONS: Vessels arriving at night must anchor outside the port entrance. It is dangerous to enter the river at night as there are no lights, and the channel is restricted by yachts at anchor.
MAX. SIZE: At spring tides: length 78 m.; breadth 12 m.; draft 4.95 m. At neap tides: length 72 m.; breadth 12 m.; draft 3.40 m.
RADIO: The Port Superintendent requires 24 hours notice of arrival.
TUGS: No tugs available.
BERTHING: At one quay there is 226 m. length for coasters. One quay of 120 m. length for discharging sand. 3 cranes available.
TANKERS: There is a fuel/oil depot at Quimper-Corniquel supplied by coastal tankers from Donges. Max. draft for tankers at Quimper is 3.50 m. to 4.10 m.
FRESH WATER: 5 drinking-water hydrants situated on the quay, loading rate 12 t.p.h.
FUEL: Can be supplied by various companies from tanker lorries.
AIRPORT: Airport of Plugussan situated 5 km. from the port. 2 regular daily flights to Paris.
AUTHORITY: Ingenieur en Chef des Ponts Chaussees, Directeur Departemental de l'Equipement.
AGENT: See "Paris".

ROCHEFORT SUR MER: 45.56 N. 00.57 W.

For all general information refer to Tonnay-Charente.
MAX. SIZE: Max. permissible length: 115 m; breadth: 16 m. (ships must pass through a lock of 18 m. width).
Max. draft is 18 ft. at any tide, 21 ft. at Spring tides.
POLICE/AMBULANCE/FIRE: Police 17; Ambulance 99.40.69;
AUTHORITY: Bureau du Port.

ROUEN: 49.28 N. 01.04 E. (See Plan)

DOCUMENTS: Cargo Manifest or Manifest of Ballast, Certificate of Cargo Space. Bills of Lading. Ship's Register. 6 Crew Lists. 3 Passenger Lists. Health Declaration. Derat Certificate or Exemption. Declaration of Crew Personal Effects.
PILOTAGE: Vessels proceeding to the ports of Rouen and Honfleur are met by pilot boat on La Carosse Roads (Rade de La Carosse). Pilotage is compulsory between the mouth of the Seine and Rouen. Vessels of 55 m. length and less can be exempt from the obligation for the lower sector of the river, and vessels of 45 m. and less for the upper sector, on condition that such vessels be equipped with suitable radar, with VHF sets, and that they are not carrying dangerous goods. Each vessel taking a Pilot for the downriver stage between La Carosse Roads and Villequier, or vice-versa, and a Pilot for the upriver stage between Villequier and Rouen, or vice-versa.
The following signals should be made for summoning a Pilot on La Carosse Roads: By Day: flag "G" of the international code of

signals. By Night; in morse by signalling lamp. Failing this, the vessel should hoist her national ensign at the foremasthead.

The following additional signal can be made when arriving on La Carosse Roads: 5 prolonged blasts (– – – – –) to call attention to pilot boat.

Vessels leaving harbour or shifting berth should apply for a Pilot to the Pilotage office, 21 Avenue du Mont-Riboudet, Rouen (tel: 71-68-50)

The Rouen pilot boat keeps a telegraphic and telephonic watch during the following period of all tides: from 1 hour after low water Le Havre until 4.5 hours after high water (middle point stay tide). The watch is kept in the following manner: 1. Telegraphy: 500 kHz (600 m.) call sign FORI. 2. Telephony: 2.182 kHz (137.50 m.) frequency modulation (VHF) 156.8 mHz, Channel 16 call sign Pilot Rouen.

Since the pilot boat's watch is not permanent, Masters wishing to enter into direct contact with her are recommended to signal their position during the high water prior to that by which the vessel expects to enter the roads.

RESTRICTIONS: The height of water above chart datum at Le Havre is broadcast on Channel 11 every 10 minutes by Honfleur VHF port radar station starting 2.5 hours before, until 4 hours after, the initial point of stay tide.

PORT RADAR: A radar post situated at kilometric point 334.400 on the right bank at Radicatel operates, experimentally, as an aid to navigation between the Risle and the Aizier from 2 hours before until 2 hours after high water Le Havre.

To obtain information put out a VHF call on Channel 16 (156.800 mHz) and then switch to Channel 13 (156.450 mHz).

Information given by the port's Radicatel radar post and the Honfleur works radar, at ship's option, is extended as an aid only and implies no responsibility either to the Port Authority or its agents in any subsequent recourse to such information, which is given free of charge.

A new radar post is in construction at Honfleur and will be in operation by October 1976.

ANCHORAGE: In the outer roads at La Carosse and at several places in the river, particularly at Villequier (two-waiting berths on buoys).

MAX. SIZE: Vessels over 230 m. length have entered. Draft approximately 2.40 m. more than height of tide at Havre. Maximum about 33 ft. Port accessible to vessels of 25,000 d.w.t. fully laden and 55,000 d.w.t. partly laden. The Port Authority's objective is to accommodate ships of 35,000 d.w.t. fully laden by 1980. Ships of 250 m. can be received.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.

RADIO: Vessels are obliged to give their ETA and draft in salt water at least 5 hours before arrival to Rouen Information Centre via Brest – Le Conquet Radio or Boulogne Radio. The Port of Rouen Authority has introduced a VHF network of frequency modulation for port needs working on the following frequencies: Channel 16 (156,800 mHz); international safety and watch frequency. A permanent watch is maintained on this frequency at the Information Centre of the Port of Rouen.

Channel 11 (156,550 mHz): working frequency granted to the Port of Rouen to be used after preliminary call on Channel 16.

Channel 12 (156,600 mHz): secondary working frequency for vessels without Channel 11.

Channel 13 (156,650 mHz): reserved for traffic with the Radicatel radar station.

TUGS: Permanently available in the Port of Rouen. Tug assistance in the River Seine is available on request.

BERTHING: The main Maritime Port of Rouen extends from the Guillaume le Conquerant Bridge as far as La Bouille over a distance of 11 miles. Quays and wharves cover the length of both banks of the Seine. There are also 5 basins in direct connection with the river without the interposition of any locks;

On the Right Bank: St-Gervais docks; on the Left Bank: the Timber dock, the Rouen-Quevilly dock, the Floating Docks tidal basin, and the "Bassin aux hydrocarbures" at Petit-Couronne.

The extent of quayage in the Maritime Port is about 38,000 ft., and in the river docks 5,900 ft.

Between the downstream limits of the Port of Rouen and the sea are a number of maritime establishments serving local requirements. The most important of these, all of them managed by the Port Authority of Rouen, being the petroleum terminal at Port Jerome.

Containers: 2 container berths, max. draft 10 m. One at the Africa quay with a 25-ton crane, one at the Rouen – Quevilly dock with two 25-ton cranes and two 35-ton gantry cranes.

Roll-on/roll-off: Five berths in service of which one roll-on roll-off berth at Petit Couronne able to load or unload rolling heavy lifts up to 400 tons (max. draft: 10 m.)

Dock	*Quay*	*Facilities*	*Length* (m)	*Depth at low water* (m)
Charles Babin	SCAC	2 electric cranes 8 t (wood) Storage include 1 hectare of storage space in water (logs)	101	9
	St.-Gervais	7 wine unloading points 1 ramp—load up to to 30 t (Vehicles and paper pulp)	—	7.8
Saint-Gervais	Antilles	5 unloading "norias" for bananas	411	8.8
	Afrique	5 electric cranes 6 t; 4 cranes 8 t 1 gantry crane 25 t (containers)		
Seine	Rive Droite	5 cranes 4 t; 19 cranes 6 t; 7 wine unloading points connected with 100,000 hl wine sheds	2636	6.3/8.8
Seine River Droite (Aval)	Skalli silo	1 unloading machine for hard corn		7.3
	Paper Mill Aubry	2 cranes 3 t		7.3
	Silo Soufflet	1 loading machine for cereals 600 t/h		6.3
	Silo Levy	1 loading machine—cereals 400 t/h		10.0
	Poste 19	1 ramp—live animals only		7.5
	Poste 25	Pipelines, vegetable oils, Molasses, etc, 56,000 m^3 specialised tanks		8.8
	Poste 27	1 ramp; lateral handling (cars)		6.6
Seine	Rive Gauche	4 cranes 6 t; 10 cranes 7.5 t; 3 cranes 8 t Open storage—coal and gypsum	2343	7.0/9.8
Bassin Aux Bois	Quai de France	12 cranes 7.5 t; 2 cranes 6 t Specialised newsprint; china clay	923	7.5
	Quai Neuf	Speed of cranes for cereals: 3 cranes 150 t/h; 3 cranes 300 t/h; 1 crane 600 t/h + silo 100,000 t.	1027	8.8
Rouen-Quevilly	Rive Nord	3 machines for unloading grains		7.3
	Rive Sud	2 cranes 6 t; 5 cranes 8 t; 2 container cranes (25 t.) 2 container gantry cranes (35 t.)	1180	10.5
Seine Rive Gauche (Aval)	Maprochim	2 gantry cranes 7 t and 1 gantry-crane 10 t (Phosphates Rhone-Pouline)	220	8.8
	Cie Rouennaise de dechargement	3 gantry cranes 7.5 t (Coal)	290	8.8
	Poste 14	1 mobile crane — dangerous goods		8.0
	Poste 10	Cereal; loading speed 300 t/h linked with silo of 36, 700 t		7.5
	Petit-Couronne	2 electric cranes 4.5 t; 4 cranes 7.5 t: 3 cranes 8 t; 1 crane 6 t; 1 ramp capable of carrying 400 t for roll-on/roll-off	625	10.0
	SCAC M.R.M.	4 moving gantry cranes 7.5 t oilcake, coal, flour loading machinery for cereals 3 cranes at 400 t/h silo 40,000 t capacity	310	8.8 11.0
	SAMS	2 electric cranes 6 t; 4 cranes 5 t; 2 cranes 2 t 2 gantry cranes 8 t for woodpulp, paper wood, gypsum, bagged cereals	390	8.2
	SOGEMA	2 electric cranes 8 t; 2 cranes 6 t; 1 crane 3 t 1 gantry crane 7 t (fertilizer)	285	8.2/10
	Petit-Couronne	Refined products and Gas pipe-lines		7.5/9.5
	Appontement Jupiter	Crude oil; pipe-lines		11.1
Moulineaux	Moulineaux	1 ramp for ships—up to 30 t 1 ramp for barges (new cars)		7.5
St. Wandrille	St. Wandrille	Specialised quay for oil drilling platform	645	9.5
Radicatel Honfleur	Radicatel Honfleur	20,000 d.w.t. ships	420 122	

STEVEDORES: From Monday to Friday:

General working schedule; 0700–1100, 1300–1700, 1700–2300, with possible overtime.

Special working schedule for bulk vessels (excluding cereals) and roll-on roll-off vessels carrying cars: 0700–1100, 1300–1700, 2000–0600 with possible overtime.

On Saturday: for all ships 0700–1300 and 1300–1800.

MEDICAL: All facilities available. Vaccination certificates required if vessels coming from a North African port. Yellow fever inoculations required if vessel coming from South of parallel 30° N.

TANKERS: Petit Couronne, Shell, 3 berths for vessels up to 11 m. draft.

Port Jerome, Esso and Mobil Oil, 2 berths for vessels up to 11 m. draft.

Honfleur, 1 berth for vessels up to 9 m. draft.

Deballasting facilities available at all berths except at Honfleur.

DENSITY: Except at Honfleur, all berths are in fresh water.

FUEL: All grades available from berths or by barge.

CONSULS: The following countries are represented in Rouen: West Germany, Belgium, Denmark, Spain, Finland, Greece, Norway,

Netherlands, Portugal, Algeria, Mauritania, Senegal, Sweden, Tunisia.
WATCHMEN: Recommended to employ watchmen on board tankers and vessels handling dangerous cargo.
HATCHES: Opening and closing hatches always performed by ship's crew.
REPAIRS: All deck, engine and radio repairs can be effected.
DRY DOCKS: Two floating docks, the largest of which is 180 m. long. 25 m. wide for vessels up to 14,000 tons.
SURVEYORS: Are represented: Bureau Veritas, Lloyd's Register.
AIRPORT: Nearest Rouen-Boos. Le Havre, Octeville, 80 km. away. Paris, Orly, 120 km. away.
TIME: GMT plus 1 hour all year round.
POLICE/FIRE/AMBULANCE: Police 17; Fire 18; Ambulance 18.
TELEPHONES Can be connected on board.
IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.
HOLIDAYS: No labour available on the following days; New Year (1st January); Easter Monday; Labour Day (1st May); Ascension Day; Whit Monday; National Day (14th July); Assumption Day (15th August); All Saints' Day (1st November); Armistice Day (11th November); Christmas Day (25th December).
DEVELOPMENTS:
Dredging and embankment operations in order to accommodate by 1980 vessels of 35,000 d.w.t. fully laden in Rouen and of 60,000 d.w.t. at Port Jerome and Honfleur.
Building of a 430 m. quay at the Rouen-Quevilly dock. (76-77).
Building of a 200 m. quay at Moulineaux (77).
Building of a new dredger for the maintenance of the channel in the Seine estuary.
AUTHORITY: Port Autonome de Rouen.
AGENT: Jolasry (France), 52 Quai Gaston Boulet, Rouen. Telex 77588. Tel. 70-87-27.

ST. LOUIS DU RHONE: 43.23 N. 04.48 E.

DOCUMENTS:
1 Cargo Manifest or Manifest in Ballast.
Ship's Register.
Bills of Lading.
6 Crew Lists (8 if Spanish or U.S.S.R. or ships bound to these countries).
3 Passenger Lists.
Health Declarations.
Deratisation Certificates.
3 Bunker Supply forms.
1 Declaration of Crew Personal Effects. If on inspection articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.
PILOTAGE: Compulsory for vessels exceeding 300 tons net. Contact Pilots by Marseilles Radio or by VHF Channel 16 for calling, Channel 9 for traffic. Pilot boards 1 mile E.N.E. of the lighthouse on the jetty.
River Pilot required by vessels loading salt in the Rhone river, boards at the locks entrance to Port St. Louis basin.
ANCHORAGE: Suitable anchorage outside Port St. Louis keeping well clear of Fos channel.
RESTRICTIONS: The St. Louis Canal is 3,300 m. long and 63 m. wide, with a depth of 24 ft. 6 in. The lock has a length of 159 m., width 22 m., and depth 24 ft. 6 in.
No entrance allowed between 2100 and 0500 hrs. except in emergency, although entrance may be effected up to 2400 hrs. if ordered before 2100 hrs.
Entrance may be delayed when large tankers are proceeding in the Fos Channel.
HEALTH: Pratique given by Customs officers who board on arrival.
RADIO: Within 150 miles use Marseilles Radio FFM, otherwise St. Lys FFL.
TUGS: Four tugs available from 500 to 1,060 h.p. Ship's lines are normally used.
BERTHING:

Quays	*No. of Berths*	*Draft*
Quai Ouest	3	6.50 m.
,, Nord	2	7.50 m.
,, East	3	6.50 m.
,, Hardon	1	6.50 m.
,, de la Suisse	3	7.50 m.
,, Charles	1	7.50 m.
Oil Installations:		
Quai Shell	1	7.50 m.
,, C.R.E.	1	4.50 m.
,, Petronaphte	1	4.50 m.
,, Soterm	1	7.50 m.
,, S.A.G.A.	1	7.50 m.

STEVEDORES: Shifts are 0800–1200 hrs., 1300–1730 hrs. Saturday afternoon, Sunday and Holidays in overtime. Shifts of 0600–1200 hrs.and 1300–1900 hrs. count as a day each.
FRESH WATER: Available from hydrants on the quays at a rate of 100 t.p.h.
FUEL: Available only by barge or railcar.
AIRPORT: Marignane Airport distant 70 km.
AUTHORITIES: Port Autonome de Marseille. Capitainerie de Port St. Louis (Harbour Master).

ST. MALO: 48.39 N. 02.02 W.; ST. SERVAN: 48.38 N. 02.01 W. (See Plan)

DOCUMENTS:
Ship's Register.
Store List in duplicate (ship's stores).
Crew Declaration of Bonded Stores.
Health Declaration.
Manifests and B/Ls.
Crew List (duplicate).
Passenger List (duplicate, if necessary).
PILOTAGE: (1) During tidal hours, 2 hours before and after high water, vessels may enter into direct contact with the Pilots on VHF Channel 12. Call Sign "Pilot St. Malo".
(2) Outside tidal hours and during working hours, vessels may call the Port Office on VHF Channel 12. Call sign "Pilot Office – St. Malo'.
When waiting for the Pilot, vessels anchor near the land buoy and report their arrival to the Port Office.
In good weather, the Pilot boards near the "Shore-buoy". In bad weather when the wind is from N.E. or N.W. the Pilot may guide the vessel as far as Dinard Roads, where the Pilot will come aboard.
Pilot Cutters: One cutter 42 ft. 6 in. fitted with radar, relief cutter 36 ft. both fitted with radio-telephone and VHF Channels 8, 12 and 16.
ANCHORAGE: Large vessels with draft greater than 13 m. anchor by the land-buoy. Smaller vessels may anchor in St. Malo Roads, there is sufficient swinging room for vessels with draft of 7 m. It is recommended to use a Pilot to come into this anchorage.
RESTRICTIONS: Vessels are allowed to enter from 2 hours before to 2 hours after high water. To be certain of mooring, vessels should arrive at the lock at least 1 hour before high water.
Depth available 20 to 22 ft. at spring tides.
No movements during foggy weather. Large vessels (length greater than 100 m.) approach the lock at high-tide. Tankers lock in by themselves. Movements are carried out day and night.
MAX. SIZE: The height of the tide, the length of the lock and width of the channel must be taken into account.
Cargo Vessels. Length 150 m. (492 ft.), beam 20 m. (65 ft. 6 in.), draft for vessels length 135–150 m., height of tide less 2.5 m. Less than 135 m. LOA: Rise of tide. 2 tugs required.
Tankers: Length 147.50 m. (443 ft.), beam 20 m. (65.6 ft.), draft see *"Cargo Vessels"*. 2 tugs required if vessel not fitted with bow-thrust.
HEALTH: Customs Officers are appointed as Health Officers and deliver pratique. In case of suspect disease, Masters must declare it at once by radio to their Agents who will contact authorities.
RADIO: Vessels coming from West use Brest le Conquest Radio, call letters FFU. Vessels coming from North should go through Boulogne Radio, call FFB.
VHF:
(a) Port Office – Channel 12; tidal hours and working days.
(b) Pilot – Channels 6, 12 and 16, when awaiting a vessel.
(c) Tugs – Channels 6, 12 and 16, at the time of high tide.
Vessels call Pilot and tugs on 12 or 16 and change to Channels 6 or 8 for working.
TUGS: Two tugs are available at St. Malo. Usually joins vessel at the end of breakwater. Ship's lines are usually used.
BRIDGES: Can be passed during tide vacation, otherwise, notice required to open.
BERTHING:
Basin Duguay Trouin, length 1,870 m. Bassin Varebon, length 1,100 m. Bassin Bouvet, length 750 m. Duguay Trouin and Bouvet Docks: 140 m. long, 16.50 m. breadth. Vauban dock: 140 m. long, 22 m. breadth.
2 new quays in Vauban Dock, (1) Quai Des Corsaires, length 185 m. 2 cranes on rails. Capacity 12 tons at 14 m. Quay used for general cargo.
(2) Tanker quay, extension of Quai Des Corsaires, length 130 m. Diameter of discharge pipe 200 mm., one mobile arm, vessels to supply reducers. Max. discharge rate, 500 cu.m./hour.
TANKERS: Also see "Berthing".
No deballasting facilities. Tankers wishing to effect repairs must leave port and wash out their tanks and obtain a gas-free certificate.
On completion of operations tankers must leave on the next tide. If a second tanker is waiting to berth she must wait in the roads.
Safety instructions are issued when the vessel passes through the locks.
BERTH ALLOCATION: Dependent upon goods to be discharged and characteristics of vessel. Bearing in mind the widths of the channels, their depth and dimensions at the foot of the quays, the height of the dock which varies on average between 11 m. and 12.5 m.
The largest vessels tie up at Quai Des Corsaires.
It is recommended that an advance notice be sent to the Port Office 15 days prior to arrival, so that the vessel may be received under the best possible conditions.
STEVEDORES: In order to have workers ready on arrival, Masters are kindly requested to give as accurate as possible ETA the day before arrival, especially if there are many ships discharging at same time.
Normal working hours 0800-1200 and 1400-1800 from Monday to Saturday, except holidays. There is no night overtime. Dispensations may be made to finish a vessel so that she may catch the tide.
Rate of discharge dependent on type of goods involved.

MEDICAL: A little notice is better to obtain an appointment with doctors or dentists. Hospital service is available.
DENSITY: Average density is 1010.
FRESH WATER: Can be delivered from quay.
FUEL: Bunkers delivered at St. Malo (with notice varying, depending on the Company – Shell 2 days, Esso 1 week, etc.) come from Donges by road lorries and cost of haulage is supported by the ship (expensive). D.O. can be obtained from local suppliers but out of contract.
FIRE PRECAUTIONS: Usual non-smoking precaution (a watchman is compulsory for tankers).
DEVELOPMENTS: A new quay for car ferries in operation 1976.
GANGWAY/DECK WATCHMEN: Watchmen are not compulsory except for tankers.
OPENING/CLOSING HATCHES: This work is normally carried out by crew. Stevedores' cranes may help for the beams, but dockers will not touch them.
CERTIFICATES: As per International Conventions, all Safety Certificates, Load line, Radio, etc.
CUSTOMS ALLOWANCES: 200 cigarettes, or 200 grams of tobacco, and 1 bottle of spirit per crew member.
IDENTIFICATION CARDS: Crew members must have an identification card on their sailor's book when going ashore.
CONSULS:

Netherlands		56.07.21/22.
Denmark	(Vice-consul)	56.07.21/22.
Norway		56.07.21/22.
Finland	(Vice-consul)	56.31.57.

REPAIRS: Deck and engine repairs can be carried out by shipyard or workshops. Electricians are also available. RAMAC Agency can repair radars and radios, also Radio-Ocean agency.
DRY DOCKS: One dry dock. Max. length admissible 120 m., breadth 16 m. One slipway, 500 tons. Length admissible 45 m., breadth 9 m. With sufficient notice.
REPATRIATION: Can be effected from St. Malo by train up to Paris, and then by plane or train.
AIRPORTS: 8 miles from port. Wintertime, 4 services to Jersey (C.I.), with correspondence to England and Wales. Summertime, several times per day to Jersey, London, and on week-ends to Paris.
TIME: Local time is GMT plus 1 hour. No alterations to clocks.
HOLIDAYS: French legal holidays. Cargo work may be carried out, but arrangements must be made with stevedores.
POLICE/AMBULANCE/FIRE: Police, 40.85.80 and 17; Ambulance and Fire, 18.
TELEPHONES: No telephones on the quays.
DELAYS: Berthing delay will only be due to tide. For loading or discharging, it depends what kind of cargo is handled.
SERVICES: Compass adjusting, radar or radio adjusting can be carried out.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Commandant du Port.
AGENT: See "Paris".

ST. NAZAIRE: 47.17 N. 02.12 W. (See Plan)

DOCUMENTS:
Cargo Manifest or Manifest of Ballast.
Certificate of Cargo space.
Bills of Lading.
Ship's Register.
6 Crew lists.
3 Passenger lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of crew personal effects.
PILOTAGE: Compulsory for vessels longer than 225 ft. owning radar/VHF. Starts about 4 miles north of lighthouse of Le Pilier, on lightbuoy SN 3. Pilot boat on station day and night, if weather conditions permit, West of a line drawn between SN 3 lightbuoy and lightbuoy of "La Couronnee" about 2 miles N.N.E. If Pilot unable to come aboard he may invite ship to follow his boat until they have reached a better shelter. Ships heading for one of Loire estuary ports should give ETA at least 24 hours ahead to Port Captain of Saint-Nazaire. Approximate time of arrival at SN 3 buoy, the further destination and speed should be given. VHF contact can be made direct with St. Nazaire pilot boat or "Estuaire de la Loire" Pilot station.
ANCHORAGE: When pilot service withdrawn, anchor near SN 3 lightbuoy or in "Rade des Charpentiers". In rough sea ships heave to off-harbour. In case of doubt contact pilot boat by VHF or phone. Sometimes Pilot taken aboard on SN 3 is relayed by another who will board near the outer port of St. Nazaire to bring ship upstream.
MAX. SIZE: Max. length 11,610 ft., breadth 164 ft., draft 30 ft. 6 in. Entrance by L. Joubert lock. 2 other locks available – length of 173 ft. to 692 ft.
RADIO: Stations at: St. Nazaire; Brest-le Conquet, and Bordeaux-Arcachon.
HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive Free Pratique, Master should radio Agent before arrival, advising full details.
TUGS: Tugs are provided by "Union des Remorqueurs de l'Ocean" at St. Nazaire; also "Les Abeilles" at Nantes.
BERTHING: Tidal basin with 8,680 ft. of public docks.
STEVEDORES: Available.
MEDICAL: Facilities available at any time.
FRESH WATER: Available on docks.
FUEL: Available in any grade of viscosity. Advance notice of at least 2 days must be given if vessel has to bunker on Saturday or Sunday. Otherwise, delivery within 36 hours by barge.
FIRE PRECAUTIONS: Usual precautions for tankers in neighbourhood of refineries; no fire, no smoking. Ground wire for ship.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Done by crew.
IDENTIFICATION CARDS: Not needed.
CONSULS:

Algeria	tel.	74.38.19
Belgium	,,	71.57.10
Brazil	,,	71.87.33
Denmark	,,	22.41.46 and 46.31.50
Finland	,,	75.53.08
German Fed. Republic	,,	71.93.18
Greece	,,	73.46.13
Holland	,,	71.16.31
Norway	,,	22.51.12 and 21.33.35
Portugal	,,	73.05.04
Spain	,,	71.59.53
Sweden	,,	71.87.31
Switzerland	,,	71.82.11
Tunisia	,,	71.10.52
Great Britain	,,	76.89.87

REPAIRS: Very good facilities exist for all types repair work.
DRY DOCKS: Shipyards for large vessels at St. Nazaire.
AIRPORT: Nantes: Good connections with French internal network (Air Interin and also international mainly with stop-over Paris). 5 daily flights to the capital. Direct flights to Bordeaux, Lorient, La Rochelle, Lyons, etc., St. Nazaire: 2 daily flights to Paris.
TIME: Paris time GMT plus 1 hour; seasonal alteration.
HOLIDAYS: New Year (1st January no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.
POLICE/FIRE/AMBULANCE: Police, 17; Fire, 18; Ambulance, 18.
TELEPHONE: Arrangements are possible.
SHORE LEAVE: No restrictions.
AUTHORITY: Port Autonome de Nantes-St. Nazaire.
AGENT: Jolasry (France), 44, Boulevard Paul-Leferme, Saint Nazaire. Telex: 71931. Tel. 70-01-18.

SETE: 43.24 N. 03.42 E. (See Plan)

PORT LIMITS: The seaward boundaries of the Port within which a vessel is considered to be an "arrived vessel" are indicated as follows: To the South by a line with the red light of Eastward end of breakwater bearing 257°; to the East by a line with the church tower of Frontignan bearing 005° ; to the North by coastline.

A second zone is a circle of 1 mile radius centered on a point located on the bearing 298° and at 3.2 nautical mile from Eastward end (Red Light) of breakwater. This zone is connected from a landing buoy by a channel 200 m. wide steering 321°.This area and channel are only for big tankers from 100,000 tons up to 270,000 tons which operate at buoy IMODCO Single Point Mooring System.
DOCUMENTS:
Cargo Manifest or Manifest of Ballast.
Certificate of Cargo space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration, eventually vaccination list.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.
2 Provision Lists.
PILOTAGE: Request Pilot by international signals (sound, flags, light signals) or telephone through Marseilles Radio or VHF by Sete Radio Channel 16, tel. 74.34.06. Description of pilot boats; cutters with black hull, white band, white anchor on hull at bow. Pilot embarks between 1 and 2 miles South of breakwater in good weather. In bad weather he embarks in the shelter of l'Epi Delon. In this case make prior contact by radio or VHF (Marseille or Sete Radio) or Port Office VHF Channel 12. In bad weather, provide a ladder on each side.
ANCHORAGE: In roads from 0.5 mile to 1 mile to South of breakwater. (See "Port Limits" and "Tankers").
RESTRICTIONS: *Commercial Harbour:* In the Canal Maritime, length max. 145 m., breadth 20 m., draft 23 ft.

In the Bassin a Petroles, max. length 140 m., draft 33 ft. except to the new petroleum pier for tankers up to 30,000 d.w.t., max. length 225 m., draft 11 m.
MAX. SIZE: *Sea Line Frontignan:* South Berth: S.B.M. Tankers 270,000 d.w.t. draft 21 m. (69 ft.).

North Berth: C.B.M. Tankers up to 100,000 d.w.t. draft 13.1 m. (43 ft.).

Bassin a Petrole: New Berth Tankers 30,000 d.w.t. draft 11 m. (36 ft.).

New dock for ore carriers 210 m. length; 10.4 m. draft (34 ft.)

Commercial Harbour up to 8.5 m. draft (28 ft.).

Commercial Harbour in the Canal Maritime: max. length 140 m; breadth 20 m., draft 7 m. (23 ft.).

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive Free Pratique, Master should radio Agent before arrival, advising full details.

RADIO: Marseille or Sete Radio VHF Channel 21 or 25, Port Office Channel 12.

TUGS: Tow line to be furnished by ships. Vessels taken in tow near the breakwaters on the North side.

BERTHING: Commercial Harbour Avant-Port, Nouveau Bassin, Bassin Orsetti depths 8 – 9 m.

Canal Maritime, Bassin du Midi, Canal lateral, Chenal du Bassin de Thau: Depth 7 m. New Dock; 3 berths of 150 m., depth in approach channel and alongside the South berth: 11 m., Central and North berth: depth 10.4 m.

CARGO HANDLING FACILITIES: New Dock: Berth No. 1 (Southward) and No. 2 (Centre) berth specialised in ore: Berth No. 3 (Northward) specialised in general cargo and timber and roll-on/roll-off ships. Orsetti Dock South Quay: general cargo and a berth roll-on/roll-off for early fruit and general cargo. North Quay specialised in phosphate and 1 roll-on/roll-off berth. Mole Masselin West side specialised in grain with a silo on the quay, and to lighten ore carriers. Nouveau Bassin: Quay of Morocco: a car ferry station to Morocco. Bassin du Midi: South quay for general cargo, a berth roll-on/roll-off. North quay: berths specialised in ore and coal; berth No. 20 general cargo.

TANKERS: Frontignan Sea Line Terminal North berth (C.B.M.) 1 berth for tankers up to 100,000 d.w.t. draft 13.1 m. (43 ft.). Two 12-in. hoses for crude oil discharge. Submarine pipe-line 28 in. diameter. Commerial Port: 1 berth for tankers up to 30,000 d.w.t. draft 11 m. (36 ft.). 1 old berth for tankers up to 140 m. length or 10,000 d.w.t., draft 10.1 m. (33 ft.). Slop disposal facilities available up to 1,000 cu. m. per hour.

Frontignan Sea Line Terminal (South berth) Mobil SBM.

Operator: Mobil Oil Francaise.

Position: 43° 22′ 12″ N. 03° 46′ 49″ E.

Restrictions: Least depth of water 92.5 ft.

Max. Size: No limit on length and beam. Max. draft 69 ft.

Pipe-line: Length, 26,000 ft. Diameter 44 in.

Hoses: 2×16 in. Bow to manifold distance should not exceed 600 ft. Connections port-side.

Max. Pressure: 125 p.s.i. at rail.

Pumping Rates: 8,500 t.p.h.

Density: 1026.

Fresh water: Not available.

Fuel: Bunker "C" available by barge, capacity 900 tons. D.O. not available.

Ballast: No facilities for receiving dirty ballast.

Vessels up to 50,000 d.w.t. normally berth at spread mooring.

Regulations and Information: When scheduled to discharge at SBM Master will receive the following standard message from Mobiltrans Ny: "Your vessel will discharge at Frontignan SBM. located 43° 22′ 12″ N. 3° 46′ 49″ E. stop 4 days prior arrival radio your Agent your ETA SETE contact "Sete Port Office" on VHF Channel 12 approximately 30 miles range advising your ETA to entrance buoy located 43° 14′ 55″ N. 3° 53′ 40″ E. Only when authorisation is granted by "Sete Port Office" you may proceed to SBM on *compulsory* route on course 326 degrees extending 500 m. each side of line joining approach buoy to SBM. When proceeding on compulsory route your vessel shall exhibit additional marks by day 3 black shapes in a vertical line the highest and lowest 1 ball the middle 1 diamond every one spaced by 1.5 m. stop by night 3 all-round lights in a vertical line the highest and lowest red the middle white every one spaced by 2 m. stop. Pilot will board approximately 3 miles seawards from SBM on compulsory route".

Your Agents will forward the following cable: "Advise ETA type size your manifold flanges whether suitable reducers available and Smit's Bracket fitted on forecastle stop Boom to lift 16 in. ID floating hose and two 16 in. 150 ANSI standard flanges ready on portside. On forecastle have 2 polypropylene 8 in. messengers 150 fathom ready. Accommodation ladder on starboard and boat ropes each side."

The "approach buoy" referred to in para 1, is located in 43° 14′ 55″ N. 3° 53′ 40″ E. having the following characteristics: 3 m. diameter – 7 m. height mast painted with vertical strip white and red with 2 crosswise shapes, with a white light 4 flashes every 12 seconds. Proceeding inshore of this buoy and inside the 12 mile line is not allowed without prior authorisation granted by "Sete Port Office" on VHF Channel 12.

An approach channel exists between the approach buoy and the SBM extending 500 m. each side of a line joining the approach buoy to SBM and must be used as a compulsory route on a course of 326°. Same compulsory route applies for outgoing tankers leaving the SBM.

When proceeding in the approach channel the vessel shall exhibit in addition to the normal navigation signals: *by day:* 3 black shapes in a vertical line the highest and lowest 1 ball, the middle one a diamond – every one spaced by 1.5 m. *By night:* 3 all-round lights in a vertical line, the highest and lowest red, the middle one white, every one spaced by 2 m.

The Pilot boards incoming tankers and leaves outgoing tankers approximately 3 miles seawards from SBM on the compulsory route. He will stay on board during the period the vessel remains secured to the SBM.

Vessels scheduled to discharge at the SBM or departing from it are only permitted to transit the channel between the SBM and approach buoy during certain hours as follows: From May 1 to October 31 (0800–2100). From November 1 to April 30 (0800–0300). Entrance is permitted from Saturday 0800 to Sunday 2100 all the year. It is stressed that the "Sete Port Office" shall grant the necessary authorisation to proceed inshore of the approach buoy irrespective of their time of arrival at the approach buoy.

Every vessel proceeding to or departing from the SBM which requires to anchor should use the following anchorage areas:

Anchorage A – Vessels with less than 15 m. (49 ft.) draft should anchor in the area bounded in the North by the breakwater, and in the East and West by meridian passing through the extremities of the breakwater, and in the South by the 20 m. (65.7 ft.) contour.

Anchorage B – Vessels having a draft of greater than 15 m. (49 ft.) should anchor in the Southern semicircle around the SBM extending between 400 m. (1,310 ft.) and 1,850 m. (6,000 ft.) from the SBM.

When a vessel is proceeding to the SBM a Marine Superintendent and a mooring team will board. Then anchors should be secured and cable pawls in the down position, deck scuppers must be plugged tight and VHF on standby on Channel 12.

Throughout the period the vessel remains at the SBM the engine should be ready and power available on deck winches and windlass.

Adequate deck lighting must be available at night, and a constant fo'c'sle watch kept on the SBM.

Propeller r.p.m. must be kept to a minimum. Intermediate ballasting may be required in order to prevent excessive strain on moorings.

While weather operational limits will depend on circumstances port regulations specify the following criteria: Vessel must cease discharge when wind is 30 knots, significant wave height 8 ft. (assumed current 2 knots) vessel must leave berth when wind is 45 knots and significant wave height is 18 ft.

FRESH WATER: Available on most quays or by lighter of 140 tons capacity.

FUEL: All qualities available subject to advance notice given.

REPAIRS: Handled by Scotto et Repetto: 5 slipways for handling and repair, Mechanical workshops, General repairs.

Terrin et Claverie, Mechanical workshop for heavy repairs, and boiler repairs.

Affre, General repairs.

CONSULS:

Denmark	tel. 74.30.20.	Norway	tel. 74.31.83.
Finland	tel. 74.25.72.	Sweden	tel. 74.28.87.
Netherlands	tel. 74.25.72.		

Others at Marseilles.

WATCHMEN: Service necessary for ships loading or unloading dangerous merchandise. Optional for other ships.

CUSTOMS ALLOWANCES: 40 grammes tobacco per day per man (calculated in accordance with the length of voyage undertaken by the ship). Amount of alcohol fixed by Customs in accordance with the crew, and length of ship's stay in port. It is a matter of tolerance and not of right.

REPATRIATION: Repatriation and crew changes are easily arranged.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

TIME: GMT plus 1 hour – alteration from end of March to end of September to GMT plus 2 hours.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); St. Louis Day (Monday, no labour available); All Saints Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available).

N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

AUTHORITY: Commandant du Port de Sete.

AGENT: See "Paris."

STRASBOURG: 48.34 N. 07.42 E.

PORT LIMITS: In Strasbourg (Lat. 48° 34′ N., Long. 7° 42′ E.), the Port Autonome extends from the Km. 285 to the Km. 297 upon the Rhine, occupying a superficy of 1093ha., of which 234ha. are water areas including 14 docks (6 have a constant level, 8 a variable level), and 2 fore-harbours.

Out of these limits, the Port Automome de Strasbourg includes 8 branches designed for the handling of building materials, and 2 ports, Marckolsheim (at Km. 242) and Lauterbourg (at Km. 349), all the branches and ports being on the left bank of the Rhine.

DOCUMENTS: The ships must hold some documents, which they have to keep at disposal of the administration or the inspection authority when required, as following:

Certificate of Survey.

Certificate of Tonnage.

Certificate of Registration.

Log-Book.

Booklet of Verification of the used oils.
Attestation for Equipments of liquified gases.
Customs Documents for the carriage of goods.
Fluvial Bill of Lading.
Rhine Manifest.
Certificate of Ability to steer the ship.
Police Regulation for the Navigation on Rhine.
A.D.N.R., regulation for carriage of dangerous goods.
the documents relating to the boilers and other tanks under pression.

PILOTAGE: The pilotage is not compulsory on the Rhine and usually the Masters do not ask for a Pilot except for Gebirge and the Haut-Rhin. A Pilot can be obtained in the port of Kehl by dialling the number 19 — 49.7851.20.70.

ANCHORAGE: The ships have at disposal an area of about 10ha. in the North and South fore-harbours to take anchorage. Minimum depth of water: 3.2 m.

RESTRICTIONS: Restrictions to navigation are to be published in the Advices to the Nautical Corporation of the Inland Water Transport.

MAX. SIZE: The max. sizes of ships allowed on the Rhine are as follows: Length: 110 m., — breadth: 11.4 m. The ships of Rhine do not exceed a draft of 4.0 m.

Dimensions of the locks: — North lock: length 125 m., breadth: 13.5 m., South lock: length 125 m., breadth: 13.5 m.

In the constant level docks, the max. water depth allowed is 3.2 m., but only along the North — South axis of the port; if not there, the water depth is 2,5 m.

In the variable level docks, which are the docks with a direct communication with the Rhine, the max. depth is 4.0 m.

These depths are given, the Rhine being supposed at its lowest bench-mark: 135 m.

HEALTH: There is no Health Service for the fluvial navigation on Rhine.

RADIO: All communications on the Rhine are performed by radio-link and radiotelephony:

VHF Channels 10 and 13: used for ship to ship communications.

VHF Channels 20 and 22: used for transmitting of nautical advice in the way shore-ship and in the reverse order.

VHF Channels 24, 25, 26 and 27: used for public communications.

RADAR: There is no radar station on shore.

TUGS: The Port Autonome de Strasbourg put at disposal of customers four tugs and one 600 C.V. pusher according to their needs.

BERTHING: 10 km. of quays can be used for mooring. Some of these quays are situated in the constant level docks (max. draft 2.5 m.), some are in the docks that link with the Rhine (max. draft 4.0 m.). Tankers berth only in the Oil Dock Harbour.

BULK CARGO FACILITIES: — with grain elevators: 2 berths for loading, and 2 berths for discharging.

Loading of gravel on the Rhine by belt-conveyors (8 facilities).

Loading and unloading of hydrocarbons in the Oil Dock Harbour by 14 facilities operating each at the rate of 300 cu.m./hr.

SPECIALISED CARGO-HANDLING FACILITIES: Containers up to 40 metric tons; heavy packages up to 300 metric tons..

The two operations are carried out at the mooring berth named "Colis Lourds" (heavy packages) and utilise a length of 180 m. of quay.

BRIDGES: The head room under the bridges reach 8.8 m. in the constant level docks.

MEDICAL: Civil Hospital, I, place de l'Hopital, 67000 Strasbourg, tel. 36.71.11.

DENSITY: The density of water is about 1000.

FRESH WATER: Fresh water is supplied by Ets. Koejac, tel. 61.26.78.

FUEL: Bunkering can be arranged with the m/s *Robertsau*, Antar Company, tel. 61.2821.

CONSULATES:

West Germany:	(88)32.61.86.
Belgium:	(88)35.43.63
Great Britain:	(88)36.64.91
U.S.A.:	(88)35.31.04
Netherlands:	(88)61.93.67
Switzerland:	(88)35.15.17
Austria:	(88)35.13.94
Poland:	(88)61.38.00

REPAIRS — SLIP: All the repairs can be carried out at: Forges de Strasbourg — Scar, tel. 34.68.00. 101, rue du Rhin Napoleon, 67100 Strasbourg.

Any vessel capable of using the port can use the Forge-de Strasbourg slip.

SURVEYORS: Surveyors of the Commission de Visite, named by the Commission Centrale pour la Navigation du Rhin, can be obtained by the Captain.

WATCHMEN: Ship's crew, if required.

OPENING/CLOSING OF HATCHES: Opening and closing of the hatches are performed by the crew or by the staff of the company freighting the ship, as any other handling. Dockers do not exist in the port of Strasbourg.

REPATRIATION: All the facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORTS: Distances from Strasbourg: Strasbourg-Entzheim: 15 km. Strasbourg-Mulhouse: 130 km. (airport Muljouse Bale). Strasbourg-Francfort: 220 km.

HOLIDAYS: Work is stopped during the weekends and the statutory holidays. Labour can be obtained on these days if necessary.

POLICE/AMBULANCE/FIRE: Police: 17 — Ambulance: 33.33.33 — Firemen: 18.

TELEPHONES: Office of the P et T, 5, rue du Port du Rhin, 67000 Strasbourg. In case of emergency: La Capitainerie du Port, 5, rue du Port du Rhin – North Lock of the Port, quai Jacoutot, can be contacted at any time. Tel. 32.49.15.

SERVICES: For the ship: Tank cleaning: SPIRS, 14, rue de Rouen, 67000 Strasbourg, tel. 61.40.45

Supplying of material: Koejac, quai des Belges, 67000 Strasbourg, tel. 61.26.78.

Electronic repairs or supplies: Radio-Metzger, 17, rue de Dunkerque, 67000 Strasbourg, tel. 35.45.42.

For the crew and various formalities (customs): La Capitainerie du Port, 5 rue du Port-du-Rhin, 67000 Strasbourg, tel. 32.49.15.

SHORE LEAVE: The Master must introduce himself, within the 2 hours following his arrival, to the Commissariat Special du Port, 5 rue du Port du Rhin, 67000 Strasbourg, and produce the passports of the crew. The passenger ships have to comply with the regular supervision of authority. Each member of crew must be holder of an identification card or a passport when he is ashore.

REGULATION: The Reglement Particulier de Police du Port are very helpful to the Master and let him know the particulars of the Port of Strasbourg.

DELAYS: The commercial operations begin and finish at the dates and hours shown upon the fluvial bill of lading. Every delay is subject to the payment of penalties. Except for the passenger ships, ships do not give notice of their arrival to the authority, before they enter into the port.

TONNAY CHARENTE: 45.57 N. 00.53 W.

DOCUMENTS:

2 copies Crew List.
2 copies Ship's Stores Lists.
2 copies Crew Manifests (Tobacco List).
2 copies Passenger List (if any).
1 Declaration of Ballast.
Manifest form Last Port.
1 copy Bill of Lading (in case of any cargo to be landed).
Ship Register to be shown.
Deratisation Certificate or Exemption.

PILOTAGE/ANCHORAGE: Vessels have to proceed to about half a mile S.S.W. Isle of Aix Lighthouse and to drop anchor in the No. 115 alignment when safe anchorage is open (lowest tides; minimum depth of water 26 ft.).

River Pilot joins ships there, about 3 to 1 hour before high water, depending on draft and size of vessel concerned.

Pilot boat is equipped with VHF.

RESTRICTIONS: As the River Charente is unlighted, movements are not possible at night. However, vessels may leave anchorage in dark and come up river at daybreak (anchorage area is about 5.5 miles from the mouth of the river).

MAX. SIZE: Max. permissible LOA about 378 ft.; max. permissible draft about 18 ft. 6 in. at any tide; max. permissible draft 21 ft. 6 in. at spring tides.

HEALTH: Free pratique is to be obtained on arrival at port. Usual yellow flag signal to be raised.

RADIO: Ships coming from South: Bordeaux-Arcachon Radio Station. Ships coming from North: Saint-Nazaire or Brest le Conquet Radio Stations.

VHF: No continuous listening out at the port. Nevertheless, vessels coming into the Roads can call up a correspondent by phone through La Rochelle – Radio – Channel 26.

TUGS: No tug is available. In case of need, tug may be obtained from La Rochelle-Pallice (about 20 miles).

BERTHING: 1 private berth for grain loading, which can take vessels up to 100 m. length. 1 berth 200 m. long for handling general cargo. 3 waiting berths. The central waiting berth can be used for handling small cargoes from 500 to 1,000 tonnes. Depth of water along the quays is an average of 6 m.

CRANES: 2 × 5 tonne cranes. 2 × 3 tonne cranes. 1 mobile crane of 5 tonnes. All the cranes are capable of working with hooks or scoops.

BRIDGES: The Rochefort Bridge clearance over highest water is about 98 ft. (30 m.).

STEVEDORES: A 24-hour notice is required in order to arrange loading/unloading operations.

Discharge rates: Coal – about 1,200 tons per day of 8 hours' work.
Phosphates – about 1,500 tons per day
Zinc concentrates – about 1,400 tons per day.
Loading rates: Grain 2,000/2,500 tons per day.

OPENING/CLOSING HATCHES: This work is the responsibility of the crew.

MEDICAL: The nearest hospital is at Rochefort (about 4 miles).

FRESH WATER: Fresh water may be obtained alongside, from hydrants, at the rate of about 10 t.p.h.

FUEL: Must be obtained from La Pallice (about 20 miles) by lorries.

REPAIRS: Small repairs may be carried out by local workshops. Nearest shipyard is at La Pallice.

REPATRIATION: Changing crew and necessary repatriation formalities may be effected.

AIRPORT: The nearest airport is Bordeaux Merignac (about 100 miles). Possible to reach Paris airports in a a few hours by train.

POLICE/AMBULANCE/FIRE: Police: Rochefort H.Q. – Tel. 17; Tonnay-Charente Gendarmerie: Tel. 88.20.38; Ambulance: Tel. 99.30.69; Fire: Tel. 18 or 88.20.38.

AUTHORITY: Harbour Master.

AGENT: See "Paris."

TOULON: 43.07 N. 05.55 E.

DOCUMENTS:
Cargo Manifest or Manifest of Ballast.
Certificate of Cargo Space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.

PILOTAGE: Pilot station is situated on President Fournel Quay, telegraphic address; Capitainerie de Port de Commerce, Toulon. Pilotage compulsory for vessels over 150 g.r.t. Pilot boards 100 m. North of the semaphore station at Cap Cepet.

There are 3 mooring buoys in the Inner Harbour owned by the Navy. The buoys can be utilised by merchant ships on request and are able to accommodate vessels up to 30,000 tons displacement.

RESTRICTIONS: Entry can be made by day and night except for vessels loading with refined petroleum or dangerous cargoes which are not allowed to enter between sunset and sunrise.

MAX. SIZE: The port is approached by a channel 125 m. wide. The docks can accommodate without tug assistance ships up to 250 m. length and 8.80 m. draft.

Renovation and reconstruction work is being carried out, after which passenger vessels of over 300 m. length and cargo vessels of up to 11 m. draft will be accommodated.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.

TUGS: Naval Tugs. There are many harbour tugs up to 1,000 h.p. and several deep sea tugs up to 2,000 h.p. controlled by the French Navy which may be called on for assistance by the Harbour Master or Pilots.

Commercial Tugs. 2 tugs of 180 h.p. owned by the Port Authority are used to assist smaller vessels.

BERTHING: President Fournel Quay, 335 m. length, depth alongside 9 m.

East Quay, 193 m. length, depth alongside 8.50 m.

Minerve Quay, length 147 m., depth alongside 7 m.

TANKERS: Tankers discharge at naval installations at Milhaud and Lazaret.

Total Terminal. 1 jetty berth for tankers up to 6 m. draft, and a buoy berth for vessels up to 15,000 tons displacement.

Societe de la Raffinerie du Midi. 1 dolphin berth for white oil cargo only.

STEVEDORES: There is a permanent working force of 40 dockers which can be increased by casual labour to 120 men if required. Shifts are available for 4 hours, 8 hours or 9 hours with possibilities for overtime.

FUEL: Only available by tanker lorries.

REPAIRS: Forges et Chantiers de la Mediterranee, Shipyard specialising in naval construction. Total length of repair quays 835 m. Heavy-lifting facilities available.

All types of repairs can be carried out at the Naval Dockyard.

DRY DOCKS: Several dry docks available in the Naval Dockyard, of which 3 can accommodate vessels in excess of 250 m. length.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

TIME: GMT plus 1 hour – no alterations.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

AUTHORITY: Direction Departmentale de l'Equipment, Etablissement Maritime de Toulon.

AGENT: See "Paris".

TROUVILLE-DEAUVILLE: 49.23 N. 00.05 E.

The port situated on mouth of River Touques, is composed of 2 parts: Trouville for small fishing vessels, and Deauville including 2 docks for cargo ships and pleasure boats.

DOCUMENTS:
1 Crew List.
1 Passenger List.
Tonnage Certificate.
2 Cargo Manifests.
Bills of Lading.
1 Crew Manifest.

PILOTAGE: Pilot must be requested 12 hours in advance to Harbour Master or Agent, for a determined tide, giving dimensions of length and draft. Pilot vessel is fishing-boat showing international lights or "P" flag. Anchorage for vessels awaiting Pilot is situated 2 miles by 310° true from entrance (49° 23′ 30″ N. 0° 01′ E.).

In case of bad weather, it is recommended to anchor near the pilot boat of Rouen and contact her by VHF for instructions.

ANCHORAGE: The best one is Rade de la Carosse (49° 27′ 30″ N. 0° 01′ E.).

RESTRICTIONS: No restrictions at night time. Draft allowed 10 ft. neap tides, 14 ft. spring tides, Entrance is dangerous with wind from N.W. to N. over force 6.

MAX. SIZE: Length: 210 ft. (64 m. OA); breadth: 45 ft.

RADIO: Radio-Boulogne FFB.

TUGS: No tugs available.

STEVEDORES: Loading and discharge by shore crane.

MEDICAL: All hospital facilities available.

DENSITY: 1025.

FRESH WATER: Available from quay.

FUEL: Small quantity by tank-lorry on demand.

CONSULS: See "Caen" or "Le Havre".

REPAIRS: Small repairs only.

AIRPORT: Deuville St. Gaitien 3 miles away.

AUTHORITY: Commandant du Port.

AGENT: See "Paris."

NOTES

Please also advise Shipping Guides (Services) Ltd.

French Antilles

POINTE-A-PITRE, Guadeloupe: 16.13 N. 61.32 W.

DOCUMENTS:
6 Manifests. See (a).
6 Crew Lists.
3 Stores Lists.
3 Crew Declaration. See (b).
6 Passenger Lists.
4 Declaration of Health.
2 Bills of Lading.
1 Clearance from Last Port.
6 Entrance Declaration.

(a) In addition, 2 sets of Manifests must be airmailed to arrive 72 hours before arrival in Pointe-a-Pitre.

(b) This Declaration must indicate all new and used personal effects.

PILOTAGE: Pilot meets vessels at "Mouchoir Carre" buoy. Advance notice of ETA to be passed 72, 48 and 24 hours, and VHF Channel 16, 1 hour before arrival.

ANCHORAGE: Consult charts.

RESTRICTIONS: Max. length 210 m., max. tonnage 26,000 g.r.t. Max. draft 9 m.

MAX. SIZE: See "Restrictions".

HEALTH: Port Health board on arrival.

RADIO: Destrellan radio, also on VHF.

TUGS: None available.

BERTHING: 9 berths available, 6 additional for petroleum, sugar, cement, flour mill and bananas.

Quay No. 1	150 m.	Quay No. 5	150 m.
,, ,, 2	180 m.	,, ,, 6	170 m.
,, ,, 3	145 m.	,, ,, 7	150 m.
,, ,, 4	145 m.	,, ,, 8	150 m.

STEVEDORES: 24 hours advance notice of ETA required (72 hours if vessel arrives on Monday). Working hours 0700–1100 and 1300–1700.

MEDICAL: Clinics and Hospital facilities available.

TANKERS: Only tankers having less than 9 m. draft can enter the harbour.

FRESH WATER: Available day and night if requested in advance.

FUEL: Available. F.O. 350 seconds Redwood, D.O. or gas oil. Delivered by road tankers.

CONSULS:

Belgium	Haiti	Norway
Denmark	Italy	Spain
Ecuador	Lebanon	Sweden
Great Britain	Netherlands	Venezuela

REPAIRS: Workshops available.

GANGWAY/DECK WATCHMEN: Available on request.

HATCHES: Usually opened and closed by crew. Stevedores will at Master's request but at ship's expense.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle per man.

CARGO GEAR: Ship's gear used.

REPATRIATION: All facilities available.

AIRPORT: 3 miles from the harbour with daily flights to Paris, Miami and New York.

TIME: GMT minus 4 hours. No alterations during the year.

HOLIDAYS: New Year's Day; Shrove Tuesday; Ash Wednesday; Carnival; Good Friday; Easter Monday; Labour Day (1st May); Ascension Day; Whit Monday; National Day (14th July); Souls' Day; Armistice; Christmas Day.

POLICE/AMBULANCE/FIRE: Police: 82.00.05 or 82.13.17; Ambulance: 82.03.96; Fire Department: 82.00.28.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: I/D or passport required.

REGULATIONS: No particular regulations.

DEVELOPMENTS: 1 deep-water berth length 300 m. for container terminal, 1 berth length 160 m.

AUTHORITY: Guadeloupe Port Authority.

AGENT: Agence Petrelluzzi. 2 rue Henri IV, PO Box 61, 97110 Pointe-a-Pitre, Guadeloupe. Cables, Lepoldo. Telex, Petrel 720 GA. Telephone. 82.43.41 (42 and 43). After hours: 82.43.41, 82.01.13 and 82.07.47.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Gabon

CAPE LOPEZ: 00.38 S. 08.42 E. (See Plan)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
3 Lists of Ports of Call.
2 Manifest of Ships Stores.
Clearance from Previous Port.

PILOTAGE: No official radio station pilotage not necessary to approach Port Gentil Roads.

For the private tanker ports at Pointe Clairette and Cape Lopez, pilotage is compulsory. The Mooring Master will board vessel in approximate position 0° 37′ S. 8° 44.5′ E., in a launch carrying proper pilot signals. The Mooring Master will stay on board throughout the vessel's time in port to assist in mooring, hose handling and loading operations.

ANCHORAGE: The whole of Baie du Prince is a good anchorage, sheltered from winds from S.S.E. through W. to N.W. Depths about 40 m., hard sand, good holding ground. 2 buoys mark the 10 m. line to the South.

It is necessary to guard against violent tornadoes occurring between December and May coming from the East or the North. These tornadoes occur very suddenly and are extremely strong.

MAX. SIZE: S.E.R. Terminal, Pointe Clairette, up to 30,000 tons. Elf-Spafe Terminal, Cape Lopez; 80,000 d.w.t. tankers have loaded.

RESTRICTIONS: Berthing is effected only in daylight hours. Vessels which arrive between 1730 hrs. and 0600 hrs. local time should anchor about 800 m. North of Cricri Buoy so as to facilitate moving to the moorings. Unberthing is effected by day or night.

Berthing is not effected in rough weather. At the berth mooring lines must be in good condition and well tended. In case of storm or tornado loading operations must cease and vessel be prepared to leave the berth if so directed by the loading Master.

RADIO: Private radio station of Cape Lopez call sign TRP394; transmitting on 2705 kHz and watching on 2506 kHz during loading operations. Before vessels arrival watch is kept on 2182 kHz.

TUGS: Owned by Elf-Spafe, can be contacted on 2182 kHz. Ship's tow lines not required. 3 tugs are available up to 400 h.p. There is a launch for handling mooring lines.

BERTHING: *Shipmaster's Report:* Anchors are not required for mooring operations. Depth of water in the Berth is about 40 m. *Twelve (12) mooring* ropes to 6 buoys as follows: 2 head lines, 2 port bow lines and 2 starboard bow lines. Aft: 2 ropes by the "Panama", 2 port quarter ropes and 2 starboard quarter ropes. Manila or Polypropylene ropes are preferred. 2 tugs are used for mooring operations.

Vessel's engines must be ready for immediate operation all the time vessel is at the berth. A small tug will remain standing by.

HOSE HANDLING: *Shipmaster's Report:* Two (2) 12 in. floating hoses are connected on the port side. A derrick of 5 tons SWL should be prepared for lifting hoses.

BALLAST: Vessels must arrive with clean ballast only. There are no facilities for discharging dirty ballast at the terminal. In no circumstances should dirty ballast be pumped overboard.

LOADING: The following signals are used for communication between ship and shore loading installations: Green flag or green light, or 6 short blasts on the whistle signifies "we are ready".

Red flag or red light, or 2 long and 1 short blast on the whistle signifies "slow pumping is necessary". 2 red flags or 2 red lights or 2 short and 1 long blast on the whistle signifies "pumping rate will be increased to maximum".

Waving flags and extinguished lights or 6 long blasts on the whistle signifies "pumping to be stopped".

International code pennant or a white light signifies "we wish to talk". The loading terminal should be given 10 minutes notice of the time when loading is to be completed.

MEDICAL: Doctors and hospital facilities available. All vaccinations can be arranged.

DENSITY: Varies between 1021 and 1025.

FRESH WATER: Can only be provided in case of absolute necessity.

FUEL: 1,500 secs. and 3,500 secs. fuel can be supplied by barge subject to 48 hours notice.

CUSTOMS ALLOWANCES: No restrictions for quantities tobacco and spirits held on board the ship. It is prohibited to allow dutiable articles to leave the ship.

CONSULS: France. Tel. 2086.

REPAIRS: There are facilities for hull and engine repairs for barges and river craft. Slipway for vessels up to 300 tons.

AIRPORT: Can be reached in 15 minutes by road. Regular services to Europe.

TIME: GMT plus 1 hour all the year round.

HOLIDAYS: French national holidays are observed and in addition Independence Day (17th August). Holidays do not affect tanker working.

POLICE/FIRE/AMBULANCE: Police tel. 17; Fire tel. 18; Ambulance tel. 23-33.

SHORE LEAVE: Crew members are allowed ashore. There is no regular immigration control but identification papers should be carried.

GENERAL: *Shipmaster's Report:* An accommodation ladder should be positioned on the port side as soon as mooring is completed. Hoses are handled by shore personnel. Accommodation for 6 shore people must be arranged.

AUTHORITY: Societe Elf des Petroles d'Afrique Equatoriale Port Gentil.

AGENT: Socopao-Gabon BP 560, Port Gentil. Tel. 52491. Cables: "Freight Portgentil". Telex 8223.

GAMBA: 02.50 S. 09.59 E.

SEA TERMINAL: SBM.

DOCUMENTS:
Last Port Clearance.
2 lists of Last Ports (during last month).
2 Stores Lists.
2 Crew Lists.

APPROACHES: The approaches to the terminal are open deep water. Gamba sea terminal fairway buoy is located in position 2° 50′ S. 9° 57.8′ E. about 4.8 miles offshore.

The single buoy mooring is located in position 2°50.1′ S. 9° 58.9′ E. and exhibits a white flashing light, visible for 5 miles. Water depth 69 ft.

PILOTAGE: Pilot will board incoming vessel 1.5 miles N.W. from sea terminal SBM. Pilot boat small tug: GRT 50T, 70 ft. long, 320 h.p. grey hull and white upper work – shows pilot light.

ANCHORAGE: 1.5 miles N.W. from SBM in 60 ft. depth.

RESTRICTIONS: Heavy swell and tornadoes.

MAX. SIZE: Draft only factor, max. 44 ft.

HEALTH: When advising ETA include in message whether any sickness on board. In case of emergency vessels should call before or after loading at Port Gentil for medical attendance or for crew changes. For this purpose send separate message to Marine Gamba and to Agency.

RADIO: Established contact with Gamba Radio (call sign TRP 8) soon as possible. ETA should be sent at least 4 days before arrival in Gamba to Marine Gamba via Gamba Radio. Thereafter keep close contact on telephone with Gamba Radio MF (2182) and VHF Channel 16.

Gamba Radio (TRP 8) Service:

Telegraphy A1	2 kW
13070 kH	TFC list at 0900. LSN on 12 mHz band from 0900 to 0930 and on 16 mHz band from 0930 to 1000. Range about 3,000 miles.
6510 kH	TFC list at 1300. LSN on 6 mHz band from 1300 to 1330 and on 8 mHz band from 1330 to 1400. Range about 1,000 miles.
Telephony A3	2 kW
VHF 6 3	Watch on 2182 kHz on request from 0800 to 0900 and from 1400 to 1500. Working frequencies 1877 kHz-2678 kHz. Range about 300 miles depending on atmospherics.
VHF F 3	50 W Watch on Channel 16. Working on Channel 16. Range about 50 miles.
Marine Gamba Service	
VHF F 3	50 W Watch on Channel 16 (office hours). Range about 35 miles.
Pilot Launch Service	20 W Watch on Channel 16 (when at sea). Range about 20 miles.
Terminal Gamba	20 W Watch on Channel 16. Working on Channel 11. Range about 20 miles, used only for loading operations.

Radio Beacon: Continuous airplane radio beacon call sign GZ, frequency 359 kHz. Position: Lat. 02° 46′ 8 S. Long. 10° 02′ 3 E.

N.B. All hours in GMT.

TUGS: No tugs available in Gamba and not necessary for berthing. For berthing, 1 or 2 Pilot boats according to circumstances.

MOORING: Recommended that vessel should be trimmed max. 8 ft. by the stern on arrival.

Vessels moor with two 12 in. nylon ropes from SBM secured on board ship by two 2.25 in. chain cables plus two 3.25 in. wires which provided by terminal. Berthing Master will advise in detail mooring procedure. Two mooring lines at least (nylon if any) are to be available on forecastle head. Depth at berth 59 ft.

HOSES: One hose of 16 in. diameter is connected on the port side. This operation is performed by ship's personnel under the direction of the Mooring Master and the terminal foreman. Total weight of the lift is about 2 tons.

A derrick should be rigged in preparation on the port side for loading mooring equipment and hose lifting. Loading rates are between 2,000 to 2,200 long tons per hour.

Shore Line System: SBM – 1×28 in. submarine pipe-line. SBM connected to 1×16 in. floating line reduced to 12 in. for connection to ship's manifold (total length of floating hoses: 660 ft.).

DENSITY: 1025.

FRESH WATER/FUEL: None available.

BALLAST: There are no facilities for discharge ballast ashore. Vessels must arrive at the loading terminal with clean ballast only, apart from contents of the slop tank.

GANGWAY/DECK WATCHMEN: Not required.

CUSTOMS ALLOWANCES: No restrictions on Tobacco/Wine.

IDENTIFICATION CARDS: Not required.

CONSULS: None, French consul in Port Gentil.

REPATRIATION: Facilities available only in emergency.

AIRPORT: Gamba airport is local airstrip and is connected to Port Gentil by daily service. Port Gentil airport is connected to Libreville International airport by daily services. Mail reaches any European country within five days.

TIME: GMT plus 1 hour throughout the year.

GENERAL: The use of Channel VHF 9 is forbidden.

SHORE LEAVE: Not allowed.

AUTHORITY: Shell Gabon Marine Superintendent, Port Gentil (Gabon).

AGENT: See "Port Gentil".

LIBREVILLE: 00.23 N. 09.26 E. (See Plan)

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" and (subject to C/P terms) laytime will commence is 2 miles off shore at Libreville harbour.

DOCUMENTS: See Port Gentil.

PILOTAGE: None available.

ANCHORAGES: Bottom of roads in Libreville slopes very gently down towards open sea. The greater the vessel's draft, the further out it must moor. E.g., ship of 7 to 8 m. draft will be moored approx. 1,500 m. from Harbour Pier. Ship 5-6 m. draft will be able to approach the Harbour Pier as near as 500 to 600 m. For reasons of safety, forbidden to come nearer, particularly during tornado season – February to May and September to December.

RESTRICTIONS: No restriction imposed on entering or leaving the Estuary. Channel marked by 5 buoys provided with radar reflectors and flashing lights. Sixth buoy, called a "landing buoy" moored in roads, where vessels moor.

HEALTH: If there is sickness on board, Health Service warned by Consignor of vessels. Health Service can go on board to check state of crew's health. Immigration Service can also board to check crew list and condition of passengers, if any.

RADIO: *Libreville Radio:* Radio-telephony from 0600 to 1800 hrs. GMT on 2.182 kc/s, Radio-telegraphy from 0600 to 1800 hrs. GMT on 500 kc/s, call sign TRA 22; from 0800 to 0830 hrs.on 13.101 kc/s, call sign TRA 8; from 1630 to 1700 hrs. GMT on 8,722 kc/s, call sign TRA 8.

TUGS: Tugs intended only for towing lighters, horse power 150 to 250, unsuitable for any harbour towing.

BERTHING: Only for lighters and small coasters with a draft of less than 3 m. Crews working unloading or loading of vessels in roads supplied by Consignor of the ship. Harbour Services have no radio apparatus. Shipping companies all have radio-telephone extensions, which allows them to be in permanent contact with vessel moored in roads. Unloading or loading operations of goods carried out by lighters which, towed by small tugs, ensure rotation between vessel in operation and quay. All this equipment belongs to shipping companies dealing with consignment of vessels in the roads. Every vessel arriving in roads must have its consignor.

STEVEDORES: Available.

MEDICAL: Hospital available, and in case of necessity, patient or patients will be admitted.

FRESH WATER: Water supply real problem, as there is no tanker to transport it. Therefore strongly recommended that any ship touching Douala coming from the North or Pointe-Noire coming from South, should fill up at one of these ports.

FUEL: There are fuel-tankers belonging to shipping companies. The ship-tanker which provisions Libreville 2 or 3 times a week is brought alongside buoys in roads, at 1,650 m. (position: Lat. 0° 23' 51" North, Long. 9° 25' 71" East); fuel is transhipped by sea-line to tank on shore.

FIRE PRECAUTIONS: No special precautions.

GANGWAY/DECK WATCHMEN: Carried out by crew.

OPENING/CLOSING HATCHES: This is done with the tacit agreement of the ship's Officer and the Consignor.

CARGO GEAR: Ship's own gear used.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: Small repairs possible.

DRY DOCKS: None.

REPATRIATION: No facilities.

AIRPORT: 9 km. from the harbour. Links with French-speaking Africa, Switzerland, and France, also Johannesburg.

TIME: GMT plus 1 hour.

HOLIDAYS: 17th August, Independence of Gabon; 1st May, Labour Day – these are the only holidays in force.

SERVICES: None.

SHORE LEAVE: Allowed.

DELAYS: First come, first served method.

AUTHORITY: Capitainerie du Port.

AGENTS: Socopao-Gabon, BP4, Libreville. Tel. 22140 and 22751. Telex 5212. Cables "Freight Libreville".

LUCINA MARINE TERMINAL: 03.40 S. 10.46 E.

SEA TERMINAL: S.B.M. in position 03.39.37 S. 10.46.12 E.

APPROACHES: Vessels should proceed as if making for Gamba Terminal, and establish early contact with Gamba Radio (see Gamba). Instructions concerning Pilot's boarding position will be given by VHF.

MAX. SIZE: Up to 120,000 d.w.t.

MOORING: Same procedure as for Gamba.

HOSES: A hose of 16 in. diameter is connected on the port side. *Line System:* SBM. Off-shore field about 7 miles off coast in deep water. Oil is stored in a tanker, supplying to the SBM through a 20 in. submerged pipe-line 1,000 m. in length.

LOADING RATE: About 3,500 t.p.h.

AUTHORITY: Shell Gabon, (see Gamba).

OVENDO: 00.17 N. 09.30 E. (See Plan)

SHIPMASTER'S REPORT

Vessel, length 156 m., breadth 22.0 m. Draft (at the time, 30 ft.).

APPROACHES: The channel buoys showed very well on radar on the 3 and 6 miles ranges, even during heavy rain, but the lights on the red buoys are poor and all buoys occasionally unlit.

ANCHORAGE: Depths in the channel and river were found to be as stated during low water with a depth of 33 ft. over all the anchorage. Maximum draft allowed at this time was 30 ft.

The holding ground is good, 4 shackles were used for a total ship weight of 19,000 tons plus a small coaster alongside.

The tides are regular with only a very short slack water period, and run at between 4 and 6 knots.

PILOTAGE: There are 2 French Pilots who may be contacted on VHF Channel 16 when in range, they are ordered by the Agent to berth vessels only, although they will pass on advice to vessels regarding anchoring.

TUGS: There is 1 tug of approximately 1,000 h.p. which assists in berthing, either towing or pushing.

BERTHING: Well fendered modern concrete quay, 450 m. in length, laid out as per plan in the Guide. The normal practice is for there to be 2 ships of around 150 m. and one smaller ship alongside at one time. The inshore side of this quay is for small craft only.

FRESH WATER: This is obtainable while alongside the quay but only in a dire emergency at the anchorage from the tug which can supply up to 8 tons.

REPAIRS: Only very small repairs are possible and it is suggested that a receipt is obtained for any parts sent ashore.

REPATRIATION: There are 2 planes a week from Libreville to Paris and approximately 12 planes weekly to Abidjan.

SHIPCHANDLER: There is no chandler for any form of stores, the only possibility being self-purchase at the local (Libreville) supermarket. All goods are imported and therefore very expensive.

HOLIDAYS: 12th March. Gabonese independence.

MARINE CLUB: There is a marine club about 1 km. from Ovendo in the Libreville direction (swimming pool, etc.).

PORT GENTIL: 00.43 S. 08.48 E.

On the coast of Lopez Island.

APPROACHES: Buoyed channel, lit at night. Min. depth 15 m.

DOCUMENTS:

Cargo Manifest.
Store List.
Crew's Personal Effects List.
Crew List.
List of Ports of Call (not compulsory).
Health Certificate.
Ship's Official Papers.

PILOTAGE: No Pilot necessary. However Port Authority will arrange Pilot if given 12 hours notice. Pilot boat is a tug. Pilot taken on board at bank buoy.

ROADS/ANCHORAGES: Ships having commercial operations carry them out at anchorage on a line with anchorage buoys (reserved for lighters and tugs) 1 mile S.E. of the Mole in depths 10 to 20 m. 1,500 acres (approx.) of safe shipping anchorage.

Anchorage for several ships of deep draft well sheltered from predominantly S.W. winds during months June, July, August and September. During season of tornadoes (January to end April) which blow from N.E. a fairly heavy sea quickly rises and vessels should anchor at least 600 m. from land.

Max. rise of tide 2 m. 2; average 1 m. 70; min. 0 m. 40.

RADIO: Libreville radio. R/T 2182 kc/s. – Harbour Master.

TUGS: Not required.

BERTHING: No berths. Loading and discharge at anchorage carried out by lighters and flat-bottomed boats. Boat Quay (Mole) has length of mooring quays (suitable only for flat-bottomed lighters and tugs) of 200 m. and depths of 2.50 m. at low tides. Total Mole area approx. 5 acres, comprises Customs Zone with warehouses, offices, wharves, etc.

MEDICAL: For attendance call Harbour Master R/T 2182 kc/s. Smallpox and yellow fever inoculations required.

TANKERS: To N.E. of Mole is petrol pipe-line unloading point for small tankers, tying up on buoys, max. length 70 m., 5 m. draft. Prince's Bay, loading point for unrefined petrol by sealine is available to North of Prince's Bay (see "Cape Lopez").

FRESH WATER: Delivery by lighters, capacity 200 tons. Loading time 2 hours.

FUEL: 3 days notice required. Fuel oil viscosity 1,500 and 3,500 seconds Redwood available. Delivery by 200-ton tankers, every 5 hours.

WATCHMEN: Not necessary.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: No limitations on tobacco, wine or spirits.

CONSULS:

Switzerland	Tel. 20–19	France	BP. 511 Tel. 20.86
Holland	BP. 792 Tel. 28–09	Sweden	BP. 518 Tel. 21.71

REPAIRS/DRY DOCKS: Not available.

REPATRIATION: Obtainable on medical grounds. No facilities for crew changes.

AIRPORT: 4 km. distant. Regular services.

TIME: GMT plus 1 hour. No alterations.

HOLIDAYS: No work on Independence Day 17th August.

SHORE LEAVE: Permitted.

AUTHORITY: Capitainerie du Port.

AGENT: Socopao–Gabon, B.P. 560. Tel. 524–91. Telex 8223. Cables "Freight".

Gambia, Republic of

BANJUL: 13.27 N. 16.34 W. **(See Plan)**

DOCUMENTS:
7 Crew Lists.
7 Passenger Lists.
7 Ports of Call Lists.
Health Documents.
Deratisation (or Exemption) Certificate.
Yellow Fever Innoculation Certificates.
Smallpox Vaccination Certificates, all valid.
Customs Crew Declaration.
2 signed copies of Manifest.
Bills of Lading (may be sent in advance of vessel).

PILOTAGE: ETA and draft to be communicated to "Harbour Master Banjul" 48 hours before ETA and confirmed 12 hours before. Vessel arriving Monday ETA preferably not later than Saturday morning.

Pilot station situated in Harbour Master's office has VHF station, calling Channel 16 (156.80 mHz) working Channels 12 (156.60 mHz) and 14 (156.70 mHz). Continuous listening watch kept 0800 – 1500 hrs. Monday – Friday. 0800 – 1300 hrs. on Saturday. Listening watch at weekends if vessels are expected. Reception generally good within 100 nautical miles radius. Pilot boat has grey hull and buff superstructure, exhibiting usual signals.

Pilotage from any point inwards from Fairway Buoy by request, but compulsory from No. 5 Buoy inwards.

ANCHORAGES: Good and spacious anchorages to the East and Southeast of Government wharf in depths of 8 to 15 fathoms.

RESTRICTIONS: Vessels may enter and proceed to anchorage at all times and states of tides. Minimum depth in sea approach channel is 28 ft. LWOS. Average rise of spring tides 6 ft., neap tides 4 ft.

MAX. SIZE: Maximum length 600 ft. maximum draft 27 ft. (Banjul Wharf) 26 ft. 06 in. (Government Wharf). For vessels anchoring only, length unlimited.

HEALTH: Vessels exhibit the appropriate International Code signals. Port Health Officer usually boards the vessel at the harbour anchorage or alongside between 0800 and 1700 hrs. daily, at all times in case of emergency.

RADIO: Banjul Radio call sign C5G. Radio Telephone 2182 kHz (calling) 2756.4 kHz. 1100 – 1200 hrs., 1400 – 1500 hrs. (weekdays) Sundays – on demand.

RADAR/VHF: No port radar station. Port VHF. See "Pilotage".

TUGS: One tug of 325 h.p. Normally used as pilot boat. No tug for vessel movements.

BERTHING: Maximum permissible draft alongside; Banjul Wharf 27 ft. Government Wharf 26 ft. 06 in. Government Wharf berthing face 294 ft. with 1 dolphin in line 100 ft. from North end. Mooring bollards on foreshore. Banjul Wharf berthing face 400 ft. mooring dolphin each end, set back from wharf face. Inner berth of length 335 ft. suitable for small vessels up to 21 ft. draft. Public Jetty berthing face 196 ft. maximum draft 11 ft.

BRIDGES: No bridges.

STEVEDORES: Normally 48 hours notice addressed to Agent. If arriving Monday preferable agent notified requirements latest Friday. Normal working hours 0730 – 1900 hrs.

MEDICAL: Emergencies and cases requiring hospitalisation attended to at all times, giving as much advance notice and information as possible. Other cases attended to as convenient to ships after arrival. For certificates required see "Documents". Inoculation and vaccination yellow fever/smallpox given on request.

TANKERS: Tankers (discharging only) berth on Banjul Wharf. Maximum permissible draft 27 ft. Discharge of residue and bilge prohibited. Ballasting by permission of Harbour Master.

DENSITY: Normally salt water at Banjul, reducing to about 1020 ozs. per cu.ft. during River Gambia flood water period: August – February.

FRESH WATER: Fresh water available at both Government and Banjul wharves from hydrant. Notice of requirements should be sent with ETA. No water barge. D5.00 per 1,000 gallons.

FUEL: Bunkering facilities available at Banjul Wharf through pipe-line and road tankers for reasonable quantities. Also available at Public Jetty for small craft (12 ft. draft). Advance notification required for all bunkers.

FIRE PRECAUTIONS: For tankers and vessels carrying explosives Fire Brigade will be in attendance.

DEVELOPMENTS: This envisages the commencement of Phase II of the Banjul Port Project as trade develops and ultimate embarkation of Phase III.

GANGWAY/DECK WATCHMEN: Recommended. By arrangement with Agent.

OPENING/CLOSING HATCHES: Usually done by stevedores.

CERTIFICATES: Registry, Articles of Agreement, Load Line, Safety, Safety Equipment Radio Licence/Certificate.

CUSTOMS ALLOWANCE: Reasonable allowance of wine/spirits and tobacco/cigarettes out of bond, as per Master's request.

CARGO GEAR: In accordance with UK Factories Act. Ship's lifting gear for loading and discharging, also 4×6 ton and 1×30 ton mobile cranes available.

CREWS IDENTIFICATION CARDS: Needed.

CONSULS: In Banjul: Belgium, Denmark, France, Lebanon, Norway, Spain, Sweden. U.S.A. has resident charge d' Affairs and U.K. has High Commissioner. Senegal has resident Ambassador.

REPAIRS: Minor hull, deck and engine repairs and welding undertaken by G.P.A. dockyard.

DRYDOCK: A slipway of capacity of 500 tons displacement is included in the dockyard facilities.

REPATRIATION: Possible.

AIRPORT: Airport 14 miles from Banjul. Regular services.

TIME: GMT kept throughout the year.

HOLIDAYS: New Year's Day (1st January); Independence Day (18th February); Good Friday, Easter Monday, Christmas Day, Boxing Day, Islamic Festivals of Eid-El-Fitr (Ramadan) and Eld-El-Kabir. No cargo work on Islamic Holidays.

TELEPHONE: Telephones installed on board at ships/Agent's request.

GENERAL: The Ports Authority operates 3 lighters each of 9,900 cu.ft. capacity. Lighters may be hired for discharging ship at anchor and transhipments up river.

A private company operates a large fleet of lighters, mainly for transporting groundnut from river ports to Banjul. Ships stores: fresh vegetables, beef and fish, fruit (in season) and bonded stores are available.

Other Ports: River Ports: Kaur and Kuntaur at 118 and 150 miles upriver respectively from Banjul. River Pilots available at Banjul. Max. loaded draft 17 ft. 06 in.

SHORE LEAVE: No restriction on normal shore leave.

AUTHORITY: Gambia Ports Authority.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Germany, Democratic Republic of

ROSTOCK: 54.09 N. 12.08 E.

DOCUMENTS:
Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Money Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory. Contact by VHF Channel 16, working Channel 12. Pilot boards at Warnemunde light buoy. International code signals used.

ANCHORAGE: In Warnemunde Roads, off port entrance, in depths of 48 ft.

RESTRICTIONS: Entrance channel from Warnemunde light buoy to Overseas Port at mouth of River Warnow, depth 30 ft. LW.

MAX. SIZE: For Overseas Port: length 200 m., draft 33 ft. For City Docks: 140 m. length, 21 ft. draft. Also see "Tankers".

HEALTH: Pratique given on arrival. In case suspected disease or fever on board, radio details to Agent before arrival. Complete declaration of health required.

TUGS: Available. Use of at least 1 tug is compulsory for vessels berthing and unberthing.

Sufficient number of tugs available, ranging from 300 to 920 h.p. Tugs normally join vessel in front of the mole.

BERTHING: *Overseas Port:* Situated in Lower Warnow River about 3.8 miles from Warenmunde sea buoy.

Pier No. 1: 6 berths General goods depth 30 ft. to 33 ft.
Pier No. 2: 7 berths General goods depth 30 ft. to 33 ft.
Pier No. 3: 4 berths Bulk cargoes depth 30 ft. to 33 ft.
Oil Pier: 3 tanker berths depth 30 ft. to 33 ft.

City Docks: In Warnow River, about 6 miles from sea. Total quay length 1,600 m. depths alongside 21 ft. and 18 ft. Grain elevators shooting capacity 42 t.p.h., suction capacity 33 t.p.h.

Warnemunde: Port for passenger service. Quay length 180 m. Depth alongside 24 ft. 07 in.

Port Control to be contacted through VHF Channel 14.

Roll-on/roll-off terminal with facilities for 20 ft. and 40 ft. containers.

CRANES: *Overseas Port:* 64 cranes and crane-bridges with capacity from 3.2-20 tons. A self-propelled floating crane "Goliath", for heavy lifts not exceeding 100 tons is available.

City Docks: Crane capacities 2-10 tons.

BULK HANDLING FACILITIES: 3 berths, length of quay 720 m. Six bridges with 20 tons capacity and outreach of 40 m. Storage area 13,200 cu.m. for 90,000 tons of bulk cargo.

TANKERS: 3 berths available. Max. length 200 m., Max. draft 30 ft. The 3 berths can accomodate two tankers of 33,000 d.w.t. at one time. Storage capacity of 120,000 cu.m. Max. discharge rate 2,900 cu.m. per hour.

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

FRESH WATER: Available ex-shore hydrants or water-boat.

FUEL: Available all grades fuel and gas oil by barge. Vessels calling for bunkers only, pay no harbour dues, and other fees are reduced.

REPAIRS: All repairs possible. Floating crane available. Neptun Shipyard and other repair shops situated at City Docks. Warnow Shipyard and floating dock situated in Overseas Port.

DEVELOPMENTS: Plans to build a floating island in depth of 21 m. off Rostock to accommodate tankers up to 100,000 tons. Estimated discharge rates up to 3,000 t.p.h. into smaller vessels for transfer to existing oil terminal.

REPATRIATION: Can be arranged if identification papers in order.

TIME: GMT plus 1 hour. No alterations during the year.

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

AIRPORT: Barth Airport 70 km. from Rostock.

TELEPHONES: Ship-to-shore connections available.

POLICE/AMBULANCE/FIRE: Ambulance 336/3662; Police 366/3164; Fire 366/2222.

SHORE LEAVE: Crew members permitted ashore.

AGENT: VEB Schiffsmaklerei, Rostok.

STRALSUND: 54.18 N. 13.06 E.

DOCUMENTS: Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Money Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory. Contact Pilot by VHF Channel 12. Pilot stations are at Barhoeft and Ruden Island. Pilot boards vessel at Gellen (North-West entrance) and Landtief and Osttief (Eastern entrance).

Entry only possible from one hour before sunrise to one hour after sunset.

ANCHORAGE: In the roads clear of the fairway, depths 26 to 30 ft.

RESTRICTIONS: Northern entrance between breakwaters is 13 ft. depth used by smaller vessels only. Eastern entrance, depth 16 ft. 6 in. MLW.

HEALTH: Pratique given on arrival. In case suspected disease or fever on board radio details to Agent before arrival.

TUGS: Available and compulsory for vessels berthing and unberthing.

MAX. SIZE: Vessels up to 17 ft. draft.

BERTHING: Depth alongside quays up to 17 ft. maximum. Length of quays 1,100 m.

CRANES:

2 cranes 10 tons capacity; reach 20 m.
2 ,, 2 tons capacity; reach 20 m.
1 ,, 5 tons capacity; reach 22 m.
1 mobile crane 5 tons capacity; reach 22 m.
2 Elevators capacity 25 t.p.h. each.

Also a conveyor system for handling of potash with a capacity of 60 t.p.h.

FRESH WATER: Available from shore ex pipe-line.

FUEL: Gas oil and lube oil available. By barge.

REPAIRS: All deck, hull and machinery repairs by local shipyards.

REPATRIATION: All facilities exist for changing crews.

AIRPORT: Barth Airport 25 km. from Stralsund.

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

TIME: GMT plus 1 hour. No alterations during the year.

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

SHORE LEAVE: Crew members permitted ashore.

AGENT: VEB Schiffsmaklerei Rostock. Agentur Stralsun 23 Stralsund. Hafen – Ballastkiste. Tel. 5661/249. Telex 0 31 85 38.

WISMAR: 53.54 N. 11.27 E.

DOCUMENTS:
Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Money Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory from outer roads to harbour quays. Pilot boards at Wismar sea buoy. International code signals used. Contact by VHF Channel 12.

ANCHORAGE: In outer roads between Hannibal Shoal and Poel Island in depths of up to 40 ft. Protected anchorage in inner roads, depths up to 30 ft.

RESTRICTIONS: Entrance to the port is through a buoyed channel 14 miles long, depth 29 ft. LW. Vessels over 5,000 d.w.t. and over 24 ft. draft enter in daylight only, turning basin 250 m. diameter.

MAX. SIZE: Length up to 200 m. Max. draft 27 ft.

HEALTH: Pratique given on arrival. In case suspected disease or fever on board radio details to Agent before arrival.

TUGS: Available and compulsory for berthing and unberthing.

2 tugs of 800 h.p. Tugs join vessel according to the Pilot's instruction.

BERTHING:

Grain Quay: Max. draft 27 ft., quay length 160 m., 2 grain elevators, grain silos for 20,000 tons.

Potash Port: Max. draft 27 ft., mechanical potash loading plant, quay length 360 m., 3 loaders.

Oil Port: Max. draft 27 ft., max. length 200 m.

Timber Port: Max. draft 22 ft., quay length 400 m., 2 gantry cranes of 3.2 tons, 1 mobile crane (30 tons).

Old Port: Max. draft 16 ft., quay length 140 m., no handling operations, fishing port, waiting berths.

Seaport, Northern Quay: Max. draft 27 ft., quay length 420 m., 5 gantry cranes with a capacity from 3.2 to 12 tons. One mobile crane of 30 tons capacity and one floating crane of 100 tons capacity.

Seaport, Southern Quay: Max. draft 27 ft., quay length 500 m., 3 semi-gantry cranes with a capacity from 3.2 to 10 tons.

FRESH WATER: Available from shore hydrants at all berths or by water boat.

FUEL: All grades fuel and gas oil obtainable. Vessels calling for bunkers only, pay no harbour dues, and are allowed a reduction in pilotage and clearance fees. 7 days notice required for bunkers.

REPAIRS: All repairs can be effected at Mathias-Thesen Shipyard. Floating crane available, capacity up to 100 tons.

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

TIME: GMT plus 1 hour. No alterations during the year.

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

SHORE LEAVE: Crew members permitted ashore.

AIRPORT: Barth Airport 100 km. from Wismar.

TELEPHONES: No ship to shore communications.

AGENT: VEB Schiffsmaklerei Rostock, Agentur Wismar, 24 Wismar, Kopenhagener Strasse. Tel. 4208. Telex 0318841.

Germany, Federal Republic of

BRAKE: 53.20 N. 08.29 E. (See Plan)

PORT LIMITS: The government-owned piers are the commercial area of the port. A vessel is considered to be an "arrived ship" when she is moored alongside such piers, and the customs formalities are complete. Laytime will commence according to referring charter parties.

Port Authorities distribute the free berthing places in following the "Benutzungsordnung fur den Hafen Brake" which says briefly that a vessel will get a rank position in actual arriving times:

(a) for ships coming from sea: arrival "Weser lightvessel" plus 5 hours.
(b) for ships coming from Bremerhaven North Roads and Blexen Roads: departure plus 2 hours.
(c) for ships coming from Bremen: departure plus 3 hours.

DOCUMENTS:
2 Lists Ship's Stores.
2 Crew Lists.
2 Passenger Lists.
Health Certificate (forms obtainable from Pilot).
Ship's Register.

PILOTAGE: Carried out by Weser River Pilots. The river Pilots also act as docking Pilots. Also see Bremen and Bremerhaven.

ANCHORAGE: No anchorage in vicinity of Harbour. nchorage in "Blexen Roads". For further details see "Bremen".

RESTRICTIONS: Vessels proceeding to Brake with a draft in excess of 24 ft. will be restricted by the tide.

MAX. SIZE: Max. length 230 m. (755 ft.); no restriction on beam. Max. draft 35 ft. in fresh water.

PRATIQUE: Free pratique is given by health and immigration officer only. If a case of fever or disease is suspected on board radio the Agent with details before arrival.

RADIO: Cable Agent via Norddeich Radio (Call sign DAN) advising ETA and cash requirements.

RADAR/VHF: Stations from Weser lightvessel to Bremerhaven. Radar service between Bremerhaven and Bremen is planned. Radar stations have day and night service. If no fog every odd hour radar stations give on VHF or Pilot walkie-talkie report of visibility, defective buoys, anchoring ships, obstructions to navigation, and special occurrences. Brake plans a port radio VHF station.

TUGS: Available day and night in sufficient number. No extra charge for using tug's lines.

BERTHING: *Inner Harbour with tidal lock:* Length of dock 1,070 m. (3,500 ft.), width 110 m. (360 ft.), width of entrance 13.25 m. (43 ft. 5 in.); depth of water over sill at ordinary tides 19 ft. 6 in., depth of water over sill at highest Spring 21 ft. 6 in. (at lowest neap 17 ft. 6 in.). Length of canal 228 m. (750 ft.), width of canal 46 m. (150 ft.), length of quay in canal 228 m. (750 ft.).

Riverside Berth: Total length 1,430 m. (4,680 ft.), depth at pier 36 ft. at normal low water, tidal amplitude 11 ft. 6 in. Max. draft 35 ft. Max. length of ships not more than 230 m. (755 ft.).

This government-owned pier is divided into 2 areas. The Northern part is the crane-area with a length of 3,115 ft., the Southern part, 1,565 ft. long, is the grain-handling area.

Private Pier of the Fettraffinerie/Unimills has a length of 150 m. (492 ft.).

SPECIALISED CARGO HANDLING FACILITIES:
Inner Harbour: crane area

4 electric cranes to lift 1 to 5 tons.	Riverside Berth
2 bridge cranes, capacity 50 tons.	
2 bridge cranes, capacity 20 tons.	
1 bridge crane, capacity 15 tons.	
2 whipping cranes, capacity 25 tons.	
2 whipping cranes, capacity 15 tons.	

Grain handling area (Riverside Berth)

7 pneumatic grain elevators (capacity from 60 to 600 t.p.h.) with a total discharge capacity of 2,000 t.p.h.

Fettraffinerie Pier

Tank installations with pumping arrangements of a capacity of 700 t.p.h. to vessel and 1,300 t.p.h. from vessel.

The government-owned pier is not equipped for containers, roll-on/roll-off traffic. The berth does not handle liquid chemicals.

STEVEDORES: ETA has to be reported to the Agent to arrange gangs. Stevedores are working 3 shifts around the clock on working days (Monday to Saturday); on Sundays and holidays 4 shifts are worked around the clock.

MEDICAL: Two hospitals and several doctors available at Brake. Advance notice to Agent required if medical assistance necessary.

TANKERS: Fettraffinerie Pier: Max. draft 33 ft. Discharging lines: molasses 6 in., fuel oil 8 in., diesel 10 in. and vegetable oil from 4 to 8 in.

DENSITY: Brake Port, Freshwater: salinity = 1002–1004.

FRESH WATER: Available both at Riverside Berth and Inner Harbour. Pumping capacity from 18 to 20 t.p.h.

FUEL: All grades available by bunker barges.

FIRE PRECAUTIONS: No smoking on deck. For tankers at Fettraffinerie Pier smoking only in saloon and/or messroom.

CONSULS: No Consuls; consulates at Bremen.

REPAIRS: All normal ship and engine repairs can be carried out during laytime on board.

DRY DOCKS: One dry dock at Luehring Werft, Brake, for ships with a length not in excess of 85 m. (279 ft.), nor broader than 16 m. (52 ft. 6 in.), and a max. draft of 13 ft. 1 in.

SURVEYORS: Classification Socieities not represented but several surveyors available at Brake Port.

GANGWAY/DECK WATCHMEN: Crew's watchmen necessary – strong tides, current-speed 3 knots.

HATCHES: Depends on the different charter parties.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle of spirits and 2 bottles of wine.

CARGO GEAR: Load/discharge normally effected by shore-gear.

REPATRIATION: Any necessary repatriation and/or crew changes can be effected by Agents at Brake.

AIRPORT: International airport served by regular airlines at Bremen. Brake to Bremen, distance 57 km. (35 stat. miles).

TIME: Local time is GMT plus 1 hour. No alterations to clocks during the year.

HOLIDAYS: New Year, Good Friday, Easter Sunday and Monday; May 1, Ascension Day; Whitsunday and Monday, Penitentiary Day, 2 Christmas Days. Cargo work can be arranged on those days, except on New Year, Easter Sunday (1st Easter day), 1st May, Whitsunday, 1st Christmas Day, and on the days before such days till 1200 and/or 1400 hours.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 4060; Fire 112.

TELEPHONES: No arrangements to place telephones on board.

SHORE LEAVE: Shore passes are required according to customs regulations.

IDENTIFICATION CARDS: Crew members to have valid identity cards.

DEVELOPMENTS: Weser fairway depth will be increased to 12 m. (39 ft. 6 in.).

SEAMAN'S HOSTEL: Weserstr. 1A, tel. 4490.

AUTHORITY: Niedersachsisches Hafenamt Brake.

BREMEN (Including Farge): 53.06 N. 08.46 E. (See Plan)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
Provision and Store Lists incl. fuel oil.
Dangerous Cargo Lists.
Health Declaration.
Ship's Register.
No Customs Papers if vessel laying in Freeports at Bremen.

DEEP SEA PILOTAGES: See "Brixham" or "Cherbourg".

PILOTAGE: Not compulsory on the Weser, but a portion of pilotage dues is charged in any case. Most vessels take a Pilot.

Distance from Bremen lightvessel to Bremerhaven 36 miles. Distance from Bremerhaven to Bremen 32 miles.

At least 12 hours before arrival at Weser lightvessel, Masters should cable ETA messages to "Lotsenbruderschaft Weser zwei Bremerhaven" via Norddeich Radio. Message to include name and g.r.t. of vessel, place where Pilot required to board, day and hour of vessel's arrival, vessel's destination and fresh-water draft in metres. Sea Pilots board at Weser lightvessel to Bremerhaven. River Pilots board at Bremerhaven to pilot vessels as far as Bremen.

Pilot station near Weser lightvessel 53° 52′ 16″ N., 07° 50′ 00″ E., black-painted motor vessel, black-topped funnel, white lettering "Lotse" on hull. In rough weather, pilot boat may be found inside near Rotesand lighthouse/buoy "G". Pilots may be contacted by Norddeich Radio, 2182 or 2614 kHz. Alternatively by VHF Channel 16.

River Pilots boarding at Bremerhaven also act as harbour Pilots to all ports above Bremerhaven.

ANCHORAGE:
1. About 1 mile South-West of Weser lightvessel 53° 52′ 16″ N., 07° 50′ 00″ E.
2. Near Hoheweg lighthouse between buoys "F" and "N". Depth about 12 m.
3. Tegeler Plate between buoys 10 and 12.
4. Bremerhaven Northroads between buoys "Y" and "A". For ships with dangerous cargo inside the red sector of Imsum Lt. F. Depth about 12 m. Blexen Roads (South Roads) depth about 10 m.

RESTRICTIONS: Vessels proceeding to Bremen, with a draft in excess of 22 ft. will be restricted by the tide.

MAX. SIZE: Bremen: length 220 m., draft 32 ft. in fresh water. Longer ships with special permission.

Locks: At the entrance of the Industriehafen max. length 170.3 m., tidal docking up to 180 m., max. draft 29 ft. 06 in., max. breadth 23 m. according to tide.

HEALTH: Master has to fill and sign Maritime Declaration of Health which is handed to health officer on arrival at Bremerhaven and Bremen. In case suspected disease or fever on board radio details to Port Health Bremerhaven via Norddeich Radio before arrival.

RADIO: Cable Agent via Norddeich Radio, call sign DAN, advising ETA and cash requirements.

Bremen Port Radio VHF station on Channels 16, 3, 12 and 14 to be used for messages to all Port Authorities including Police and Fire Brigade and Port Health in case of emergency.

RADAR/VHF: Stations from Weser lightvessel to Bremerhaven. Radar service between Bremerhaven and Bremen is planned. Radar station has day and night service. If no fog, every odd hour radar station gives by VHF, or Pilot walkie-talkie, report of visibility, defective buoys, anchoring ships, obstructions to navigation and special occurrences.

TUGS: Tugs available at all stations according to ships request. Tugs lines used (only) without charge.

BERTHING: Berthing at Bremen: The following harbours can be reached:

Harbour name:	Max. draft subject to tide and berth ft.	in.	Safe draft in Harbours at any time up to ft.	in.	Length m.
Europahafen	31		23 06 – 29 00		2,760
Uberseehafen	32		27 06 – 32 00		3,240
Holz-und Fabrikenhafen	31		21 06 – 28 06		1,540
Getreidehafen	32		13 06 – 32 00		780
Neustadter Hafen	32		31 00 – 32 00		1,500
Kap Horn Hafen	32		28 06		400
Industriehafen	29	06	12 00 – 29 06		5,100

Max. draft is dependent on the prevailing winds

SPECIAL CARGO-HANDLING FACILITIES:

Container-Handling Facilities: The container terminal in the Neustadter Hafen is equipped with 2 container cranes, suitable for 40 ft. containers. Maximum lifting capacity: 45 tons. The terminal has 116 connections for reefer containers.

Roll-on/roll-off terminal: A new roll-on/roll-off terminal has been built at the head of the Europahafen for roll-on/roll-off ships, 1 berth. Maximum carrying capacity 60 tons, width 8 m. Max. draft 28 ft.

Lash Terminal: A lash terminal has been built at the head of the Uberseehafen. Further lash place: Lankenauer Hoft.

Bulk handling facilities (Industriehafen)

Bulk cargoes such as coal, coke, ore, phosphate, oil, logs, and potash are handled in the Industriehafen. To enter the industriehafen, vessels have to pass through a lock which is 171 m. long, 23 m. wide and allows a max. draft of 29 ft. 6 in. fresh water at normal high water.

Gebr. Rochling (Kohlenhafen)

At this facility coal, ore, phosphate, and logs are handled. There are no restrictions regarding the vessel's length, beam, height or draft other than those imposed by the lock to the Industriehafen. The quay has a length of 850 m. and is equipped with four 18-ton cranes, each having a capacity of 1,500/2,000 tons per shift. In addition there is 1 gantry crane lifting a 20-ton wagon and loading this quantity within 3 minutes, and 4 cranes (two of 8 tons and two of 5 tons) which are mainly used for handling logs.

Storage facilities amount to 75,000 m^2.

Anker-Schiffahrt (Kalihafen)

At this facitilty salt and potash cargoes are handled. The quay has a length of 400 m. and is equipped with 5 conveyerbelt loaders and 3 crane bridges each with a lifting capacity of 6 tons. It is possible to store about 150,000 tons of cargo. Restrictions as above.

Klocknerhutte (Huttenhafen)

This facility mainly handles coal, ore, scrab, stones and sand. Export of steel sheets pipes and coils of Klockner iron mill are handled via this quay.

Quay length:	550 m.
3 Gantry cranes:	12.5 tons, 10 tons, 40 tons.
Ore discharging capacity	8,000 tons per 24 hours.
Storage capacity	300,000 tons
Restrictions as above	

Kraftwerk-Hafen (Power Station) Kohlenhafen

At this berth only coal cargoes for use by the power station are handled. Discharging rate 2 cranes: 1,250 tons per shift.

Other bulk handling facilities:

Granary (Getreidehafen) *near the Uberseehafen*

No locks Max. draft 32 ft. Lighterage is possible.

Berth A 2 elevators with a capacity of 400 t.p.h. max. length 260 m. (853 ft.).

Berth B 6 elevators with a capacity of 170 t.p.h. max. length 176 m. (577 ft.).

Kraftwerk Farge (Power Station)

Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz-und Fabrikenhafen. Grain facility with

Max. draft	21 ft. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyer for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz-und Fabrikenhafen)

Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4–250 t.p.h. each

Car loading installations (Kap Horn) with two quays, one 320 m. long inside Industriehafen and the other 400 m. long (riverside). The storage area is 100,000 sq.m. and provides sufficient space for 7,000 cars. The loading of cars is done by ship's gear.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:

Regular period: 0630–1430 resp. 0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1500–2300
3rd shift: 2300–0600 (overtime)

on Sundays: (overtime)
1st shift: 0600–1200
2nd shift: 1200–1800
3rd shift: 1800–2400
4th shift: 2400–0600

Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

Industrieh/Grain Pier
0630–1230
1230–1830
1830–2430
0030–0630

On Saturdays:
Free Port
1st shift: 0600–1400
2nd shift: 1500–2100 (overtime)
3rd shift: 2100–0300 (overtime)

Industriehafen/Grain Pier
0630–1430
1430–2030 (overtime)
2030–0230 (overtime)

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 250 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. 10 in. at low water
Osterott I	one berth max. draft 33 ft. at low water
Osterott IV	one berth max. draft 36 ft. 09 in. at low water
Farge	two berths max. draft 31 ft. 06 in. at low water

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 29 ft. 06 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS: 31 countries represented.

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 22,000 d.w.t.
AG. "Weser" 2 Docks	up to 22,000 d.w.t.

SURVEYORS: Contact Schiffsbesichtiger or Port Authority.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCE: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112. Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 38–52–08 or 38–13–26.
Port Administration Bremen: 38–92–1.
Waterway Police: 38–32–68.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen.

AGENT: Wm. H. Muller Co. (Bremen) GmbH. 1 Bremen, Birkenstrasse 37. Tel.: (0421) 314910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See Brixham or Cherbourg.

PILOTAGE: See "Bremen".
Docking Pilots join vessels at Buoy "Z" if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. 6 in. will be restricted by tide.

MAX. SIZE: Length 260 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR/VHF: See "Bremen".

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	36′
Stromkaje	46′
Dock basins:	*Depth*
Neuer Hafen	21′
Kaiserhafen I	28′
Kaiserhafen II	36′
Kaiserhafen III	36′
Verbindungshafen	36′
Nordhafen	46′
Osthafen	46′

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. depth 23 ft. at LW.
Nordschleuse: length 1220 ft., gate width 148 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24′
Fischereihafen II	24′
Handelshafen	22′

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.
With special permission of the port authorities the following maximum FW drafts are allowed.
42′8″ = 13 m. – max. beam 40 m.
39′3″ = 12 m. – max. beam 41 m.
35′ = 10.7 m. – max. beam 42 m.
The port is equipped with modern bulk-, container-, roll-on/roll-off and general cargo facilities.
3 floating cranes have lifting capacities of 100, 250 and 500 tons respectively.
Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.6 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 750 t.p.h.
Columbus Quay Passenger and general cargo facilities.
Quay length 1,020 m. Depth 30 – 36 ft.
9 cranes – 4 to 8 tons.
Terminal ferry service to Harwich.
Car loading installations
The car loading installation at Bremerhaven is situated in the Nordhafen. Quay length 750 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' gear.
Container Terminals
2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 10 container cranes. 7 cranes at 54 tons, 2 cranes at 45 tons and 1 crane at 52 tons.
Depth alongside in river 46 ft. at LW. Depth at Nordhafen 38 ft.
Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: 79,716 sq. m. 40 cranes with capacities from 3–8 tons. Various cranes for heavy lifts up to 30 tons. Shed B in the Kaiserhafen III is equipped with 2 conveyor belt loaders for bagged cargo, especially fertilizers. The installation is weather protected. A banana discharging installation, with 5 elevators, has a capacity of over 300,000 tons per year.
Lash Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)

on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)

on Sundays:
as Bremen Freeport.

TANKERS: *Esso Bremerhaven*, Columbus-Kaje. Max. draft 36 ft.
There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCE: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa, and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULATES: At Bremen only.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police, help 110; Fire 112; Harbour Master 481212; Docking Pilots 481 230; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port medical service 40031.

DEVELOPMENTS: 2 container cranes under construction, expected to be operational mid-1977.

AUTHORITY: Hansestadt Bremisches Amt-Der Hafen kapitan.

AGENT: Wm. H. Muller Co. (Bremen) GmbH, Neue Fahrgastanlage 11, Kaiserhafen, Bremerhaven. Telegrams: "Batavier". Telex: 244704. Telephone: (0471) 46123.

BRUNSBUTTEL: 53.43 N. 09.09 E.

DOCUMENTS:
Health Certificate forms obtainable from river Pilot.
3 Crew lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

PILOTAGE: Canal Pilots compulsory. Vessels with more than 25,000 g.r.t. must take 2 river Elbe Pilots. Vessels requiring Elbe Pilot must order same at least 12 hours prior to arrival at Elbe 1 light vessel by cable to "Elblotse Brunsbuttelkoog" via Norddeich Radio (DAN) giving name of vessel, gross tons, ETA, date 2 figures, time 4 figures, draft. (For example: Tibetan 35824 ETA Elbe 1 05 0430 36 ft. 6 in.) Vessels requiring Canal or Harbour Pilot at Brunsbuttelkoog must order Pilot at least 6 hours prior arrival Brunsbuttelkoog roads by cable to "Kanallotse Brunsbuttelkoog" via Norddeich Radio (DAN) (for example: Brigitte 1249 ETA Brunsbuttelkoog 29 18.00 3.5 m.).

ANCHORAGES: In vicinity of lightvessel Elbe (54° 00′ N. 08° 10′E.); Neuwerk Roads (53° 58′ N. 08° 30′ E.); Freiburg Roads (53° 50′ 7″ N. 09° 20′ E.).
Vessels waiting entrance to the Canal may anchor in N.E. Anchorage, S. Anchorage, or Neufeld Anchorage, all with sufficient depth for vessels transitting Canal.

RESTRICTIONS: No restrictions imposed on night entry. If draft above 31 ft. 2 in. fresh water, vessels will be piloted to Brunsbuttelkoog with flood-tide.
Dimensions of lock: length 315 m., beam 40 m.
The Canal can be navigated by vessels up to 235 m. LOA and 32.5 m. beam and draft in accordance with table below.
Height above water-line transitting Canal must not exceed 40 m.
For Binnenhafen, as far as km. 3.75, vessels not requiring to transit Canal may enter with draft up to 10.40 m.

Length in (m.)	Beam in metres 20	21	22	23	24	25	26	27	28	29	30	31	32	32.50
	Draft on (m.)													
160	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	8.9	8.9
163	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.9
166	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.7
169	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.0	8.9	8.8	8.7	8.6
172	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5
175	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4
178	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.0	8.9	8.8	8.7	8.5	8.4	8.3
181	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5	8.3	8.3
184	9.5	9.5	9.5	9.3	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.2
187	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.1
190	9.5	9.4	9.3	9.2	9.1	8.9	8.8	8.7	8.6	8.1	8.3	8.2	8.1	8.0
193	9.5	9.3	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.1	8.0	7.9
196	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8
199	9.3	9.1	9.0	8.9	8.8	8.7	8.5	8.4	8.3	8.2	8.1	7.9	7.8	7.8
202	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.2	8.1	8.0	7.9	7.7	7.7
205	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.6
208	9.0	8.9	8.8	8.7	8.5	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5
210	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5
214	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.6	7.5	7.4	7.4
217	8.8	8.7	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.5	7.4	7.4	7.3
220	8.7	8.6	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5	7.4	7.3	7.3
223	8.6	8.5	8.4	8.3	8.1	8.0	7.9	7.7	7.6	7.5	7.4	7.3	7.2	7.2
226	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.5	7.4	7.4	7.3	7.2	7.1
229	8.4	8.3	8.2	8.1	7.9	7.8	7.7	7.6	7.4	7.4	7.3	7.2	7.1	7.1
232	8.4	8.3	8.1	8.0	7.9	7.7	7.6	7.5	7.4	7.3	7.2	7.2	7.1	7.0
235	8.3	8.1	8.0	7.9	7.8	7.6	7.5	7.4	7.3	7.3	7.2	7.1	7.0	7.0

MAX. SIZE:
Elbe Harbour: Max. draft 41 ft. 6 in. salt water ships to 250,000 d.w.t.

Oil Harbour: Max. draft 34 ft. 2 in. fresh-water max. length 235 m.

Ostermoor: Max. draft 31 ft. 2 in. fresh-water ships to 30,000 d.w.t.

Ships passing canal; See "Restrictions" above.

HEALTH: Pratique automatic for vessels entering harbour for loading or discharging, and ships passing through Canal if required. Health Certificate form does not show any infectious diseases.

RADIO: Cable Agents stating ETA, draft and requirements via Norddeich Radio (DAN).

RADAR/VHF: River Radar Service from Elbe 1 to Hamburg, but no special Port Radar Service for Brunsbuttelkoog. Radar Service can be contacted by VHF Channels 5 or 20.

River and Canal Pilots listen on Channels 9 and 13. Ships transitting canal directed by VHF Channels 2 or 3.

TUGS: 6 tugs available at Brunsbuttelkoog. Vessel's lines used. Tugs normally join vessels bound for the Elbe Harbour on river in vicinity of Canal locks.

From the approach limit up to entry into the lock, tug assistance is mandatory for vessels in Group 5 and over, and also such vessels which manoeuvre only with difficulty. Tugs assisting ships entering locks join vessels on canal-roads.

BERTHING: Ships lying at terminals situated on Canal bank in Inner Harbour should take into consideration that vessels must moor safely, as suction of passing ships may cause breaking of lines.

Elbehafen: Situated outside of locks. Quay length 1,100 m.

Binnenhafen: Comprises the area between lock entrance and km. 5.27.

Also see "Tankers" and "Fuel" below.

BRIDGES: Ships transitting canal must have bridge clearance of 40 m. Otherwise no impediments.

STEVEDORES: Ordered by Agents, no ETA to stevedores necessary.

MEDICAL: Port Medical Service by Harbour Doctors. Day and night service. Inoculations have to be ordered 24 hours prior arrival. Hospital available at Brunsbuttelkoog.

TANKERS: *Elbe Terminal:* Crude oil discharge berth situated outside of locks. One 30-in. pipe-line to DEA Tanker Storage. Two 12 in. hoses and 2×16 in. hoses available for discharge.

Oil Harbour. Situated on North side of Canal with entrance in location of km. 3.5. 5 berths suitable for tankers up to 10.40 m. (fresh water) draft. Hoses of 6 in., 8 in. and 10 in. for handling crude oil, diesel oil, gas oil, gasoline, tuluol, xylol and lube oil. No slop facilities available.

Ostermoor: 3 tanker jetties suitable for vessels able to navigate Canal. A mooring for discharge of K-3 cargoes (Flashpoint above 55°C).

Also see "Fuel" below.

DENSITY: Brackish at Elbe Harbour and inside locks. Average density 3% NaCL.

FRESH WATER: Most berths supply by shore installations, otherwise barge.

FUEL: All grades available. Vessels in Elbe Harbour supplied by barge.

Bunker stations on South side of Canal are:
Shell – 2 berths, no gas oil.
BP – 3 berths.
Elf (See Ostermoor) 4 berths.
and on the North side of Canal:
Norddeutsche Bunkergesellschaft – 1 berth no gas oil.
Brunsbuttel Bunker Service. – 3 berths.

FIRE PRECAUTIONS: No specific precautions except in Oil Harbour where anchors may not be used. Fire safety-lines must be ready fore and aft.

GANGWAY/DECK WATCHMEN: Services of watchmen not necessary but available day and night if required.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ships entering canal and using terminals mentioned under "Max. Size" must have international ship's register. All other certificates should be valid but are normally not used.

CUSTOMS ALLOWANCES: Tobacco, each crew member 200 cigarettes or 50 cigars or 250 grams of tobacco. Surplus will be sealed up by customs. Wine and/or spirits 1 bottle of spirits and 1 bottle of wine permitted for each crew member. Beer unlimited. Ships transitting canal are not affected.

IDENTIFICATION CARDS: Normally not needed. If necessary in special cases identification Cards will be issued by Immigration.

CONSULS: All consulates available at Hamburg. Swedish Vice-Consul at Brunsbuttelkoog.

REPAIRS: Only minor repairs can be effected. Big yards and dry docks available at Hamburg.

REPATRIATION: Crew changes can be arranged in connection with local immigration Office.

AIRPORT: Nearest Airport Hamburg. 90 km. away.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: Cargo work can be arranged on every day.

POLICE/AMBULANCE/FIRE: Police 110 and 3041; Waterway Guard Police 8.71.60; Passport Control 87.262; Customs 8555; Hospital 2086; Fire 112.

TELEPHONES: No facilities for placing telephone on board.

AUTHORITY: Canal Authority – Kiel Holtenau, Port Captain Brunsbuttel, Lock.

BUTZFLETH: 53.39 N. 09.32 E.

DOCUMENTS:
3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

PILOTAGE: The pilot cutter is stationed off "ELBE 1" lightvessel. May be contacted on VHF Channels 13 and 16. River Pilots also act as docking Pilot.

ANCHORAGE: Neuwerk roads, near "ELBE 1" lightvessel.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

BERTHING: *Aluminium Oxid Stade GmbH. (AOS):* This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 43 ft. F.W.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	260 m.	
Quay inside	310 m.	5.2 m. (17 ft.)

When the depth of the River Elbe has been increased, it is expected that larger vessels will be handled at this installation.

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate
Caribbean bauxite ..... 350 t.p.h
Australian bauxite:
from Gove ..... 500 t.p.h.
from Weipa ..... 750 t.p.h.
Oxide ("Spout" loading) ..... 500 t.p.h.
Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers.

Restrictions	*Products Inflammable*	*Non inflammable*
Length at quay outside	149 m.	250 m.
Length at quay inside	125 m.	
Draft at quay outside	43 ft.	43 ft.
Draft at quay inside	26 ft. 3 in.	
Discharging rate liquid gas		approx 150 t.p.h.
Loading rate chemical products		200-650 t.p.h.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Brunsbuttel or Hamburg.

REPAIRS: Minor repairs can be carried out.

AGENT: Sartori Berger, PO Box 1140, 2212 Brunsbuttel, tel. (code 4852) 8091 (5 lines), telex 28324.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan)

DOCUMENTS:
Stores List.
Crew List.
Customs Manifest.
Derat. Certificate.
Amerikahafen is a Customs free port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Post", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available in Cuxhaven Outer Roads, 12 m. depth of water, and Inner Roads (Medem Reede) in 6 m. depth of water.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.
HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.
RADIO: for ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.
TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.
RADAR: Available, can be contacted through VHF Channel 21, call radar station, Cuxhaven.
MEDICAL: Doctors and hospitals obtainable day and night.
FRESH WATER: Available from shore pipe-line up to 50 t.p.h. Small quantities up to 15 tons may be obtained in Roads from bunker barge. There are no water barges.
FUEL: Bunker and gas oil available. Small quantities, up to 150 tons, may be obtained anytime. Otherwise according to conditions of supplying oil company.
FIRE PRECAUTIONS: No special restrictions. Ships with explosive cargo and liquid cargoes of danger class K1 and K2 not allowed in Cuxhaven Harbour.
CARGO HANDLING: A harbour for overseas ferries up to 150 m. length with roll-on/roll-off and container equipment.
GANGWAY/DECK WATCHMEN: Not obligatory, at Master's discretion.
OPENING/CLOSING HATCHES: Normally performed by crew. Stevedores must be paid if required to do this work.
CUSTOMS ALLOWANCES: 40 cigarettes, 1 bottle spirits and 2 bottles wine.
IDENTIFICATION CARDS: If no passport, shore pass required.
CONSULS:
Iceland, tel. 36036/37.
Sweden, tel. 36011/12.
Others at Hamburg/Bremen.
REPAIRS: All deck and engine repairs possible.
DRY DOCKS: Floating dock for vessels up to 110 m. length, and slipway for vessels up to 75 m. long and 13 m. beam.
REPATRIATION: All facilities available.
AIRPORT: Hamburg-Fuhlsbuttel, 130 km. away; Bremen, 110 km. away.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: New Year's Day, Good Friday, Easter Sunday, Easter Monday, 1st May, Ascension Day, Whit Sunday, Whit Monday, 17th June, Atonement Day, Christmas Day, Boxing Day. Loading/unloading can be arranged on these holidays.
POLICE/FIRE/AMBULANCE: Police, tel. 110; Harbour Police, tel. 22072; Ambulance, tel 23125; Fire, tel. 112.
TELEPHONES: At Steubenhoft and in the ferry harbour, telephones can be put on board.
SERVICES: Compass adjusting and radio overhaul.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A new Ferry Terminal with roll-on/roll-off and load-on/load-off facilities under construction, completion expected 1977.
AUTHORITY: Niedersachsisches Hafenampt Cuxhaven.
AGENT: See "Hamburg".

ECKERNFORDE: 54.29 N. 09.51 E.

DOCUMENTS:
Stores List.
Customs Documents.
Cargo Documents.
Crew List.
PILOTAGE: No Pilot station. No tide. In East winds, water level can increase to 1.50 m. above normal.
ANCHORAGE: Good anchorage in the Roads between N.W. to N.W. by W. bearing from the port, distance 1 to 1.5 miles. Depths 18–21 m. Anchorage not allowed in harbour area.
CLEARANCE: Customs clearance at any time subject prior notice given. If suspected diseases on board inform Health Authorities.
MAX. SIZE. In outer harbour, up to 5 m. draft; in inner harbour up to 3 m. draft.
RADIO: Radio Kiel, call sign DAO, tel. 39011.
TUGS: No tugs.
BRIDGES: Outer and Inner Harbours separated by bascule bridge, opening to 12 m. width.
MEDICAL: Doctors and hospitals available.
FRESH WATER: Available.
FUEL: Diesel oil available. No coal.
WATCHMEN: Not available.
OPENING/CLOSING HATCHES: By ship's crew.
IDENTIFICATION CARDS: Required, if no passport.
REPAIRS: Available for fishing boats or coasters. Slipway for vessels up to 200 tons.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Work allowed on Sundays and official holidays subject to Harbour Master's permission.
POLICE/FIRE/AMBULANCE: Police, tel. 110; Hospital, tel. 6041; Fire, tel. 112.
TELEPHONES: Public telephones in harbour area. No installation on board.
SERVICES: Other services available from Kiel.
SHORE LEAVE: Permitted.
AUTHORITY: Stadtische Betriebe Eckernforde GmbH.

ELSFLETH: 53.14 N. 08.28 E.

PORT LIMITS: The seaward boundary of the port is the entrance of River Hunte, vessels are considered to be arrived when alongside the berth or waiting berth, and customs formalities are completed.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
1 Health Certificate.
2 Provision and Store Lists.
1 Ship's Certificate.
PILOTAGE: Pilotage is carried out by Weser River Pilots, no harbour Pilot available.
ANCHORAGE: No anchorage in vicinity of the harbour, see Blexen Roads.
RESTRICTIONS: Max. draft in the entrance at low water is 3.20 m.
MAX. SIZE: Max. size in daytime, length 80 m. Max. size at night-time, length 60 m., draft depends on the tide.
PRATIQUE: Pratique is given on arrival by the health officer. If disease or fever is suspected on board it has to be reported to the Agent.
RADIO: Cable Norddeich (call sign DAN) advising ETA and cash requirements.
RADAR/VHF: No port radar service but river radar can be used for approaching port from Weser lightvessel to Bremerhaven. VHF Channel 6 from Bremerhaven to Elsfleth.
TUGS: Tugs have to be ordered from Bremen or Brake, they join the vessel at River Hunte estuary. If tug lines are used there are no extra charges.
BERTHING: 1 quay with a length of 260 m., depth alongside 150 m.=5 m., and 110 m.=4 m., 1 waiting berth for small vessel 2 m., 1 private berth (Omni-Pac).
SPECIALISED CARGO-HANDLING FACILITIES: 2 cranes with 5 tons and 1 crane with 3 tons. Bulk cargo can be handled with grabs, no other special facilities.
BRIDGES: No bridges to reach the port, but all ships bound for Oldenburg are waiting at Elsfleth for opening bridges.
STEVEDORES: ETA has to be cabled to the Agents to arrange gangs. Port works 3 shifts around the clock, including Sunday and holidays.
MEDICAL: Medical service is available day and night. Hospital is available at Brake.
TANKERS: No tanker berth.
DENSITY: Fresh water.
FRESH WATER: Delivered from the quay by hose.
FUEL: Fuel is delivered by bunker-barges stationed in port.
FIRE PRECAUTIONS: No fire precautions.
CONSUL: No Consuls.
REPAIRS: 1 dockyard, all ship and engine repairs can be carried out.
DRY DOCKS: 2 slipways can be used.
SURVEYORS: Classification Societies have to be ordered from Bremen, surveyors available at Elsfleth.
GANGWAY/DECK WATCHMEN: A crews' watchman is necessary because of strong tidal streams, 2—3 knots.
HATCHES: Hatch-opening/closing to be carried out by crew.
CUSTOMS ALLOWANCES: Quantity permitted for each crew member: 100 cigarettes, 1 bottle of spirits.
CARGO GEAR: Loading/discharging is carried out by shore cranes.
REPATRIATION: Any time. Inform agent.
AIRPORT: Airport at Bremen (50 km). Regular airlines.
TIME: Local time: GMT plus 1 hour.
HOLIDAYS: Cargo work can be arranged on those days.
POLICE/AMBULANCE/FIRE: Police: Station 2263, River 2377. Ambulance: Brake Hospital 04401–4060. Fire 2333.
TELEPHONES: No ship-to-shore communications.
SHORE LEAVE: Crew members are allowed ashore with valid passports.
IDENTIFICATION CARDS: No shore pass issued.
REGULATIONS: No unusual regulations for the port.
DEVELOPMENTS: A new private berth is under construction for the distillery "Pabst & Richards".
GENERAL: All ships bound for Oldenburg have to do clearance in port.
AUTHORITY: Niedersachsisches Hafenamt Brake.

EMDEN: 53.23 N. 07.13 E. **(See Plan)**

DOCUMENTS: Health Certificate: form obtainable from River Pilot and to be completed before arrival Emden locks, where it is collected by Port Health Authorities. Crew Lists. Ship's Register. Slop-chest List.
PILOTAGE: Compulsory. At least 12 hours prior arrival at Pilot station, vessel to radio "Emslotse Emden" indicating vessel's name, ETA, destination and draft. Contact pilot vessel on VHF

Channel 16 or MW 500 kHz or LW 2023 kHz (daytime) and 2182 kHz (night-time).

Pilot vessel located near Wester Ems Light Buoy in approx. position 53° 37′ N. 06° 24′ E.

ANCHORAGE: Vessels may anchor in vicinity of pilot vessel 9.5 fathoms depth. Sandy bottom.

RESTRICTIONS: Vessels drawing in excess of 26 ft. salt water have to wait for high tide to proceed to Emden proper. Tide rise about 10 ft.

MAX. SIZE: Under normal tide conditions, vessels drawing 36–37 ft. can enter Emden directly. Vessels up to 45 ft. can be discharged at the unloading berth on the Ems South of Borkum. Length and beam restrictions imposed by locks at Emden proper: 255 m. length, and 38 m. width. Vessels exceeding these dimensions require prior permission.

Vessels drawing up to 45 ft. salt water can be lightened in river inside Isle of Borkum, by floating cranes until appropriate draft achieved.

HEALTH: Pratique granted immediately on arrival at locks by Doctor or Health official.

RADIO: Cables should be despatched via Norddeich Radio (DAN).

RADAR: Radar service on the river "Ems" from approx. position 53° 37.5′ N. 06° 23′ E. (Westerems) or 53° 35′ N. 06° 23′ E. (Hubertgat) up to port entrance. The other range (Borkumradar) works on VHF Channel 18. Further information on this Channel.

TUGS: Sufficient tugs available, stationed at Emden locks, ranging from 790 to 3,900 h.p.

BERTHING: *Outer Harbour* quay length 110 m.

New Inner Harbour accessible through sea lock; South quay 930 m. length; North quay 480 m. length.

Inner Harbour includes Industry Harbour Quay. Length 300 m., depth 25 ft. alongside.

STEVEDORES: Since main commodities consist of bulk cargoes, such as iron-ore, coal, coke, bauxite, no specific requirements.

MEDICAL: Advance notice only required in urgent cases; hospital available.

BULK HANDLING FACILITIES: *Outer Harbour.* Facilities on northern part of quay include 3 stationary grain elevators with capacities of up to 250 t.p.h. and 2 floating elevators each of 250 t.p.h. capacity.

New grain silo, with 11,500 tons capacity equipped with 2 telescopic loading pipes. Handling capacity – 400 t.p.h. seawards, 100 t.p.h.

Inner Harbour. South Quay equipped with 10 transporters of about 15 tons lifting capacity each, and a conveyor belt system handling about 1,500 t.p.h., max 3,000 t.p.h.

North quay equipped with 4 transporters each of 15 tons lifting capacity and an ore conveyor belt system handling 1,000 t.p.h., max. 1,400 t.p.h.

TANKERS: Olhafen situated in Inner Harbour. Tankers up to 36 ft. draft discharge to Frisia Refinery.

Slops may only be discharged at the Tank Cleaning installation of Thyssen Nordseewerke GmbH.

The berth is equipped with two 12-in. Woodfield type loading arms used for receiving crudes and loading fuel oils. There is one 8-in. loading arm for bunkering. The average discharge rate is 3,000 t.p.h.

DENSITY: Average density in Port 1005–1010.

FRESH WATER: Available, supplied by barge, and alongside Outer Harbour Quay.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Neither compulsory nor necessary.

OPENING/CLOSING HATCHES: To be performed by crew.

CUSTOMS ALLOWANCE: In Freeport and Inner Harbour no restrictions on board vessel for up to 4 weeks. Seamen going ashore allowed to take only 20 cigarettes each.

IDENTIFICATION CARDS: Not required.

CONSULS: Swedish Consul, tel. 2 19 04, Dutch Consul, tel. 2 14 04.

REPAIRS: All kinds of repairs possible.

DRY DOCKS: Schulte & Bruns (floating dock) length 281 ft., width 52 ft. 6 in., lifting capacity 1,300 tons.

Rheinstahl Nordseewerke GmbH (floating dock) length 426 ft., width 51 ft. 8 in., lifting capacity 3,500 tons. (Floating dock) length 579 ft., width 88 ft. 7 in. lifting capacity 11,300 tons (Dry dock) length 715 ft., width 97 ft. 8 in.

C. Cassens Schiffswerft (floating dock) length 220 ft. width 33 ft. lifting capacity 1,000 tons. (Floating dock) length 308 ft. width 52 ft. 5 in., lifting capacity 1,780 tons.

AIRPORT: Nearest airports Bremen and Hamburg, about 2–3 hours drive from Emden. World-wide connections. Flight Emden to Bremen or Hamburg possible by air-taxi.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday (June 17th); Prayer Day; Christmas Day; Second Christmas Day (December 26th) No work on New Year's Day, Easter Sunday, Whit Sunday, May 1st and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 23 311; Fire 112.

TELEPHONES: Telephones can be placed on board if vessel berthed Northquay, Southquay or Rheinstahl Nordseewerke shipyard.

AUTHORITY: Wasser und Schiffahrtamt, Emden.

AGENTS: Fritzen Schiffsagentur und Bereederungs-GmbH, Neptunhaus, PO Box 109, Emden. Tel 04921 20011 (also after office hours). Telex 027821. Cables "Fritzenagent".

FLENSBURG: 54.48 N. 09.26 E.

PORT LIMITS: The seaward boundary is the line between a special boundary-stone on the Westside and the South corner of the Bluecher-Bridge on the Eastside of the port entrance.

DOCUMENTS: 2 crew lists, 2 passenger lists, 2 stores lists (bonded stores), EG cargo lists, bills of lading, general declaration, ship's certificates.

PILOTAGE: Pilot Station Flensburg, Schiffbrucke 12, D-2390 Flensburg, tel; (0461) 25150. Advance notice 5 hours before arriving Buoy 7 by Kiel Radio or agent (3 hours before leaving port). Pilot boards at Kalkgrund beacon near Buoy 7. Pilot will board in all weather if possible, otherwise pilot-boat will lead vessel to that position where pilot can board. Not necessary to anchor. Pilot-boat is a fishing-boat with "Lotse" written in white letters on both sides. Boat will show lights prescribed by international regulations and is fitted out with VHF Channel 6, 10, 16, 25, 26, 27.

ANCHORAGES: Just outside harbour entrance, N.E. of Mittelgrund and West of Kielseng leading lights. Depths of water between 12 and 19 m. muddy ground; same position for quarantine anchorage.

RESTRICTIONS: No specific restrictions; no tide, water-level variations depending only on the wind.

MAX. SIZE: Vessels up to 21 ft. draft can enter without hindrance, maximum draft 23 ft. Beam and length has to be in normal proportion to the draft of a seagoing vessel.

HEALTH: Generally free pratique for ships in the North Sea and Baltic Sea trade, ships coming from overseas ports pratique granted on arrival. Inform pilot if any suspected diseases on board. He will make necessary arrangements. A valid Deratting Exemption Certificate has to be on board.

RADIO: Kiel Radio, call sign DAO, tel. (0431) 39011, telex 02-0081.

VHF: None in Flensburg Port.

RADAR: There is no Port Radar Service.

TUGS: Harbour tugs are not available. If required, Flensburger Schiffsbau-Gesellschaft can supply one tug 470 hp, provided at least 3 hours notice given, ship's lines are used.

BERTHING: Powerstation-Quay length 170 m. depth of water 7.30 m. Harnis-Quay length 470 m. depth of water 6.50 m. Schiffbruck-Quay length 210 m. depth of water 6.50 m. Ballast-Quay length 140 m. depth of water 6.00 m. Depths of water refer to normal water-level.

CRANES: Powerstation-Quay 1 crane 5 tons and 1 crane 10 tons lifting capacity; Harnis-Quay 4 cranes 1 – 5 tons lifting capacity; all cranes are usable for general and bulk cargo.

BULK CARGO FACILITIES: No extra bulk cargo facilities available.

SPECIALISED CARGO-HANDLING FACILITIES: Not available.

BRIDGES: There are no bridges at Flensburg port.

STEVEDORES: Agents make all arrangements. Unloading rates depend on type of cargo. Bulk cargo discharge up to 120 t.p.h. per gang.

MEDICAL: Doctors, hospitals, ambulances available day and night.

TANKERS: 3 berths for tankers up to 1000 GRT with depths of water 5.70 m. and 5.00 m.; diameter of discharge lines are NW 200 and NW 80; average discharge of fuel and gasoil 300 cu. m. per hour.

DENSITY: Winter-time 1015; Summer-time 1012.

FRESH WATER: Available at all berths, delivery rate about 20 cbm/h from shore hydrants.

FUEL: Diesel available in any quantity. Fuel oil subject to 5 hours advance notice from 2 bunker stations and tank lorries.

FIRE PRECAUTIONS: No specific precautions.

CONSULS: Denmark, Nordergraben 19; others at Hamburg.

REPAIRS: Flensburger Schiffsbau-Gesellschaft carry out all ship repairs; outfit section equipped with one crane of 42 tons lifting capacity.

DRY DOCKS: One floating dock with 1,500 tons lifting capacity.

SURVEYORS: All main Classification Societies are present at Hamburg.

GANGWAY/DECK WATCHMEN: No watchman service available.

HATCHES: Opening/closing normally done by crew. Stevedores will perform this for additional payment.

CUSTOMS ALLOWANCES: For consumption on board merchant vessels for each crew member and per day 40 cigarettes or 20 whiffs or 10 cigars or 50 grams tobacco *and* 0.25 litre spirits *and* 3 litres wine are duty-free. If the ship stays for 3 days or longer it is usual to allow three-fold of the mentioned quantity. For shore leave 20 cigarettes are permitted for each person only. If a crew member leaves the ship for at least 3 days the regulations for tourists are applicable.

CARGO GEAR: All loading and discharging done by shore cranes, except elevator-work.

REPATRIATION: Possible at any time without difficulties.

AIRPORT: Hamburg-Fuhlsbuttel, 175 km. distant; 2.5 hours by train.

TIME: GMT plus 1 hour, permanent.

HOLIDAYS: See "Hamburg". No work on official holidays.

POLICE/AMBULANCE/FIRE: Police tel. 110, Fire/Ambulance tel. 112.

TELEPHONES: No installation on board ships.

SERVICES: No tank cleaning and slop disposal services. Compass adjusting possible, advance notice necessary.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Not required.

REGULATIONS: No particular or unusual regulations.

DELAYS: Normally no delays.

DEVELOPMENTS: One dredger is at work from time to time.

AUTHORITY: Stadtwerke Flensburg.

HAMBURG: 53.33 N. 09.59 E. (including Altona, Harburg and Wilhelmsburg) (See Plan)

DOCUMENTS:
6 Crew Lists
6 Passenger Lists.
3 Provisions and Stores Lists including Fuel Oil.
3 Dangerous Cargo Lists.
Health Certificates (forms obtainable from Pilot).
General Cargo Declaration.
Ship's Register.

DEEP SEA PILOTAGE: See Brixham or Cherbourg.

PILOTAGE: Pilot vessel *Elbe I* stationed Lat. 54° 0′ N., Long. 8° 10′ 7″ E. black painted, 2-masted vessel, with yellow funnel and "Lotse" in white letters on hull.

In bad weather, pilot boat shifts to East of Elbe II light vessel.

Pilotage district divided into 3 areas: (1) Elbe I to Brunsbuttelkoog. (2) Brunsbuttelkoog to Hamburg. (3) Harbour Pilotage. Change of Pilots takes place at Brunsbuttel and Seemannshaft. Pilotage is not compulsory, but advisable to use Pilots in approaches and port. River pilotage is charged. Inward and outward harbour pilotage free for vessels loading and/or unloading at Hamburg.

Pilots can be called by international code, flag, sound, or morse signals, radio call-signs DBBW, DBCQ, DBBY, or DAAO.

ANCHORAGE: Vessels awaiting Pilot may wait in vincinity of Elbe I lightvessel.

Other anchorages in Neuwerk Roads, approx. position 53° 58′ N., 8° 30′ E., and Freiburg Roads, approx. position 53° 50.7′ N., 9° 20′ E. Depths up to 13 m. available at Neuwerk and Freiburg Roads. Up to 14 m. at Brunsbuttel.

RESTRICTIONS: No restrictions on night entry. Vessels over 30 ft. draft are piloted to Hamburg with the tide in order to reach Finkenwerder Pilot station 1 hour before high water.

Depth of Channel, 12 m. at MLW, 14.50 at MHW at Hamburg.

MAX. SIZE: Draft 43 ft. (13.10 m.) in fresh water.

The following Harbours can be reached:

Harbour Name	*Max. draft subject to tide and berth*	*At any time up to*
Dradenau Hafen	33′–43′	33′
Petroleum Hafen	23′–37′	23′
Griesenwerder Hafen	27′–35′	27′
Kohlenschiffhafen	23′–33′	26′
Waltershofer Hafen	36′–43′	30′–36′
Kuhwerder Hafen	29′–36′	29′
Obere Hafen	28′–37′	27′
Rethe Neuhof HGL	33′–43′	30′
Rethe Gaswerke	33′–43′	33′
Kattwyk Hafen	33′–43′	33′
Neuhofer Hafen	33′–40′	33′
Rethe Hansamatex	33′–43′	33′
Rethe Speicher	32′–40′	32′
Schluisgrove Hafen	32′–38′	32′
Harburg 4	26′–35′	26′
Harburg 3	26′–35′	26′
Harburg 2	30′–40′	30′
Harburg 1	26′–30′	26′
Kraftwerk Wedel	32′–42′ 6″	32′
Rethe-Kruse	33′–40′	33′
Blumensandhafen	33′–43′	33′

The maximum draft is dependent on the prevailing Easterly or Westerly winds.

ETA: Master's telegrams via Norddeich Radio, call sign DAN, are passed on to Agent 24 hrs. a day, week-ends and holidays inclusive. For this reason it is advisable that Masters communicate with Agent via Norddeich Radio.

In order to avoid delay and extra charges Masters should cable their ETA at least 12 hrs. prior to arrival at Pilot station Elbe I to "Elbelotse Brunsbuttelkoog" via Norddeich Radio, stating the following details:

1. Name of vessel.
2. Gross register tons.
3. Date (2 figures).
4. Time (4 figures).
5. Place where Pilot is required.
6. Place of destination.
7. Draft in metres (4 figures).

For example:

Eta	Fjordaas	41079	12	1600	Elbeone	Hamburg	1214
(1)		(2)	(3)	(4)	(5)	(6)	(7)

1 hour before arrival at Elbe I lightvessel Masters are advised to contact the pilot cutter by VHF Channel 13 or 16.

BRIDGES: To be passed by vessels bound for basins South of Kohlbrand.

	Situated	*Max. breadth*	*Height above normal H.T.*	*Depth at normal H.T.*
Kohlbrand Brucke (a high-bridge)	across the Kohlbrand near Neuhof	558′	175′ 6″	48′
Kattwyk Brucke (a drawbridge)	across the Suder Elbe, before Harburg	328′	168′	43′ 8″
Retthe Brucke (a drawbridge)	across the Rethe, near Reiherstieg	164′	130′ 4″	41′

HEALTH: Master required complete health certificate when Pilot boards. Only vessels with infectious diseases are subject to detention.

RADIO: All messages to Agent, etc., through Norddeich Radio call sign DAN. Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships reporting stations are on permanent duty at *Cuxhaven* (VHF Channel 12, safety and calling Channel 16), *Brunsbuttel* (VHF Channel 14, safety and calling Channel 16), *Stadersand* (VHF Channel 11, safety and calling Channel 16), *Hamburg* (VHF Channel 12, safety and calling Channel 16).

A continuous chain of radar stations is established from Elbe I to Hamburg (port area included) and can be contacted through radar stations *Neuwerk Radar* Radio 1 VHF Channel 18, *Neuwerk Radar* Radio 2, VHF Channel 5. *Cuxhaven Radar* Radio, VHF Channel 21. *Belum Radar* Radio, VHF Channel 3. *Brunsbuttel Radar* Radio 1, VHF Channel 20. *Brunsbuttel Radar* Radio 2, VHF Channel 5. *Steindeich Radar* Radio 1, VHF Channel 22. *Steindeich Radar* Radio 2, VHF Channel 18. *Hetlingen Radar* Radio, VHF Channel 21. *Hamburg Radar* Radio, VHF Channels 22, 18 and 20, and *Hamburg Port* Radio, VHF Channels 14 and 16. All stations are on duty 24 hrs. River Pilots at Elbe I VHF Channel 13. Harbour Pilots Hamburg VHF Channel 9.

TUGS: Normally join incoming vessels at Harbour Pilot station at Finkenwerder. Vessels' lines usually used. If tugs lines required, an extra charge is made.

STEVEDORES: Ordered by Agents, no additional ETA's required.

Working hours

Monday to Friday	First shift 0700 to 1500 hrs.
	Second shift 1500 to 2300 hrs.
	Third shift 2300 to 0700 hrs.
Saturdays, Sundays and holidays	First shift 0700 to 1300 hrs.
	Second shift 1300 to 1900 hrs.
	Third shift 1900 to 0100 hrs.
	Fourth shift 0100 to 0700 hrs.

Work performed after 1500 hrs. Monday to Friday, on Saturdays after 1300 hrs., on Sundays and holidays is at overtime rates.

BULK HANDLING FACILITIES:

Grain

	Maximum Draft	*Length*	*Number of elevators*	*Capacity total/hour*
Hamburg–Kuhwerder Hafen	34 ft.	656 ft.	5	800 tons
Hamburg–Rethe/Stroh	37 ft.	753 ft.	3	750 tons
Hamburg–Rethe/Kruse	40 ft.	820 ft.	3	900 tons
Hamburg–Rethe/Makprang	36 ft.	753 ft.	11	1,300 tons
Hamburg–Neuhof	43 ft.	902 ft.	3	1,000 tons

There are 17 floating elevators with a capacity of 350/450 t.p.h.

	Quay length (feet)	*Max. safe draft (F.W.)*	*Max. height discharging gear above high water level (feet)*
Coal and Minerals:			
Hamburg–Tollerort	900	33 ft.	80
Hamburg–Harburg II	1,720	40 ft.	66
Elbehafen Brunsbuttelkoog Gmbh	1,968	37 ft.	98
Coal:			
Hamburg–Grasbrook	690	33 ft. 6 in.	No restriction
Hamburg–Kattwyk	1,200	43 ft.	50
Hamburg–Strandhafen	560	36 ft. 6 in.	No restriction
Hamburg–Wedel	1,050	42 ft. 6 in.	No restriction
Fertilisers:			
Neuhof–Kalikai	1,215	40 ft.	60
Minerals:			
Hamburger–Stahlwerke	1,542	43 ft.	82
Petcoke/Oxide:			
HamburgerAluminium Werk Gmbh	600 ft.	32 ft.	No restrictions
Bauxite/Oxide:			
Aluminium Oxid Stad Gmbh (AOS)	1,080 ft.	43 ft.	62

CONTAINER HANDLING FACILITIES:

Terminal	*Length (m.)*	*Depth (m.)*	*No. berths*
Burchard–Kai	1,850	10–14	8 (2 Ro-Ro) (2 cont.)
Tollerort			
Container 508 m. total:	1,080	11	7
Africa Multi-purpose	1,122	12	6
Euro-Kai KG aA Griesenw. Damm	770	13	4
Shed 73–74	438	11	3

CRANES:

Abbreviations: B (Bridges), C (Cranes), MC (Mobile Cranes), FC (Floating Cranes).

Burchard-Kai: 4 B at 53 t, 3 B at 42 t, 1 B at 38 t, 12 C up to 25 t, 2 MC at 30 t.
Tollerort: 2 B at 48 t, 2 Cargo-Tainer Twin-Cranes up to 50 t, 6 C at 15 t, 12 C at 3–5 t.
Africa: 7 C at 33 t, 1 C at 8 t, 10 C at 3 t, 1 MC at 20 t.
Euro-Kai: 4 B at 45–53 t, 4 C at 25 t, 5 C at 6 t, 1 MC at 12.5 t.
Shed 73: 2B at 50 t, 8 C at 3 t, 1 MC at 60 t, 2 FC at 25–30 t.

TANKERS:

	No. of berths	*Max. Draft (FW)*
Kohlfleethafen (Esso/B.P.)	2	43 ft.
Petroleumhafen	10	37 ft.
Kattwyk/Shell	2	43 ft.
Kattwyk/Petronord	1	43 ft.
Blumensandshafen	1	43 ft.
Neuhof/Hansamatex	4	40 ft.
Neuhof/Schindler	2	40 ft.
Harburg IV/Esso	2	28 ft.
	1	35 ft.
Stadersand	1	35 ft.

Tanker cleaning and gas freeing facilities at Hansamatex, Shell-Kattwyk/Hog and some dolphin berths by boats.

DENSITY: Fresh water.

FRESH WATER: Available from shore at most berths. Also supplied by barge.

FUEL: All grades available from oil berths, or supplied by barge.

DEVELOPMENTS: Silo capacity for bulk cargo handled by pneumatic elevators is increased up to 500,000 tons at deep water.

Capacity of further 500,000 tons is available. Maximum depth for bulk cargo vessels 46 ft.

Dredging of the Lower Elbe by a further 1.5 m. to 16 m. at mean high tide is underway. This depth will be sufficient for fully loaded 100/120,000 d.w.t. vessels, completion expected 1977.

Port Extension Area. An industrial port area of 4,600 ha. with access for large sea-going vessels up to 120,000 d.w.t. is under development.

Hansaport: The new ore/coal terminal at Sandauhafen (operational from 1977) has a capacity of 15 millions tons p.a. Length of the two berths: 560 m; depth of water: 16 m. (MLT). Vessels up to 160,000 d.w.t. (partially lightened) will be able to berth.

WATCHMEN: Can be hired for all purposes. Normally arranged by Agent.

OPENING/CLOSING HATCHES: Normally by crew with the assistance of stevedores; otherwise, according to charter party.

CUSTOMS ALLOWANCES: No restrictions in the freeport area on board a ship. While not on board the ship in the freeport area or outside the freeport during shore leave or temporary leaving the ship up to 3 days, each Crew member allowed 20 cigarettes, 5 cigars and 50 grams tobacco. These quantities change when paying off.

CONSULS: All Maritime countries are represented by Consuls in Hamburg.

REPAIRS: All deck, hull and machinery repairs can be carried out by local shipyards at Hamburg. Underwater repairs and cleaning can be effected by divers with special equipment.

DRY DOCKS: *Blohm and Voss,* tel. 3061: 5 floating docks with lifting capacities up to 29,000 tons. Graving dock, capacity up to 320,000 d.w.t.

Howaldtswerke Deutsche Werft, tel. 7411: 9 floating docks, with lifting capacities up to 53,000 tons.

Norderweft, tel. 311471: 2 docks, for vessels up to 4,000 tons d.w.t. and slipway for vessels up to 60 m. length.

There are other slipyards providing floating docks with lifting capacities of up to 5,000 tons.

TIME: GMT plus 1 hour all year round.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; National Day (June 17th); Prayer Day; Christmas Day; Boxing Day. No work on New Year's Day, Easter Sunday, May 1st, Whit Sunday and Christmas Day.

POLICE/FIRE/AMBULANCE: Police 110; Fire 112; Ambulance 110; Port Medical Service 321021.

AUTHORITY: Hafendirektion.

AGENT: Wm. H. Muller & Co., Schiffahrts-Agentur G.m.b.H., Monckebergstrasse 31, Hamburg 1. Tel. (040) 33.54.76. Telegrams "Batavier". Telex 2162926.

HOLTENAU, Kiel Canal: 54.22 N. 10.09 E.

For entrance from Baltic, refer to "Kiel".
For entrance from Elbe, refer to "Brunsbuttel".

KIEL: 54.19 N. 10.10 E. (See Plan)

DOCUMENTS:
Stores List.
Bills of Lading.
Manifest.
Crew List.
Health Declaration.
Derat. Certificate.
If loading/unloading cargo, following also required:
Ship's Stores List.
Crew Possessions List.
Cargo Manifest.
Bills of Lading.
Customs Declaration.

Local Agents will advise Master on board regarding these Clearance Documents.

PILOTAGE: Not compulsory for Kiel Harbour. For Kiel Canal, vessels over 50 g.r.t. must take a Pilot, and vessels over 2,500 g.r.t. must employ a steersman. Pilot station, tel. 331135. ETA required in advance. Pilot boat can be found near Kiel Lighthouse and also off the entrance to Kiel Canal. Pilot boats are yellow with "Lotse" painted on both sides. Signal for Pilot is flag "G" over numeral pennant 1. Pilots for Kiel Harbour also available and recommended if port is not familiar.

ANCHORAGE: Safe anchorages at Kanalreede in 13 m. depth, and at Heikendorferbucht in 11 m. depth.

RESTRICTIONS: Non gas-free tankers must give advance notice of arrival and will require chemist's certificate before entering harbour area.

Speed limit 10 knots South of line Bulk/Ehrenmal Laboe.

MAX. SIZE: For Nordhafen and ships passing Canal, 315 m. length, 40 m. beam, 9.50 m. draft; fresh water. Depth at harbour quays: Binnenhafen, 10 m.; Scheerhafen, 10.50 m. A bulk carrier of 35,000 d.w.t., draft 35 ft. has discharged at Scheerhafen.

HEALTH: If suspected infectious disease on board, inform harbour authorities by radio in advance.

RADIO: Kiel Radio, call sign DAO. Tel. 39011.

TUGS: If required tugs normally join vessel just off berth. Can be ordered by Kiel Radio or through Agents.

BERTHING: No particular restrictions except for vessels in distress, or carrying explosives or tankers not gas-free. In these cases special permission of Harbour Authorities required for berthing.

Binnenhafen: Length of quay 2,500 m. Depths up to 10 m. 6 cranes with capacity up to 24 tons, also 2 mobile cranes.

There is a mobile roll-on/roll-off bridge, 18 m. wide. Max. axle pressure 70 tons.

At Sartori-Kai there is a silo with a capacity of 16,000 tons, and at mouth of the River Schwentine another with capacity of 17,000 tons and discharge rate of 80 t.p.h.

Oslo-Kai: The terminal is for the exclusive use of passenger and car ferries. Depth of water 7.5 m.

Scheerhafen: Length of quay 300 m. Depth 10.3 m. There are 2 modern high capacity cranes capable of lifting up to 10 tons. There is also a privately owned tanker unloading facility with storage capacity of about 70,000 cu. m. and facilities for receiving dirty ballast.

Nordhafen: Situated in the Kiel Canal. Length of quay 2,000 m. depth 11 m. Facilities available include a floating roll-on/roll-off bridge with permissible axle pressure of 60 tons, 6 cranes with capacities up to 25 tons, a 40,000 ton silo with drying capacity of 70 t.p.h. and 2 elevators with capacity 125 t.p.h.

MEDICAL: Doctors, hospitals, ambulances available. Advance notice to Agents recommended if medical assistance required. Vessels coming from European ports need Derat. Cert. Vessels from other ports need in addition International Vaccination Certificates.

For all cases of poisoning needing special and urgent treatment telephone 597 3268, Medical University Clinic, Schittenhelmstrasse.

TANKERS: Unloading/Loading/Bunkering berths operated by private companies; slop discharge facilities available.

FRESH WATER: Available at all quays.

FUEL: All grades available. Preferable to order in advance through Agents.

FIRE PRECAUTIONS: Tankers should be prepared to leave port at any time. To be berthed with bow heading seaward. A valid Gas-free Certificate given by chemist in Kiel district is required before entering harbour area.

GANGWAY/DECK WATCHMEN: Not required.

OPEN/CLOSE HATCHES: Normally by ship's crew. Can be arranged by stevedores if required.

CUSTOMS ALLOWANCES: 20 cigarettes per man per day. No alcohol.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium tel. 532579	Norway tel. 731631
Chile tel. 54457	Sweden tel. 3017/235

REPAIRS: All types of repairs possible.

DRY DOCKS: *Floating Docks.* No. 1, 1,500 tons; No. 2, 22,500 tons; No. 3, 3,500 tons; No. 4, 6,000 tons; No. 20, 1,700 tons. *Dry Docks:* No.. 5, 794 ft. long, 95 ft. wide; No. 6, 661 ft. long, 95 ft. wide; No. 7, 1,018 ft. long, 164 ft. wide; No. 8, 951 ft. long, 144 ft. wide. No. 8A, 1,395 ft. long, 292 ft. wide.

REPATRIATION: No restrictions. Can also be arranged in the locks of Kiel Canal by local Agents. Valid passports required.

AIRPORT: At Kiel, local flights to Hamburg. Nearest international airport at Hamburg, about 100 km. away.

TIME: GMT plus 1 hour. Permanent.

HOLIDAYS: New Year's Day, Good Friday, Easter (2 days), Ascension Day, Whitsun (2 days), 17th June, Atonement Day, Christmas (2 days). Work can be arranged on above holidays except Good Friday and Christmas Eve.

POLICE/FIRE/AMBULANCE: Police, tel. 110, alternatively 51171; Ambulance, tel. 44112, alternatively 61036; Fire, tel. 112.

TELEPHONES: Installed on wharves and Oslo quay (ferries to Scandinavia). Public phones near quays.

SERVICES: All services available.

SHORE LEAVE: Allowed.

AUTHORITY: Hafenkapitan, Hafenamt der Stadt Kiel, tel. 9012024; Hafen unt Verkehrsbetriebe der Stadt Kiel, tel. 9012011/2.

KIEL CANAL: (See Plan)

For entrance from Baltic, refer to "Kiel".
For entrance from Elbe, refer to "Brunsbuttel".

LUBECK (including Travemunde): 53.52 N. 10.40 E. (See Plan)

DOCUMENTS:
2 Crew Lists.
1 Health Declaration.
2 Cargo Manifests.
2 Stores Lists.
1 Ship's Particulars form.
Crew Manifest.
Bills of Lading.
Customs Declaration.
Derat. Certificate.

PILOTAGE: Compulsory for vessels over 300 g.r.t. Pilot station situated at Travemunde, near foot of Nordermole. Pilots board vessels in anchorage area. International signals used by Pilots and by vessels requiring a Pilot. Contact by VHF Channel 13 and 20.

RESTRICTIONS: Channel from Lubeck "A" buoy to Stadthafen is well lit and navigable by vessels fitted with radar in all weathers.
Depths: from "A" buoy to Travemunde (Nordermole) 10.5 m.; from Nordermole to Siechenbucht, 10 m.; channel to NWK power station, 9.5 m.; channel to Stadthafen 8.5 m. The river Trave narrows from 130 m. at seaward end to 90 m. at Stadthafen.
MAX. SIZE: Dependent on berth depth and approaches. Vessels up to 14,000 d.w.t. can reach Stadthafen. Also see "Restrictions".
HEALTH: Radio pratique possible. Pilot will ask Master to complete Health Declaration.
RADIO: Lubeck Radio, VHF Channel 27. Harbour Radio service used by Pilots, tugs, and other vessels.
TUGS: Available and compulsory for vessels navigating river above Herrenbrucke: 2,000 up to 2,500 g.r.t., 1 tug required; over 2,500 g.r.t. or 6 m. draft, 2 tugs required.
BRIDGE: Herrenbrucke is 60 m. wide and 22 m. above water level. Can be opened for vessels requiring higher clearance.
MEDICAL: All facilities available. Hospital near docks at Travemunde, and at Lubeck.
BERTHING:
Travemunde: Passenger ferry harbour. North side river berths I and II, 10 m. depth; Kaiserbrucke, 100 m. length, 10 m. depth; Ostpreussen, 190 m. length, 8 m. depth; Prival (South side), 180 m. length, 5 m. depth. 6 berths for roll-on/roll-off and passenger traffic each 140–220 m. length, 7 m.–9.5 m. depth.
6 berths with railway connection.
Industriehafen: depth alongside, 7.8 m.
N.W.K. Power Station: depth alongside, 9.5 m.
Stadthafen: 27 km. from sea. Total length of quays 7.6 km. The harbour depth is 6 m.–8.5 m.
Elbe Lubeck Canal: navigable by barges up to 1,000 tons.
CRANES: 1 – 40 ton, 1 – 25 ton, 1 – 12 ton, also 3 ton cranes.
TANKERS: Two berths, length 150 m. Max. draft 8 m.
FRESH WATER: Available by barge at any location.
FUEL: All grades of bunker oil and coal available.
CONSULS: Denmark, Norway, Austria, Sweden, Iceland and Finland.
REPAIRS: Several shipyards available for deck and engine repairs.
DRY DOCKS: Floating docks for vessels up to 7,500 tons.
SURVEYORS: German Lloyd, others at Hamburg.
OPENING/CLOSING HATCHES: By crew.
REPATRIATION: All facilities available.
AIRPORT: Hamburg, 1.5 hours by bus or train.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January, Good Friday, Easter Sunday, Easter Monday, 1st May, Ascension Day, Whit Sunday, Whit Monday, 17th June, Atonement Day, Christmas Day, Boxing Day.
POLICE: Lubeck River Police, tel. 3 34 40; Travemunde River Police, tel. 5025.
TELEPHONES: Ship telephone connections at ro/ro berths.
SHORE LEAVE: Allowed.
AUTHORITY: Port Capt. Lubeck.

NORDENHAM: 53.29 N. 08.29 E. (see also Bremen and Bremerhaven)

DOCUMENTS:
Cargo Papers & Ship's Certificate.
3 Stores Lists.
3 Crew Lists.
2 Personal Manifests.
Derat Certificate.
PILOTAGE: Pilot boards off the Weser Light Vessel. Docking Pilot will board off Bremerhaven.
ANCHORAGE: Sea anchorage off Weser lightvessel or the Hoheweg Light. Max. draft 30 ft. River anchorage for vessels with a draft of 20 ft. off Blexen, 1 mile above Bremerhaven.
RESTRICTIONS: No restriction on night entry except vessels with a draft exceeding 38 ft. Vessels with a draft exceeding 32 ft. will be controlled by tidal conditions. Controlling depth in channel 11 m. MLW. In the port 9 m. to 12 m. at MLW (Midgard Pier).
MAX. SIZE: *Midgard Pier: (a)* Bulk cargo berth, total length 1,068 ft. max. beam 120 ft., max. draft 42 ft.
(b) Oil berth No. 1 (combined with Southern part of *'a'*), max. length 850 ft., beam 120 ft., draft 40 ft.
(c) Oil berth No. 2, max. draft 32 ft.
(d) Granary, max. length 690 ft., beam 80 ft., draft 38 ft.
Guanowerk, max. length 550 ft., max. draft 29 ft. 6 in. (approx.).
Preussag, max. length 550 ft., draft 27 ft.
Asbestos wharf: Max. length 820 ft. (250 m.) up to a draft of 40 ft. at MLW.
Also see "Tankers".
HEALTH: Pratique granted immediately on arrival in port by Health Official.
RADIO: Norddeich Radio Dan or Elbe Weser Radio (VHF Channel 16).
RADAR: No port radar available. Radar for entrance see Bremerhaven.
TUGS: Ample available from Bremerhaven. Tug's lines used.
BERTHING: The following industrial works and companies within the port area of Nordenham possess a berth each for sea-going vessels which serve only their private supplies and requirements. These berths are situated North of Midgard Pier.
1. Norddeutsche Seekabelwerke Aktiengesekkschaft, (production of cables).
2. Felten & Guilleaume Schsltanlagen GmbH (production of electric appliances, motors, etc.).
3. Preussag Aktiengesellschaft (s.a.) (production of lead, zinc). Length of quay 230 m., depth of water 32 ft. 10 in. (approx.) 2 cranes of 5 and 3 tons. Capacity 80 and 50 t.p.h. respectively. Storage capacity, 50,000 tons (coal or ore). 10,000 tons (Metal blocks), 5,000 cu.m. (Sulphuric acid).
4. Guano-Werke Aktiengesellschaft (s.a.) (production of fertilisers). Length of quay 100.0 m. One gantry crane.
5. Erdolwerke Frisia Aktiengesellschaft (tanks for the storage of mineral oils).
6. Vereinigte Flugtechnische Werke GmbH (production of airplanes).
7. Asbestos Corporation GmbH (production of asbestos).
8. Weser Tanklager Gesellschaft mbH (storage of mineral oils, bunker oil station of BP).

Connections: Gas oil 2×8", fuel 1×8".
9. Titangesellschaft mbH (production of titandioxide).

Asbestos Wharf: Length 210 m. Extra mooring dolphins North and South of wharf 50 m. from each end of wharf. Depth alongside 12.5 m. at MLW. 1 grab crane for discharge of asbestos minerals into conveyor system of factory.
SPECIAL CARGO HANDLING FACILITIES:
Midgard Pier:
No. 1. Bulk cargo berth for discharging and loading, 5 bridges with a lifting capacity of 22 tons each. Max. outreach 24.5 m. Total capacity of ore per shift 10,000 tons.
No. 2. Oil berth. 3 pipe-lines 10 to 12 in. diameter for fuel oil, diesel oil and gas oil. No shore steam or facilities for dirty ballast available.
No. 3. Granary. 2 elevators with a total capacity of 700 t.p.h. Storage capacity of 46,000 tons.

STEVEDORES: 24 hours' notice required. Notice required Friday morning for week-end work.
1st shift: 0600–1400 hrs.
2nd shift: 1400–2200 hrs.
3rd shift: 2200–0600 hrs. (overtime).
on Saturdays: (grain and other bulk cargoes).
1st shift: 0600–1400 hrs.
2nd shift: 1400–2200 hrs. (overtime).
3rd shift: 2200–0600 hrs. (overtime).
MEDICAL: Hospital available; advance notice only required if urgent cases.
TANKERS: Diameter of lines 8 in.
Shell Berth: Max. size 34 ft.
Weser Tankerlager: Max. size 200 m., length 32 ft. draft at L.W. T-shaped mooring lines attached to pontoons fore and aft, middle lines are attached to the shore. Length of lines 100 m.
DENSITY: Average density of water 1005–1012.
FRESH WATER: Fresh water available at a rate of 15 t.p.h. per hose price 2 DM. per ton.
FUEL: All grades available; delivery by barge; 2 days' notice required.
FIRE PRECAUTIONS: Special regulations for vessels loading or discharging explosives.
CONSULS: See "Bremerhaven".
REPAIRS: Minor repairs can be carried out. Ample facilities for major repairs at Bremerhaven.
DRY DOCKS SURVEYORS: See "Bremerhaven" or "Bremen".
WATCHMEN: Not necessary but available if required by Master.
OPENING/CLOSING HATCHES: Normally by crew but if by stevedores extra charges will apply.
CUSTOMS ALLOWANCE: Each crew member 200 cigarettes or 30 cigars or 30 grammes of tobacco and 1 bottle of spirits for a running period of 3 days.
CARGO GEAR: In most cases loading and discharging is effected with shore gear. Special equipment can be ordered from Bremerhaven.
REPATRIATION: Possible by air via Bremen or Hamburg.
AIRPORT: Bremen, distance 70 km., 1 hour by car. Hamburg, 200 km., 3 hours by car.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 2052; Fire 112.
TELEPHONES: Available on request.
SHORE LEAVE: Permitted.
IDENTIFICATION CARDS: Are not issued.
REGULATIONS: Port regulations for the Midgard Pier including special regulations for handling of explosives.
DELAYS: None except waiting for high tide (see restrictions).
AUTHORITIES: Asbestos Corporation, GmbH., Nordenham
"Midgard" Deutsche Seeverkehrs-Aktiengesellschaft, Nordenham.
And others.

STADERSAND: 53.37 N. 09.32 E.

Oil Terminal in Elbe River operated by Hamburger Mineralolwerke.
DOCUMENTS:
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Cargo Documents.
Ship's Register.
PILOTAGE: As for Hamburg.
RESTRICTIONS: Draft calculated by adding 31 ft. to height of tide and allowing 3 ft. keel clearance.
MAX. SIZE: Length up to 600 ft.
RADIO: Norddeich Radio call sign DAN.

HEALTH: Health Certificate brought on board by River Pilot for Master to complete.
TUGS: Available. Meets vessel off the berth.
BERTHING: 1 tanker berth at T-head jetty.
DENSITY: Brackish.
FRESH WATER: Only obtainable by barge from Hamburg. Minimum quantity supplied is 200 tons.
FUEL: Only obtainable by barge.
CUSTOMS ALLOWANCES: 100 cigarettes and 1 bottle wine/spirits per man.
CONSULS AND GENERAL INFORMATION: Refer to "Hamburg".
AGENT: See "Hamburg".

WILHELMSHAVEN: 53.31 N. 08.10 E. (See Plan)

DOCUMENTS:

Oil Port	2 Crew Lists.
	1 Health Declaration (Form supplied by Pilot).
	Derat Exemption Certificate.
	Passports/Seamen's Books.
	Vaccination List.
Harbour Docks	2 Crew Lists.
	1 Health Declaration.
	2 Cargo Manifests.
	2 Stores Lists.

PILOTAGE: Jade pilot boats are 2-masted and have yellow funnels with black tops; the black hull has white inscription "Lotse" on both sides. By day flag "H" of international code is flown; by night, the lights prescribed by international regulations.

Pilot vessel stationed at mouth of Weser. To call Pilot for Jade, in addition to International Code signals the signal "J" is hoisted by day or flashed by Morse lamp at night. The same signal can be made on whistle in bad visibility. In bad weather pilot vessel may retire to Roten Sand (Weser River), near the light-buoy "G".

ETA required 24 hours prior arrival at Pilot station. Pilot vessel transmits and receives on VHF Channel 16.

Pilotage compulsory. Vessels up to 70,000 d.w.t. take 1 Pilot at "Weser" lightvessel. Vessels exceeding 70,000 d.w.t. take 2 Pilots at "Deutsche Bucht" lightvessel.

Helicopter pilot service is available for vessels above 50,000 g.r.t. at "Deutsche Bucht" lightvessel.

ANCHORAGE: A deep-water mooring for large tankers lies South of the lightvessel "Deutsche Bucht". Ships which are waiting for a Pilot may anchor for a short while by the "Weser" lightship.

2 further anchorages for large and deep-draft vessels, the "North" and "South roads", have been made available to the North-east and the South-east of the "Weser" lightship.

Quarantine anchorage, and tanker lightening at Schillig Roads. Vessels waiting for a berth and with max. draft not exceeding 41 ft., may anchor at Wilhelmshaven North Roads. Vessels with draft exceeding 41 ft. must anchor near the tanker anchorage Schillig where the depth is at least 45 ft.

Vessels must report at the beginning of the area-way Jade River to radio station "Jade Area Radio" on Channel 18 VHF. The area station will give information about movements.

RESTRICTIONS: No restrictions on night entry. Vessels draft exceeding 55 ft., will be controlled by tidal conditions.

The lock opening times for No. 4 dock are announced in daily maritime bulletins.

Dock No. 4, dimensions of lock: 390 m. long, 57 m. wide and depth of 11.47 m. MLW. However, only smaller vessels use dock harbour as bollards for mooring larger ships not yet available.

MAX. SIZE: Max. LOA, 1,150 ft. Max. draft 65.5 ft. Keel clearance of 10% of draft required. Also see "Tankers".

HEALTH: Radio pratique possible. Sea Pilot will hand Health Declaration to Master. If one of the questions is answered "Yes", Pilot will advise Port Health Officer. A valid derat. exemption must be produced.

RADIO: Norddeich Radio, call sign DAN. Elbe-Weser Radio can be contacted by VHF Channel 16.

TUGS: Compulsory. Tankers normally require 4 tugs of minimum 1,500 h.p. for berthing. Tugs meet tankers at anchorage near buoy "U". Only tug lines are used, charge inclusive. Tugs join vessels at buoy "Q" when proceeding to Mobil Oil Terminal.

TANKERS: *Nord-West Oelleitung Terminal:* Position 53° 33′ N, 08° 08′ E. Distance from Weser lightvessel, 24 miles. Type of Berth, Finger Pier "T" head. Density 1025. Current velocity, 3-4 knots. Mean tidal range, 11 ft. 09 in. Nature of bottom, sand and mud. Vessels may berth and unberth day or night. Vessels exceeding 55 ft. draft enter only on rising tide. Fresh water available, Diesel and Fuel "C" available. When discharging, full capacity of ship's pumps required. Normal residues and sediments are acceptable without any water. Shore gangway available. Vessels berth Port or Starboard side alongside. No limit on length or beam. Max. draft, Berth No. 1 and No. 2 – 61 ft. Berth No. 3 – 51 ft. and Berth No. 4 – 66 ft.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia.*	*Length*	*Load – Discharge Rate Tons/Hour*	*Maximum Pressure*	*Hoses*
No. 1	Crude Oil	1×30″	4920′	8000	220 lbs.	4×12″
No. 2	Crude Oil	1×30″	4595′	8000	220 lbs.	4×12″
No. 3	Crude Oil	1×30″	4920′	6000	220 lbs.	3×12″
No. 4	Crude Oil	1×40″	5500′	12800	375 lbs.	4×16″
No. 1	Fuel Oil	1×24″	5920′	250/500	110 lbs.	1× 6″
No. 2	Fuel Oil	1×24″	5575′	250/500	110 lbs.	1× 6″
No. 3	Fuel Oil	1×24″	5905′	250/300	110 lbs.	2×12″
No. 4	Fuel Oil	—	—	500/700	110 lbs.	various

Mobil Oil Terminal: Berth No. 1 and 1A. Position 53° 37′ 28″ N, 08° 08′ 30″ E. Distance from Weser lightvessel, 20 miles. Type of berth, Sea Island. Density, 1025. Current Velocity, 3-4 knots. Mean tidal range 10 ft. 6 in. Nature of bottom, sand and mud. Least depth of water from port entrance to berth, 18.5 m. (60 ft. 09 in.) at MLW. Vessels may berth or unberth day or night. Vessels exceeding 55 ft. draft enter only on rising tide. Fresh water available by barge. Fuel "C" and Diesel available. Dirty ballast facilities available, capacity 29,000 cu. m. seawater, 17,900 cu. m. fresh/brackish water, discharge rate, 2,400 cu. m./h. Vessels berth port or starboard side alongside. All ballast, including clean ballast, to be discharged ashore.

Shore gangway available. An under keel clearance of 1 m. is required at Berth No. 1A at MLW.

Berth No. 1. Max. LOA, 1,150 ft. Min. length, 800 ft. Max. draft, 65 ft. Depth at MLW 68 ft. 11 in.

Berth No. 1A. Max. LOA, 650 ft. Min. length, 500 ft. Max. draft at HW, 48 ft. 2 in. Depth at MLW, 41 ft.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia.*	*Length*	*Load – Discharge Rate cu.m/h*	*Hoses*
No. 1	Crude Oil	1×44″	5000 m.	17500	4×16″
	Heavy Fuel Oil	1×30″	3000 m.	3200	2×16″
No. 1A	Heavy Fuel Oil	1×30″	3000 m.	3200	3×12″
	Light Fuel Oil	1×20″	3000 m.	3200	2×12″
	Gasoline	1×12″	3000 m.	950	1×10″

Mobil Oil Terminal: Berth No. 2 and 3. Position 53° 37′ 12″ N., 08° 07′ 36″ E. Distance from Weser lightvessel, 20 miles. Type of berth, "L"-head jetty. Density, 1025. Current velocity, 3–4 knots. Mean tidal range, 10 ft. 6 in. Nature of bottom, sand and mud. Least depth of water from port entrance to berth 7.5 m. (24 ft. 7 in.) at MLW. Vessels may berth or unberth day or night. Vessels up to 21 ft. 4 in. may berth and unberth any time. Fresh water by barge. Diesel and Fuel "C" available. Dirty ballast facilities same as Berth No. 1 and 1A. Max. deballasting rates, Berth No. 2, 2×10 in. 1,800 cu. m. per hour. Berth No. 3, 2×8 in. 500 cu. m. per hour.

All ballast, including clean ballast, to be discharged ashore. Min. distance ship's side to manifold, 1.5 m. If reducer required to match shore flanges, at least 1.8 m. Shore gangway available. A keel clearance of 1 m. is required at MLW until silting developments after dredging can be firmly assessed. Vessels berth port or starboard side alongside.

Max. LOA, 400 ft., min. LOA, 263 ft. until about February 1976 when modifications will be made and size reduced to 180 ft. Beam, no limit. Max. draft, 31 ft. 8 in. (at HW). Depth of water at MLW 24 ft. 7 in.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia*	*Length*	*Load – Discharge Rate cu.m/h*	*Hoses*
No. 2	Heavy Fuel Oil	1×20″	2000 m	2600	2×10″
	Light Heating Oil	1×20″	2000 m	2400	2×10″
No. 3	Heavy Fuel Oil	1×16″	2000 m	475	1× 8″
	Light Heating Oil	1×20″	2000 m	550	1× 8″
	Gasoil	1×10″	2000 m	550	1× 8″
	Gasoline	1×12/1×10″	2000 m	950/550	2×10/8″
	LPG	1×8″	2000 m	400	1× 6″

Niedersachsenbrucke: (Lower Saxony Bridge) The "Niedersachsen Bridge" which belongs to the state of Lower Saxony is equipped with a fuel oil discharge unit for supplying a large nearby plant. The land-side berth of the loading pontoon running parallel to the Ufer is about 12 im. depth, so that loaded tankers up to a size of 35,000 d.w.t. can come alongside this pontoon. Furthermore, on this pontoon a loading installation for caustic soda is available. A bulk discharger unit with a hourly capacity of 1,200 tons serves coal to a large nearby plant. Vessels of 80,000 d.w.t. and a draft up to 13.5 m. can be accommodated.

Drinking water in adequate quantities is available at all shipment pontoons in the Jade.

Bunker and diesel oil is available in adequate quantities from Nord-West Ollleitung and Mobil Oil A.G. At the "Niedersachsen Bridge" it is necessary to order a bunker vessel in advance.

BRIDGES: 3 swing bridges affect entering dock harbour; these are opened to coincide with lock opening times.

STEVEDORES: 24 hours notice required. Bulk cargo discharge rate about 150 t.p.h.

MEDICAL: All medical facilities available.

FRESH WATER: Available by pipe-line.

FUEL: All grades available. 2 days notice required.

GANGWAY/DECK WATCHMEN: Shore watchman recommended to attend telephone.

OPENING/CLOSING HATCHES: Usually by ship's crew.

CUSTOMS ALLOWANCES: Oil port is Customs free port. In dock harbour each man allowed 5 cigars or 40 cigarettes, or 50 grams tobacco and 50 pieces of cgarette paper; 1 unopened bottle wine/spirits.

DEVELOPMENTS: *Liquid gas berth:* To the North of Mobil Oil A.G. a liquid gas terminal is to be installed. This will take gas tankers up to a capacity of 200,000 cu.m.

"Lower Saxony Bridge" (Niedersachsen Bridge): In connection with planned installation of a large tanker berth for crude oil and crude oil products, the "Niedersachsen Bridge" is to be extended. It is planned to provide facilities for the loading and discharge of large vessels up to 250,000 d.w.t. with dry and liquid bulk cargoes.

IDENTIFICATION CARDS: Required in oil port.

CONSULS: Denmark tel. 41061. Sweden tel. 26266. Finland tel. 7701.

REPAIRS: Facilities available for all deck and engine repairs. Repairs affecting main engine or steering gear intended to be carried out at the berths or at Wilhelmshaven anchorage, must be authorised by NWO and Port Authorities, when sufficient security tugs will be ordered to stand by. No charge for tugs if ordered before arrival. Permission for repairs depends on prevailing weather conditions and should be requested before arrival.
DRY DOCKS: Floating docks for vessels of 8,000 and 1,000 tons respectively. 1 small dry dock 50 m. by 10 m. by 2.8 m.
REPATRIATION: All facilities available.
AIRPORT: Nearest international airport at Bremen, distance 102 km.
TIME: GMT plus 1 hour. Permanent.
HOLIDAYS: Not observed in oil port. 1st January; Good Friday; Easter Sunday; Easter Monday; 1st May; Ascension Day; Whit Sunday; Whit Monday; 17th June; Atonement Day; Christmas Day; Boxing Day. Work may be arranged on Easter Monday, Ascension Day, Whit Monday and Boxing Day.
POLICE/AMBULANCE/FIRE:
Police: 43031.
NWO Oil Port: Fire/ Ambulance 621.
Mobil Oil AG.: Fire/Ambulance 551328
Niedersachsen Bridge: Fire/Ambulance 62008 or 26121.
Dock Harbour: 112 or 2621.
TELEPHONES: May be placed on board all tankers in oil port. At some locations in dock harbour, installation by Post Office, who require 2 days notice.
SERVICES: All services available including tank-cleaning, diving, compass adjusting, etc.
SHORE LEAVE: Allowed.
AUTHORITY: Wasser und Schiffahrtsamt Wilhelmshaven.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Ghana

TAKORADI: 04.53 N. 01.45 W. (See Plan)

DOCUMENTS:
2 Stores Lists.
2 Lists Crew Personal Effects.
1 Bill of Health.
6 Crew Lists with dates smallpox and yellow fever inoculations.
6 Passenger Lists or "Negative".
6 Vessel's Itinerary Lists.
1 Freighted Cargo Manifest.
1 Unfreighted Cargo Manifest.
1 set Bills of Lading.
Clearance from Last port.

PILOTAGE: Compulsory for berthing alongside. Pilot boards at port limits. International code signals used.

ANCHORAGE: Vessels may anchor outside the harbour without Pilot. Depth at moorings 22 ft. to 35 ft.

RESTRICTIONS: Depth at harbour entrance 35 ft. MLW.

MAX. SIZE: Up to 28 ft. draft for berthing alongside. Up to 33 ft. at buoys.

HEALTH: All crew require valid certificates of vaccination against smallpox and yellow fever, which are inspected on arrival when vessel boarded by Port Health Inspector. In case of suspected disease or fever on board, Agent should be notified details in advance by radio.

TUGS: Tug assistance is compulsory, to be ordered through Signal Station. 3 tugs available, 2 of 1,350 h.p., and 1 of 850 h.p.

BERTHING: Additional coir springs from shore required at all berths.

Berth	*Max. length vessel*	*Max. draft*
Manganese Wharf	520 ft.	28 ft.
No. 2 Wharf	550 ft.	26 ft.
No. 3 Wharf	500 ft.	28 ft. 6 in.
No. 4 Wharf	600 ft.	28 ft.
No. 5 Wharf	270 ft.	28 ft.
No. 6 Wharf	500 ft.	29 ft.
Bauxite Wharf	505 ft.	32 ft.
Coal Wharf	250 ft.	14 ft.

In addition, there are 9 buoy moorings in depths of 22 to 35 ft. of water.

TANKERS: Oil tankers moor on the North side of Lee breakwater. 1 berth suitable for ships of 600 ft. length, draft 29 ft.

STEVEDORES: Normal working hours: weekdays 0700 hrs. to 1200 hrs. and 1400 hrs. to 1700 hrs. Saturdays 0700 hrs. to 1200 hrs.

Gangs required for Sunday work should be ordered before 1130 hrs. previous day. For weekday work, gangs should be ordered before 1500 hrs. previous day.

GANGWAY/DECK WATCHMEN: Available, to be utilised on all ships by compulsion for security reasons.

SHORE LEAVE: Shore pass required from Immigration. Bathing in harbour is prohibited.

FRESH WATER: Good quality water available at all berths and from two 200-ton water barges.

FUEL: Diesel oil and fuel available at 4 main wharf berths and at the oil berth.

REPAIRS: Minor repairs can be effected, slipway for vessels up to 500 tons. Small drydock for vessels up to 100 ft. length.

AIRPORT: Situated 2 miles from the port.

TIME: GMT, no alterations during the year.

AUTHORITY: Ghana Railway and Ports Administration.

AGENT: Scanship (Ghana) Ltd., PO Box 329, Takoradi. Tel. 35.31. Cables "Scanship Takoradi", Telex 2181 Accra.

TEMA: 05.38 N. 00.01 E. (See Plan)

DOCUMENTS: Arrival.
2 copies List of Stores.
2 copies Crew Declaration Forms.
1 Bill of Health.
6 Crew Lists with vaccinations lists for smallpox and yellow fever.
6 copies of Passenger List (or "nil" pass. list).
Valid certificates for smallpox, cholera and yellow fever vaccinations.
6 lists of Ports of Call.
2 Freighted Cargo Manifest.
7 Unfreighted Cargo Manifest.
1 B/L's set.
Port clearance from Last Port.
Departure – Port clearance visaed by customs.

PILOTAGE: For Main Harbour pilotage compulsory for all vessels of more than 100 net tonnage, when arriving or leaving harbour, or shifting berth, but for both Fishing Harbours obtainable on request.

Time of pilotage as follows: for Main Harbour:
(a) Dry cargo vessels: arrivals 0600–1800 (on special request up to 2000 hrs.), departure 0600–2300 hrs.
(b) Tankers: arrivals daylight only; sailings 0600 to 2200 hrs.
(c) Valco-carriers: all handling, during daylight only.
For fishing harbours: during daylight only.

Vessels arriving or wishing to enter harbour must await Pilot between E. and S.W. off Fairway light-buoy, up to 1.5 miles distance. Ships embarked by Pilots from 0600 hrs., according to time of arrival Quarantine Anchorage.

ANCHORAGES: Good anchorage, three-quarters to two miles from E.N.E. to S.W. off main entrance with depth 30 to 60 ft., with good holding ground. Eastern area of anchorage is more comfortable, without additional swell reflected from main breakwater.

TIDES: Maximal tides rise 6 ft. 2 in., minimal tides rise 3 ft.

PREVAILING WINDS: Light to fresh breeze from W. and S.W. during all year, except December to February when N.E. Harmathan is dominating with poor visibility. Dangerous winds are tornados from East, May to July, but occasionally isolated tornados are to be expected from January to December. There is a swell in harbour, especially after tornados, when lying alongside the berths.

HARBOUR: Harbour consists of 3 basins:
(a) The large basin of Main Harbour, formed by Main Breakwater 6,250 ft. long, and Lee Breakwater, 3,650 ft. long.
(b) Outer Fishing Harbour, East of Lee Breakwater.
(c) Inner Fishing Harbour on Northern side of former one.

Entrance to Main Harbour 800 ft. wide and together with the approaches has minimal depth of 35 ft. (Admiralty Chart Datum to which all depths refer). Ships entering Harbour 2–3 cables before entrance roll heavily, up to 4–8° during some seasons. Ship's deeper than 30 ft. enter only during high tide with maximum possible draft limit 32 ft. during neap tide. Bottom of harbour consists of sand and mud, with frequent hard rocky ground. Depth increases in direction of Main Breakwater. Two pairs of mooring buoys in depth of 34–36 ft. Inside harbour, alongside Lee Breakwater is an Oil Wharf for tankers with depth of 34 ft.

TUGS: Use of 1 tug compulsory for all ships over 2,000 g.r.t. and 2 tugs over 5,000 g.r.t. (but at Pilot's option), and 2 tugs compulsory for tankers and Valco-carriers. 2 Diesel Tugs 1,300 h.p. and 2 Steam Tugs 850 h.p. in service. 2 tugs available for duty between 0600 and 2100 hrs., otherwise 1 tug. Tug's wires to be used.

Berths	*Length*	*Max. Draft*
1	600 ft.	31 ft. 6 in.
2	600 ft.	28 ft. 6 in.
3	485 ft.	24 ft. 6 in.
4	600 ft.	25 ft. 9 in.
5	600 ft.	25 ft. 6 in.
6	600 ft.	24 ft. 6 in.
7	600 ft.	26 ft. 0 in.
8	600 ft.	24 ft. 9 in.
9	600 ft.	25 ft. 0 in.
10	600 ft.	24 ft. 6 in.
11	600 ft.	24 ft. 6 in.
12	600 ft.	25 ft. 6 in.
Oil Berth	Ships up to 650 ft.	32 ft. 0 in.
Valco Berth	Ships up to 600 ft.	31 ft. 6 in.

Berths No. 6 and 7 for loading cocoa-beans, equipped with 4 high-speed conveyers, transporting bags directly to ship's hold, from 4 cocoa sheds (totalling 2,400,000 cu. ft.) situated at Westerly corner of harbour.

Usually ships moor starboard side to berths No. 1, 2, 6–9 and portside to berths No. 3, 4, 5, 10–12.

SPECIALISED CARGO HANDLING FACILITIES: 3 special berths for bulk cargoes only: Berth No. 10 for grain only. It is equipped with 1 elevator for sucking/discharging.

Valco Berth for handling bulk cargoes such as alumina, pitch/coke and aluminium fluoride. It is also equipped with 2 elevators for sucking/discharging.

Berth No. 8 is partly meant for pumping/discharging of liquid/bulk chemicals such as tallow and alicane.

Cranes, Outloaders:

Quay No. 1	10 Portal Cranes	Cap.	(2) 5 ton	(2) 7.5 ton	(6) 3 ton
Quay No. 2	8 ,, ,,	,,	(3) 5 ton		(5) 3 ton
	4 Mobile Cranes	,,	(1) 5 ton		(1) 3 ton
			(1) 19.5 ton		(1) 45 ton

Cocoa Conveyor System: 4 Outloaders, each 30-35 t.p.h.
or : 2 Outloaders on high speed =70 t.p.h.

STEVEDORES: Available. Dry cargo is handled from 0730 hrs. to 1230 hrs. and from 1400 hrs. to 1700 hrs. on normal working hours, and overtime after 1700 hrs. to 2000 hrs. (for finishing ships 2030 hrs.) and on Saturdays p.m., Sundays and holidays. Oil Wharf and Valco Berth are working around the clock.

TANKERS: Tankers always moored starboard side to dolphins, and ropes to breakwater and bow-buoys. Crude oil pumped to refinery, by ships pumps, a distance of 18,000 ft.

North of Oil Wharf about 2 cables on same breakwater isValco Berth for discharging of bulk materials for "Valco" aluminium smelter (mostly alumina). Narrow channel 250 ft. wide leads to berth with depth 33 ft. 6 in.

FRESH WATER: Water pipes alongside all wharves, and under State's sanitary control. Rate of supply 50 t.p.h.

FUEL: Fuel and diesel-oils available by tanker-trucks only. No coal-bunkers available.

REPAIRS: Good marine-workshop.

DRY DOCKS: Dry dock 350 ft. long, 44 ft. wide on the gate, and with depth of 16 ft. 9 in. Also there is one slip with capacity 160 tons, and one 20 tons. Diving pontoon fully equipped, and with 3 divers and crane 10 tons. Graving dock 910 ft. long with necessary facilities.

GENERAL: Recommended to send ETA message at least 24 hours in advance. Essential that ETA message reaches Agent's office before 1430 hrs. Monday-Thursday or before 1000 hrs. Friday for weekends because of booking of gangs. Ships from Abidjan should also send 48 hours ETA message.

SHIPMASTER'S REPORT: January, 1976:

Good W/T. D.F. signals are obtained from Accra and Lome and with this vessel's equipment Marconi Type 758E will give a reliable position to within 2 miles. The 100 fathom contour line was accurate to within 1 mile where we crossed it. Within 20 miles the land definition is excellent on Radar. There is now an Oil Rig 137° 3.2 miles from the eastern end of the main breakwater. This is an

excellent seamark and is well lit at night. Native fishing craft are met with from about 10 miles offshore and show lights when fishing at night but reliability regarding these lights is doubtful.

VHF contact with the port Signal Station is good, although there was very heavy traffic during our stay outside waiting to berth 5.5 days, but I was allowed to use the main transmitter when berthed to inform Owners that we were alongside, at anchor no restrictions are placed on vessels using their wireless transmitters.

The pilotage is efficient although the tug was late in attending us when berthing this caused no difficulty.

The entrance to the Harbour is good, plenty of water all about if you have to wait for the Pilot, which we did. (He was moving a fishing vessel, and we had to cruise for about twenty minutes, after having come to the entrance on instructions that he would board there).

There were never less than 18 ships waiting for berthing.

W/T. contact with Portishead was good.

AUTHORITY: See Takoradi.

AGENT: Scanship (Ghana) Ltd., PO Box 64 Tema. Tel. 26.51 and 26.79. Cables "Scanship Tema". Telex 2181 Accra.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Gibraltar

GIBRALTAR: 36.08 N. 05.22 W.

DOCUMENTS:
3 Crew Lists.
4 Passenger Lists.
Arrival Report, to be completed when receiving Pratique.
International Maritime Declaration of Health.
Ship's Register.
Load Line Certificate.
Deratisation Certificate.
Ship's Articles.
Certificate of insurance in respect of Civil Liability for Oil Pollution Damage.

PILOTAGE: Pilotage compulsory for all navigation (except direct *departure* from anchorage). Give notice of arrival through Agents 24 hours in advance furnishing maximum draft. Ships approach off Rosia Bay where Pilot (available day and night) boards vessel. Pilot boat painted black and flies international Pilot flag. To call Pilot: sound, and fly flag "G" or call Gibraltar Port on VHF Channel 16 and pass message on Channel 12.

ANCHORAGES: In open bay, good safe anchorage, depths vary from 5 to 40 fathoms. Vessels normally anchor in area West of Harbour Moles.

RESTRICTIONS: *Note:* British waters in the Bay of Gibraltar extend to the Median Line drawn in accordance with the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone (see Admiralty Chart D 1448). However, part of those waters, lying North of 3 Qk. fl. buoys, are considered by the Spanish authorities to be within the limits of the Port of Algeciras/La Linea (Spanish Notice to Mariners 49/1563/67 of 9 December 1967), and the Spanish authorities have claimed Spanish port dues in respect of vessels anchoring between the Median Line and the line of buoys.

The waters in dispute form only a small part of the anchorages available to shipping calling at Gibraltar.

MAX. SIZE: If anchoring in bay, any size. Max. draft alongside, 31 ft. 6 in.

HEALTH: Vessels are usually boarded by Port Authorities off the Southern end of the detached Mole: if everything found satisfactory Pratique is granted immediately. Masters should advise Agents by radio before arrival of any illness on board so that Port Doctor may board vessel with Port Authorities.

RADIO: Gibraltar Radio, call sign ZDK.

VHF. Communicate with Port Authorities by VHF international calling Channel 16, pass message on Channel 12 (24 hour service).

TUGS: When required for berthing alongside, tugs meet vessels off Mole. Ship's ropes used.

BERTHING: Berths alongside are normally limited to 31 ft. 6 in. Deeper drafts may be accommodated for short durations of stay on a half-tide basis. Masters required to advise ship's draft when giving ETA. Cruise ships are only charged 50% of normal berthing charge.

Ships calling for bunkers and/or fresh water and not conducting operations involving passengers or cargo are only required to pay 20% of the normal berthing charges providing the stay alongside does not exceed 8 hours in addition to the bunkering/water period.

CARGO HANDLING: Port is able to accept containers that can be discharged by ship's equipment. 1 berth, for use by ships up to 28 ft. draft, has a fixed concrete stern landing ramp. Height of ramp above water level varies from 9 to 13 ft. according to tide. This is available for use in conjunction with ship's own stern ramp for roll-on/roll-off traffic.

STEVEDORES: Agents automatically advise stevedoring company on receipt of ETA from ship.

MEDICAL: Masters should advise Agents when giving ETA if medical attention is required on board. Adequate hospital treatment available.

TANKERS: Max. draft at discharging berths 31 ft. Diameter of discharging lines 14 in. fuel oil, 10 in. diesel oil and gas oil.

DENSITY: 1025.

FRESH WATER: Available at Mole from pipe-lines, delivery rate 60/80 t.p.h. Water can also be delivered at anchorage from barge, delivery rate 40/50 t.p.h.

FUEL: Fuel available any time day or night. All grades available.

GANGWAY/DECK WATCHMAN: Not necessary.

OPENING/CLOSING HATCHES: Normally effected by stevedores.

CUSTOMS ALLOWANCES: No restriction whilst on board. Crew members may bring ashore small quantity for their immediate personal use.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	Tel. 3288	Netherlands	Tel. 5968
Denmark	,, 2151	Norway	,, 4352
France	,, 4830	Portugal	,, 5330
Greece	,, 2956	Sweden	,, 2151
Italy	,, 3053	Venezuela	,, 3509
Israel	,, 5955	Finland	,, 3113
Liberia	,, 4312		

REPAIRS: Deck and engine repairs possible. Underwater operations including repairs and cleaning of vessel's hull.

DRY DOCKS: 4 dry docks (Admiralty) available subject Naval requirements. Largest 871 ft.×125 ft., smallest 260 ft.×46 ft.

REPATRIATION: Facilities exist for repatriating Crew members.

AIRPORT: Daily regular flights to London. Distance to airport about half mile.

TIME: GMT plus 1 hour all the year round.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Commonwealth Day (24th May); Spring Bank Holiday; Summer Bank Holiday; Queen's Birthday; Christmas Day; Boxing Day. Cargo work can be effected at overtime rates on these holidays except on Good Friday and Christmas Day when no cargo work is carried out. Bunkering is effected on any of these holidays without any extra charge except on Good Friday and Christmas Day when a surcharge is made.

POLICE/AMBULANCE/FIRE: Police and Ambulance 3434; Fire 2000.

TELEPHONES: No arrangements exist for placing telephones on board at normal berths. Telephones can be placed on vessels under repair at the Detached Mole, through Admiralty Telephone Exchange, cost about £10.

GENERAL: Advisable that vessels calling for bunkers and only stopping in port for few hours should radio their requirements prior to arrival to ensure avoiding delay.

AUTHORITY: Captain of the Port.

AGENT: Lambert Brothers (Gibraltar) Ltd., 47 Irish Place. Tel. address "Lambert-Gibraltar". Tel. 4373, 3288; Telex 222. Ship's Agents, Insurance Agents, Travel Agents.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Gilbert & Ellice Islands

TARAWA: 01.21 N. 172.55 E.

Tarawa is the main port of entry for the Gilbert & Ellice Islands Colony. Other entry ports are Ocean Island, Christmas Island, and Funafuti.

The Atoll is roughly triangular in shape, being 19 miles in length North and South and 16 miles broad along the southern side. A number of islets, separated by shallow passages, dry at low water, from the southern and eastern sides of the Atoll.

Causeways link up the islets along the southern sides and part of the eastern side. On the western side there is a barrier reef, most of which is sunken, enclosing a large lagoon navigable by vessels drawing 26 ft. at LWOST and 30 ft. at HW.

The Governor and Main Government Offices are at Bairiki Islet which is connected by causeway to the Colony Central Hospital and Government Schools at Bikenibeu.

PILOTAGE: Not compulsory, but advisable as sometimes especially after strong winds, some of the navigation marks may be out of position.

APPROACHES: The ship passage into the lagoon is 3.25 north of Betio and is usually well marked by buoys, as depicted on chart B.A. 3269. An occulting white light with a range of 8 miles, exhibited from a 105 ft. tower at the western end of Betio Islet marks the southwestern corner of the Atoll.

ANCHORAGE: Inside the lagoon, safe in all weather although in strong winds it may not be possible to work craft in the lagoon.

RESTRICTIONS: At present navigation and pilotage of the lagoon is restricted to daylight and vessels arriving at night should stand off the southwest of Betio light. A vessel approaching in daylight and having to wait for high tide or other reasons may anchor anywhere on the western reef in 8–10 fathoms. Bottom, coral and sand.

RADIO: Tarawa Marine Radio maintains continuous watch on 500 k/cs., 2182 and 6204 k/cs.

TUGS: Available.

CARGO HANDLING FACILITIES: Tugs and lighters capable of working cargo up to 29 t.p.h. A 20-ton crane on Betio Wharf is capable of working containers from the lighters.

MEDICAL: Attendance can be obtained.

FRESH WATER: Available in limited quantities in an emergency.

FUEL: Stocks of light diesel fuel, petrol and kerosene available.

REPAIRS: Boat repairs and most minor ship repairs can be undertaken at Betio, where the Development Authority employs engineers, electricians, boilermaker and a shipwright. Radio and Radar repairs can be undertaken by the Posts and Telegraph Department. Aqualung and skin divers available.

AIRPORT: Bonriki International Airport.

AUTHORITY: Gilbert & Ellice Islands Development Authority.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Greece

AGHIOS NIKOLAOS (St. Nikolo-St. Nicholas)
Crete: 35.12 N. 25.43 E.

DOCUMENTS:
4 Crew Lists.
2 Passenger Lists.
1 Cargo Manifest.
1 Spares List.
1 Stores List.
1 List Crew Personal Effects.
Maritime Health Declaration.
1 Provisions List.

PILOTAGE: Not compulsory. No Pilot station. Private Pilot who can be used if needed. However, not always available. Area of Pilot's boarding is N.E. or S.E. of Aghioi Pandes Islet, depending weather conditions. Anchorage waiting place in same area. Call Pilot with signal "G". Small fishing vessels (length 13.0 m.) fitted with VHF can indicate position of anchorage if advised by Agent.

ANCHORAGE: (a) Harbour of St. Nikolaos, depth 3 – 5 fathoms. (b) Usual anchorage for vessels over 500 tons gross, S or SE of Nikolo Islet (Admiralty Chart No. 2536 B) and at a distance of 0.5 – 1.0 m. from the mainland, depth 10 – 40 fathoms respectively. (c) Poros Bay for small and large vessels, only when N and NW fresh gales, depth 16 – 27 fathoms.

RESTRICTIONS: Care to be taken off North entrance to port owing to rocky shoals, depth 5 m. Entrance from the S.W. is free of obstructions.

MAX. SIZE: Vessels of up to 100 m. length and 9.0 m. draft can enter the port. At oil bunkering installation outside the port, vessels of any size can be accommodated.

HEALTH: If from another Greek port free pratique is automatic and access to and from vessel granted on permission of Port Authorities. Port doctor visits all other vessels.

RADIO: No local radio station. Cables to Agent or Port Authority through "Athinai Radio", "Heraklion Radio" or Rhodes Radio".

TUGS: None.

BERTHING: Berthing position designated by Port Authority.

STEVEDORES: 10 permanent port stevedores available, but further 5 men can be engaged. Cargo worked by vessel's own gear.

MEDICAL: No advance notice of medical attendance required. Medical attention by town doctors available. Government hospital with all facilities.

TANKERS: No tanker berths. Vessels moor to buoys. Oil line 6 in. diameter.

DENSITY: 1025.

FRESH WATER: At new pier 3 hydrants, hose dia. 25 ins. for supplying water. At the bunkering installation at Katsini Bay there is water storage tank capacity 500 cu. m. for supply to deep-sea vessels. Loading rate about 49 t.p.h. Delivery by flexible hose connection from the mooring buoys. Fresh water not available at the present time at the bunkering installation as they have ceased operating.

FUEL: Unlimited supply of bunker fuel but from 1974 the bunkering installations have ceased operating due to the tourist area. Operations are to be moved to another part of Crete.

Small quantities transported by tank truck are available from the pier.

DEVELOPMENTS: During next 5 years *(a)* deepening of Port Basin, *(b)* Provision of 1 shore crane, *(c)* construction of breakwater — length 200 m.

HATCHES: Opened/closed by stevedores.

CUSTOMS ALLOWANCES: 2 packets cigarettes per crew member per day.

CARGO GEAR: No shore facilities. All cargo worked with ship's own gear.

CONSULS: None.

REPAIRS: Only minor repairs.

REPATRIATION: Crew replacement and repatriation available.

AIRPORT: At Iraklion distance 66 km. 2 or 3 flights per day to Athens.

TIME: GMT plus 2 hours, permanent.

HOLIDAYS: In addition to standard Greek holidays, local holidays are Ascension Day (date not fixed), and St. Nicholas Day (6th December).

POLICE/AMBULANCE/FIRE: St. Nicholas Police tel. 100. State Hospital, 22369. Fire — none. Port Police 22312. Area code for St. Nicholas 0841.

TELEPHONES: None.

SERVICES: Tank cleaning and hold cleaning.

SHORE LEAVE: Permitted with Port Authority pass.

REGULATIONS: *(A)* Vessels are not allowed to approach Aghioi Pandes (goat reserve). *(b)* No refuse or other waste matter of any description allowed to be thrown overboard from vessel. *(c)* No visitors permitted without Port Authority permission.

AUTHORITY: Port Authority of Aghios Nikolaos.

AGIOI THEODOROI: 37.55 N. 23.05 E.

DOCUMENTS:
7 copies Crew Lists (European and Asian).
2 copies Dates of Vaccinations/Inoculations.
1 copy Cargo Manifest.
2 copies List of Provisions and Stores (these are supplied on forms issued by Agent printed in Greek/English).
2 copies Officers'/Crews' personal declaration, on forms supplied by Agent in Greek/English, covering all high duty items, radios cameras, etc.
1 copy declaration of ships' cash on board, form supplied by Agent in Greek but made out in front of Master.
2 copies of Masters' declaration that all high duty goods have not been put under seal, and that he is responsible for any loss or landing of same without proper authority.
All passports and/or Seamen's books to be produced *if* requested by Immigration.
On completion of loading, documentation takes about 2 hours.

PILOTAGE: Compulsory. Pilot boards S.S.E. of port, about 1 mile off the outer jetty. No pilot boat as such; uses either a tug or mooring boat. Pilot is arranged by Agents who are based in Piraeus (1 hour by car). No means of radio contact between vessel and Pilot station.

ANCHORAGE: A reasonably safe anchorage can be obtained in position 0.5 mile off the outer jetty in a depth of 20 to 25 fathoms with a sandy bottom.

TUGS: 2 tugs used for berthing, and 1 on sailing.

BERTHS: There are 3 main berths with 2 smaller berths for coastal vessels. The largest and outermost berth can accommodate vessels of 250,000 tons fully loaded, a max. discharge/loading rate at this berth being 5,000 t.p.h. The other berths can accommodate vessels of up to 50,000 tons fully loaded with a max. discharge/loading rate of 3,000 t.p.h. All berths are equipped with four 10 in. Chicksans. They are situated in an open position for winds from the South and West but provided ample moorings are put out, there should be no cause for concern.

Vessels can berth at any time day or night.

MOORINGS: Standard moorings on to dolphins which are well fended and hold the vessel about 4 feet clear of the manifold complex. Vessels require their gangway but no derricks are required. 1 or 2 anchors are used depending on the berth used.

FRESH WATER: Fresh water for other than drinking purposes is available from the jetty, but drinking water has to come by barge from Piraeus for which 2 days' notice is required.

FUEL: Bunkers can be obtained from one of the coastal tankers based here, capacity approx. 5,000 tons.

CUSTOMS: Bonded locker is sealed. Allowance 200 cigarettes or equivalent in tobacco or cigars per man (7 days) and a part bottle of wine and spirits is permitted per man (7 days). All Tobacco/cigars/cigarettes placed under seal. Crew excess must be declared on provision list in separate column for same.

SHORE LEAVE: Shore leave is allowed, passes being issued on arrival which must be handed in prior to sailing.

REPAIRS: No facilities. Nearest port for repairs is Piraeus.

ALEXANDROUPOULIS: 40.51 N. 25.54 E.

DOCUMENTS:
Port Authority
2 Crew Lists.
1 Passenger List (if any).
If from abroad Maritime Declaration of Health. If Greek flag, articles and log book, and declaration of foreign exchange.
Customs:
3 Lists of Stores and Provisions.
1 Crew List.
Master's personal declaration that all stores not held in bond will remain on board.

PILOTAGE: No pilot service. If Master requires pilotage assistance an experienced local boatman is available, but Agent must be advised of ETA in advance order to arrange for this Pilot to await vessel about 1 mile outside port.

ANCHORAGES: Depth inside port 6.5 m., mud bottom. Depth increases outside port to about 10 m. at distance of 1 nautical mile.

Area around port subject to strong S.E./S. winds especially during Winter. During strong winds vessels can seek shelter off Samothraki Island. In strong winds port is considered safe but because of occasional large waves loading is stopped. Winds from other directions do not affect port work.

MAX. SIZE: Vessels with draft not exceeding 6.5 m. can enter safely.

HEALTH: Vessels from foreign countries can enter harbour and obtain free pratique during the period from sunrise until 2200 hrs. Vessels having suspected contagious disease on board should remain outside harbour until visit of medical officer, and await further instructions.

TUGS: None.

BERTHING: At least 24 hours notice of ETA to be passed to Agent in order to obtain allocation of berth from Port Authority.

STEVEDORES: Prior notice to be passed to Agent order arrange gangs. Rate of cargo working: General cargo about 120 tons per gang every 8 hours. Bagged cargo about 120 tons per gang every 8 hours. Coal about 80 tons per gang every 8 hours. Timber about 120 cu.m. per gang every 8 hours. Vessels must use own gear for loading/discharging.

MEDICAL: No advance notice required. 1 Government General Hospital, 2 clinics. Doctors' services readily available.

TANKERS: No facilities.

FRESH WATER: Hydrants on West side of breakwater. Delivery rate about 5 t.p.h. (each), but delivery rate reduced when 2 or more hydrants in use.

FUEL: No bunker C fuel available. Supplies of diesel oil available from 2 barges, each with capacity of 900,000 litres.

FIRE PRECAUTIONS: No port fire brigade. In emergency fire brigades must be called from Alexandroupolis.

DEVELOPMENTS:
(a) The Main Pier is finished, total length 450 m.
(b) The pier East of Main Pier is finished, total length 231 m.
(c) The Western Breakwater has recently been finished. It extends for 108 m. Study in progress for 97 m. more.
(d) Study in progress to increase depth of the port area to 10.5 m. and to dredge a channel of 3.2 km. by 97 m.
WATCHMEN: Not available, and if required must be supplied by vessel.
HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: 1 packet of cigarettes allowed out of bond for each crew member, for each day in port. Wine/beer no restrictions. Spirits, Master allowed one bottle.
CARGO GEAR: Load/discharge by ship's own gear.
IDENTIFICATION CARDS: Shore pass issued against crew list and seamen's book. Passes obtainable from Port Authorities.
CONSUL: Consul-Agent of France. Tel. 26–720.
REPAIRS: Only minor repairs available.
REPATRIATION: Facilities for crew changes and repatriation.
AIRPORT: 5 km. distant. Daily flights to Athens. Flights to Thessaloniki Monday, Wednesday and Saturday.
TIME: GMT plus 2 hours. Summertime GMT plus 3 hours.
HOLIDAYS: 1st January; 6th January; Whit Monday; 25th March; Good Friday; Easter Monday; 1st May; 14th May (local); 15th August; 28th October; 6th December; 25th December; 26th December, and all Sundays. Cargo work can be arranged on these days, subject to payment of additional charges.
POLICE/AMBULANCE/FIRE: Police station. Tel. 26352; Security Police, 28020; Ambulance 26471; Fire 26222.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: Permitted.
AUTHORITY: Port Authority of Alexandroupolis.

ARGOSTOLI, Cephalonia: 38.12 N. 20.29 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
Customs Clearance.
2 Cargo Manifests.
Bills of Lading (copy)
4 Ship's Stores List.
4 Lists of Crew's Personal Effects.
Ship's Papers.
Crew Vaccination List.
PILOTAGE: No Pilot station.
ANCHORAGE: Vessels anchor in roads 0.5 miles N.N.W. from Entrance light. Max. channel draft 19 ft.
MAX. SIZE: Up to 19 ft. draft.
HEALTH: Free pratique given by Port Health doctor.
RADIO: Patras Radio. No VHF.
TUGS: None available.
MEDICAL: Advance notice not required except in urgent cases. For vessels arriving from foreign countries crew require vaccination certificates.
TANKERS: Small tankers discharge at DEH Power Terminal.
FRESH WATER: Can be supplied from the pier using ship's hoses.
FUEL: Small quantities available, but only for yachts.
OPENING/CLOSING HATCHES: Performed by ship's crew.
CUSTOMS ALLOWANCE: 50 cigarettes allowed for each crew member.
CONSULS: No local representation.
REPAIRS: Only minor machinery repairs can be carried out.
REPATRIATION: By air to Athens (once daily) or by ferry-boat.
TIME: GMT plus 2 hours, Summertime may be kept.
HOLIDAYS: Local holidays are 21st May, 16th August and 20th October, in addition to national holidays. Work may be arranged at double rates.
POLICE/FIRE/AMBULANCE: Police tel. 22200; Ambulance 22515; Fire service will be organised in 1976.
TELEPHONES: Can be connected on board vessels without charge.
SHORE LEAVE: Allowed
AUTHORITY: Cephalonia Harbour Office.

CHALKIS: 38.27 N. 23.36 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
2 Cargo Manifests.
2 Stores and Spares Lists.
2 Crew Personal Effects Lists.
Health Certificate.
PILOTAGE: Pilotage is compulsory.
Application for Pilot to be made by radio through Agent to Chalkis Port Authority. ETA required at least 8 hours before arrival.
Apply for Pilot through VHF Channel 12, or through radio/telephone on 2364 kc/s calling Harbour Master, Chalkis.
Pilot boards from black motor-boat with white horizontal stripes, about 10 m. length, in a position about 1-1.5 miles North of the light buoys of the Northern Port.
The pilotage area extends from 1 mile North of red and green light buoys, North of Evripos Bridge, and to the South of Euboea, 2.5 miles from Bourtzi Point.
The anchorage for vessels coming from the North of Euboea and awaiting Pilot is at the centre of the Euboean coast off Lighthouse Kakokefali, North of the 2 light buoys and outside the bearing 020/200° which is the axis of vessels passing in and out of Evripos Strait.
Safe anchorage for vessels coming from South of Euboea and awaiting Pilot is 1 nautical mile South of Bourtzi Point.
ANCHORAGES: *(a)* In the basin of South Port clear of vessels passing in the Straits. Depths over 21 ft.
(b) In North Port between the light buoys and Kakokefalis lighthouse and outside the axis of course 020/200°. In depths of 10–15 fathoms.
(c) Anchorage mentioned in "Pilotage" above, depths of 10 fathoms.
RESTRICTIONS: Entry restricted only by depth. Max. draft 21 ft. For vessels intending to pass Evripos Strait having draft 19 ft., passage possible only at slack tide or with following tide. Full details in Evripos Straits Operations Regulations.
There is also a restriction in Steno Straits where there is an overhead cable 38 m. above sea-level.
MAX. SIZE: Max. draft 21 ft. in daytime and 19 ft. at night for vessels entering port. For vessels navigating Evripos Strait max. length 110 m., max. draft 19 ft., breadth 20 m. and subject to local regulations.
HEALTH: Pratique not required if coming from another Greek port. Otherwise international pratique regulations are applied.
RADIO: No local radio, all messages should be passed through Athinai Radio.
TUGS: 1 tug available, joins vessel off the berth. Ship's tow lines used. Tug is compulsory for vessels over 1,000 g.r.t. Tug used only for berthing and unberthing.
BERTHING: Berthing in both the North Port and the South Port can only be effected at slack water subject to available tide.
BRIDGES: Passage above Evripos Bridge can only be effected at slack water or with following tide.
STEVEDORES: Loading, discharging, carried out with ships gear. Notice must be given by Agent to stevedores not less than 6 hours before vessel's arrival.
Cargo working rates: General cargo 80–100 tons every 8 hours. Bagged cargo 100–150 tons every 8 hours. Timber 70 cu. m–90 cu. m. every 8 hours.
MEDICAL: Agent should be advised beforehand if medical assistance required on arrival. Clinic facilities available. Vaccination certificates required.
DENSITY: Average 1025.
FRESH WATER: Drinking water can only be supplied in small quantities by tanker lorry.
FUEL: Can be supplied in small quantities by tanker lorry.
DEVELOPMENT: A pier 240 m. is under construction at Vourkos in the South Port; depth alongside 26 ft.
WATCHMEN: Not required.
HATCHES: Opening and closing hatches can be effected by ships crew or by workers if requested.
CUSTOMS ALLOWANCES: Crew members each allowed 1 packet of cigarettes per day. Only the master is allowed 1 or 2 bottles of alcohol while vessel in port.
IDENTIFICATION CARDS: Shore passes are issued by port authorities.
CONSUL: France, tel. 2574.
REPAIRS: Only minor repairs can be effected by technicians from Piraeus.
REPATRIATION: No difficulties as there are excellent communications with Piraeus.
AIRPORT: Nearest is Athens International Airport.
TIME: GMT plus 2 hours all the year round.
HOLIDAYS: 1st January; 6th January; 25th March; 21st April; Good Friday; Easter Monday; Easter Sunday; 21st May; 15th August; 28th October; 6th December; 25th and 26th December. Local holiday 26th July.
POLICE/FIRE/AMBULANCE: Port police, tel. 22580; Fire 23333; Ambulance 22282.
TELEPHONES: Cannot be connected on board.
SHORE LEAVE: Allowed.
DELAYS: Only waiting for suitable tides.
AUTHORITY: Chalkis Port Authority.

CORFU (Kerkyra): 39.37 N. 19.56 E.
(Including Kalifoka and Kefalomandouko)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
Maritime Declaration of Health.
3 Stores Lists.
3 Spares Lists.
PILOTAGE: At least 24 hours before arrival ETA should be passed to Port Authority on 2182 kc/s, answering on 2830 kc/s. Vessels requiring Pilot during daytime should hoist letter "G" of international code, and sound letter "G" in the morse code on ships whistle at intervals. Whistle signal may also be used at night. Vessels should await Pilot in position 39° 38' N., 19° 57' E. nearest to the coast of Ptychia Island (Vido) and Corfu, depending on weather conditions.
ANCHORAGE: Safe anchorages in the area between Ptychia Island and coasts of Corfu, depth about 30 m. During strong N.W. winds there is safe anchorage in the roadstead at Goritsa Bay or at Kastrades at a distance of half mile from the shore where depth in excess of 20 m.

RESTRICTIONS: Only during unfavourable weather conditions or lack of berthing space.
MAX. SIZE: Draft 7.5 m.
HEALTH: Port Health Officer boards vessel on arrival and examines health declaration. In cases of suspected disease or fever on board the health officer will examine entire crew and passengers.
RADIO: Radio Kerkyra. 2182 and 2830 kc/s.
TUGS: None.
BERTHING: Vessels should prepare fenders prior going alongside berth.
STEVEDORES: At least 24 hours advance notice of ETA required order arrange gangs. There are 3 silos for the discharge of bulk grain at Kalifoka (Mandoukion). Discharge rate about 60 t.p.h.
MEDICAL: Agent should be advised in advance of any medical requirements. Medical clinics available.
DENSITY: 1025. Max. height of tide 0.6 m.
FRESH WATER: Available through 2 in. hoses. Cost 25 drachmas per ton (approx.).
FUEL: For yachts in the new harbour there is a diesel-oil tank, capacity 10 tons. Also available from road tanker for all vessels alongside. At Kefalomandouko there is a permanently anchored oil barge capacity 24 tons. There are plans to provide permanent shore facilities.
FIRE PRECAUTIONS: Loading/discharging of inflammable liquids and explosives generally forbidden at night. The anchorage for vessels carrying inflammable liquids or explosives is between Lazaretos Islet and N.W. of breakwater point.
WATCHMEN: Not required.
HATCHES: Opened and closed by stevedores. Hold cleaning service available.
CUSTOMS ALLOWANCES: Crew of Greek vessels are not allowed more than immediate requirements out of bond. Seamen signing off and passengers leaving the vessel are allowed 200 cigarettes.
IDENTIFICATION CARDS: Required.
CONSULS:
France: Botis George, 1, Romanou St. Tel. 30067.
W. Germany: Aspiotis Gerasimos, Isermeti St. Tel. 31755.
Denmark: Damaskinou, 33 A.G. Spiridonos St. Tel. 29481.
Italy: Pitsino Juzepina, 10 Alexandras Avenue. Tel. 22351.
Netherlands: Aris Bogdanos, Skondrou-Pyrgi-Ypsos. Tel. 23870–29642.
U. Kingdom: Tsatsopoulou-Brouks, 1 Zambeai St. Tel. 30055.
Spain: Spiridon Pogiagos, Eygeniou Voulgareos St. Tel. 29969.
Norway: K. Kondis, 5 Donzelot St. Tel. 32423.
Belgium: Arsenios Androutselis, 11 Kapodistriou St. Tel. 29988.
Brasil: K. Palatianos, 124 Kapodistriou St. Tel. 30767.
Sweden: Adam Bogdanos, 5 Donzelot St. Tel. 29469.
REPAIRS: Facilities for minor repairs only.
DRY DOCK: Largest dry dock 20 m. length 2 m. depth.
REPATRIATION: Facilities for crew changes and repatriation available.
AIRPORT: 2 km. from port. During winter 1 flight daily to Athens. During summer frequent daily flights to Athens.
TIME: GMT plus 2 hours permanent.
HOLIDAYS: Local holidays are 21st May, 11th August and 12th December. In addition Corfu observes standard Greek holidays.
POLICE/AMBULANCE/FIRE: Police, tel. 23661; Ambulance, tel. 30062; Fire, tel. 29255.
TELEPHONES: No facilities for placing on board.
GENERAL: Prevailing wind is from the N.W. Anchorage in the new harbour unsatisfactory due to mud bottom.
SHORE LEAVE: Allowed.
REGULATIONS: Forbidden to approach Lazaretos Islet.
AUTHORITY: Port Authority of Corfu.

ELEUSIS (including Skaramanga): 38.02 N. 23.33 E.

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists.
Bill of Lading.
2 Lists of Stores and Provisions.
PILOTAGE: Piraeus Pilot station regulations are operative.
ANCHORAGE: Port offers safe anchorage. Bottom mud and sand.
RESTRICTIONS: After sunset and for vessels intending to enter Eleusis port through Salamis channel, it is imperative to give 6 hours notice of expected time of arrival to Port Authorities of Eleusis, in order to obtain special permission from the naval yard of Salamis.
MAX. SIZE: No limitations to length and breadth at the installations or at the main port. Max. permissible draft of vessel entering Eleusis Bay is 36 ft. Max. draft at berths is 33 ft. Also see "Tankers".
HEALTH: For vessels arriving from other Greek ports, pratique is automatic. Vessels arriving from foreign ports boarded by Health Officer who grants free pratique.
RADIO: Athinai, 2182 kc/s.
TUGS: Join vessel outside Piraeus Harbour and formalities much same as Piraeus.
BERTHING: Overall length of jetties and quay at Eleusis 715 m. Max. depth over 80 m. of jetty length is 33 ft. with depths of 26 ft. elsewhere.
SPECIALISED CARGO HANDLING: Loading/discharging of iron ore is carried out by *(a)* Holivourgiki Co., which owns a pier of 180 m. long and from 26 ft. to 36 ft. depth, equipped with 4 cranes, and *(b)* by Metallia Voxitou Elefsinos Co., which offer a special anchorage with buoys. Loading is effected by means of silo.

Loading/discharging of fluid chemicals or liquid gas are carried out by Petrogas Co. to their private pier of 35 m. long and 15 ft. depth.
MEDICAL: Advance notice not required. Clinic available in town of Eleusis if required.
TANKERS: Operating companies supply reducing pieces. No facilities for residue discharge. *(a)* Esso Pappas: length 160 m.; breadth 30 m.; depth at pier 30 ft. *(b)* Greek refineries: length 93 m.; breadth 12.70 m.; depth 7 m. *(c)* Texaco: length 80 m.; breadth 6 m.; draft 4.50 m. *(d)* Mamidakis: length 40 m.; breadth 5 m.; draft 27 ft.
FRESH WATER: Barge delivery available.
FUEL: Available ex-wharf at tanker installations subject advance notice. Can be supplied by barge at other locations.
FIRE PRECAUTIONS: The usual precautions applicable to oil installations. During operations of white liquid (petrol, spirits, etc.) regulations require a tug to be standing by.
HATCHES: Usually opened and closed by crew and subject additional payment by stevedores.
DEVELOPMENTS: Hellenic shipyards, Skaramanga, plans to build a new graving dock for 300,000 d.w.t.

Eleusis Shipyards have built a third floating dock which takes vessels up to 115,000 d.w.t. At the building dock, a crane of 400 tons lifting capacity has been constructed.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits allowed per Crew member out of bond.
CONSULS: None.
REPAIRS: All grades of repairs can be carried out at Eleusis shipyard, and also at Skaramanga (see "Dry Docks").
DRY DOCKS: Skaramanga shipyard situated on the coast between the Port of Piraeus and Eleusis Bay. Shipyard is 8 miles by road from Athens and 7 miles from Piraeus; driving time 25 and 20 minutes respectively.

Mailing address: Hellenic Shipyards Co., PO Box, 480, Athens, Greece. Cables: Shipyard, Athens. Telex: 215293 HSYS GR, 215396 HSYS GR, 215567 HSYS GR. Telephones 8073.471, 8073.351, 8073.610. Office hours at Skaramanga: 0815 hrs. to 1715 hrs. (weekdays), 0815 hrs. to 1345 hrs. (Saturdays).

Floating Docks

Main Particulars	*Dock No. 1*	*Dock No. 2*	*Dock No. 3*
Lifting capacity	30,000 tons	22,000 tons	25,500 tons
Docking capacity (d.w.t.)	72,000 ,,	37,000 ,,	60,000 ,,
Length overall	826 ft.	673 ft.	760 ft.
Length on keel blocks	760 ,,	605 ,,	693 ,,
Breadth inside banks	121 ,,	105 ,,	111 ,,
Breadth outside banks	147 ,,	129 ,,	136 ,,
Ht. of WL above keel blocks	28 ,,	28 ,,	28 ,,
Pumping time	120 min.	80 min.	100 min.

Skaramanga Yard's three floating docks have been designed in such a way as to eliminate delays of any kind in the raising of large vessels and to ensure that the work is carried out in minimum time and with the least possible inconvenience to the crew living on board.

The basic equipment of the docks is the following; Two 5-ton cranes, 2 fire extinguishing pumps 120 cu.m. per hour at 90 m. WC, DC current supply to ships 1200 A 220 V, AC current supply to ships 600 A 440 V 60 cycles, multipoint welding rectifier 2500 A, 2 oil pumps for supply of fuel oil from the dock to the vessel 60 cu.m. per hour at 50 m., 2 compressors 17 cu.m. per minute at 7 atu, emergency diesel generator set 200 KVA, foam fire extinguishing system, steam boiler and water distilling plants.

Graving Dock

The Graving Dock is 327 m. (1,100 ft.) long, 53.6 m. (176 ft.) wide and 9.25 m. (30 ft.) deep at the entrance. It can take ships in the 240,000 ton range.

Ships are manoeuvred at the dock entrance with the assistance of two 5-ton capstans situated on each side of the entrance gate. They are then shifted inside the docks by two 15-ton auto-tensioning winches and hauling-in trolleys (mules) running on tracks on each side along the dock subway.

The dock floor is fitted with specially designed keel blocks for easy fitting and removal and with electrically, operated side blocks.

The Graving Dock is served by two 100-ton cranes, one 50-ton crane and a small 5-ton crane.

A fleet of 5 powerful tugs is on hand at Skaramanga Yard to assist docking and undocking operations of all vessels calling at the yard.

Eleusis Shipyards S.A. is located 27 km. outside Athens. The site was chosen on account of the several advantages it presents. The bay is well protected from strong winds, sources of raw materials are available in the vicinity of the ward, and adequate transportation, power, and telecommunication facilities can service the needs of yard.

Athens Office: 67 Athinas Street, Athens 112. Tel. 349 053. Cables "Helnafel Athinia". Telex 215215 ESC GR.

Yard: Eleusinia, Eleusis. Tel. 55351. Cables "Helfafel Eleusis". Telex 215684 YARD GR and 215690 YARD DR.

Floating Docks: Two floating docks are available with the following specifications:

	No. 1	*No. 2*	*No. 3*
Length	162 m.	227.5 m.	252 m.
Breadth at entrance	23 m.	33 m.	41 m.
Draft over keel blocks	6.30 m.	8 m.	9.40 m.
Lifting capacity	11,500 m. tons	20,000 m. tons	30,000 m. tons
Cranage	5 t at 15 m.	12 t at 20.6 m.	12 t at 20 m.

Quay Wall; The 640 m. long quay wall is equipped with 40 and 15 ton cranes; range 30 m. power 220 volts DC 100 amp. – 42 volts DC 25 amp. – 280 volts AC 630 amp. Floating crane, 50 tons capacity.
Tugs: Available for manoeuvring purposes at all times.
AIRPORT: Athens Airport. Regular international flights.
HOLIDAYS: Cargo operations can be effected during usual Greek

holidays, following submission of application to Harbour Workers' Union and subject cost increase of 75% above normal.
POLICE/AMBULANCE/FIRE: Eleusis Police Station 46674; Ambulance 46503; Fire Brigade 0199.
SPECIAL PRECAUTIONS: See "Piraeus".
AUTHORITY: Eleusis Port Authority.

IRAKLION (Heraklion), Crete: 35.20 N. 25.10 E.

DOCUMENTS:
4 Cargo Manifests.
4 Crew Lists.
4 Passenger Lists.
Declaration of Crew's Personal Effects.
List of Stores and Provisions.
Maritime Declaration of Health.
Vaccination Certificates.

PILOTAGE: Pilotage area extends 0.5 to 1 mile N.E. of breakwater. Advance notice of ETA should be passed to Agents order arrange Pilot. Contact may be made with Pilot station on VHF Channel 12 during daylight, also when within distance of 3–12 miles, and subject prior agreement of calling time, communication can be effected by radio–telephone via Radio Iraklion – Pilot station telephone 286133. International pilotage signals apply. Pilot boat is wooden boat 12 m. length, hull colour black, with white deckhouse, carrying black board with word "Pilot" in white letters. In bad weather vessels should proceed close to entrance of port for Pilots boarding.

A cement pillar has been installed on the end of the extension of the N. breakwater. Fl. Gr. every 3 seconds, visible 9 miles. The pilot boat is equipped with VHF. range 50 miles.

ANCHORAGE: Anchorage East of port entrance is forbidden owing to numerous underwater cables. In good weather conditions anchorage to be found 0.75 mile Northwards of N. breakwater with Enetic Castle bearing 180°. In bad weather conditions, best anchorage is at a distance of about 5 nautical miles to the W. of the North breakwater and at a distance of 3 miles from the coast (Ellinoperamaton Haven); depth of water requires a big scope of anchor chain.

MAX. SIZE: Max. length 250 m., draft 29 ft.–29ft. 6 in. Usual rise and fall of tide 1 ft. but increasing with South winds and decreasing with North winds.

HEALTH: International regulations apply for obtaining free pratique. In the event of suspected disease vessel will remain under quarantine until cleared. Pratique is automatic if arriving from another Greek port.

RADIO: Radio Iraklion – SUH 2128 kc/s.

TUGS: Port authority has 1 tug of 1,000 h.p. and periodically (during the tourist season), 1 tug of 650 h.p. When tugs required they await vessel at port entrance. Ship's lines used.

BERTHING: Pilot will advise Master of berthing position.

STEVEDORES: Port authority owns 3 cranes but they are seldom used. Cargo operations usually conducted by use of ship's own gear. Discharge rates per gang in 8 hours: bulk cargo 100 tons, bagged cargo 140 tons, liquid cargo subject ship's equipment – transportation by barges, timber 100 cu. m.

MEDICAL: Advance notice should be passed to Agents if requiring medical attention. Clinics and medical treatment available.

TANKERS: Only very small tankers discharge in Iraklion Port and Ellinoperamaton Haven. At Iraklion, tankers discharging liquid fuel are required to berth at East breakwater (fuel pier). Attendance of fire brigade and 1 tug standing by is compulsory.

DENSITY: 1020.

FRESH WATER: Available ex-berth or ex-barge. Rate of delivery ex-berth about 500 tons per 24 hours.

HATCHES: Opened and closed by crew.

CUSTOMS: 2 packets of cigarettes per day per crew member allowed out of bond, and one 500 gr. bottle wine/spirits for whole time of vessel's stay in port.

IDENTIFICATION CARDS: Shore passes issued by Port Authorities.

CONSULS:

Finland	tel. 284860 and 283860
Norway	tel. 282667
Netherlands	tel. 282615
Belgium	tel. 282520 and 282296
Sweden	tel. 282476 and 285859
Denmark	tel. 282253
France	tel. 282347
Germany	tel. 282266 and 285400

REPAIRS: Minor repairs available by machine shops in town of Iraklion. No facilities for deck repairs.

AIRPORT: distance 5 km. Now an international airport with numerous flights.

TIME: GMT plus 2 hours, permanent.

HOLIDAYS: Usual Greek holidays plus local holidays of 25th August and 11th November. Cargo work can be arranged on holidays subject additional costs.
POLICE/AMBULANCE/FIRE: Police, tel. 282241, 282430, 282316; Ambulance, tel, 282894, 282638; Fire, tel. 283555, 282333.
AUTHORITY: Central Port Authority of Iraklion.

ISTHMIA, Corinth Canal (incl. Sousakion): 37.55 N. 23.00 E.

DOCUMENTS:
Port Authorities
Crew List.
Passenger List.
Ship's Certificates.
Health Certificates.
Certificate of Anchorage Dues.
Customs
Customs papers and declarations.
Cargo Papers.
List of Stores and Provisions.
List of Crew's Personal Effects.

PILOTAGE: There are 11 Pilots for the Corinth Canal. Telegraphic address of Canal is "Corinth Canal", tel. 0741-24452. Master of vessel must give at least 4 hours notice of ETA in order to avoid delay. For Pilot signals, etc., see article 7 of the New Company of the Corinth Canal "Regulation of Navigation and Tonnage".
ANCHORAGES: Open anchorage in Isthmia Bay.
RESTRICTIONS: Corinth Canal closed every Tuesday from 0600 hrs. to 2000 hrs. in order for maintenance work to be effected.
MAX. SIZE: The max. draft of ships negotiating the Canal, in relation to their width, is defined as below, assuming normal water level and normal weather conditions.

Width	*Maximum draft*
16.0 to 16.5 m.	6.2 m.
15.5 to 16.0 m.	6.2 m.
15.0 to 15.5 m.	6.6 m.
14.5 to 15.0 m.	6.8 m.
14.0 to 14.5 m.	7.0 m.

The max. draft for vessels of less than 14.0 m. width is 7.2 m. The max. width must not anyhow exceed 18.3 m. (60 ft.).

Special instances will be examined by the Master and the Canal Service in collaboration.
HEALTH: Pratique effected by health department of the Port Authority assisted by temporarily engaged doctor. In cases of suspected contagious disease vessel will be held under quarantine and if necessary fumigation will be conducted at Piraeus.
VHF: Will be installed during 1976 in the Corinth Canal.
TUGS: Join vessel near Canal entrance at Isthmia and Possidonia. Ship's lines always used.
BERTHING: In Sousakion at private factory pier. No berths at Isthmia.
MEDICAL: Agent should be advised in advance of number of crew needing medical assistance, also information of any vaccination required.
FRESH WATER: Not available either at Sousakion or in the Canal.
CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes out bond and 1 bottle wine/spirits.
CARGO GEAR: Loading/discharging by ship's gear.
AIRPORT: 100 km. distance.
TIME: GMT plus 2 hours, permanent.
POLICE/FIRE/AMBULANCE: Police, tel. 22129.
DELAYS: Possible delay up to 1.5 hours in transitting Canal if another vessel already transitting canal from opposite direction.
AUTHORITY: Port Authority of Isthmia.

ITEA: 38.26 N. 22.25 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Cargo Manifest.
Bills of Lading.
List of Ship's Stores and Spares.
Health Declaration.
Ship's Certificates.

PILOTAGE: Vessel should advise ETA at least 24 hours before arrival through the telegraphic office of Itea. Pilots are called by international code flag "G" or sound signal 2 long and 1 short blast.

Pilot boards 1 mile S.E. jetty lighthouse. Pilot boat painted black with white deckhouse, the word "Pilot" is painted in white letters on both sides. On the bow is painted "PY21".

In bad weather vessel should enter harbour without Pilot and anchor using both anchors.
ANCHORAGE: Available inside the harbour and in Aggolis Gulf. Safe anchorage in the vicinity of the jetty head in depths of 8–10 m.
RESTRICTIONS: Vessel may enter harbour day or night. Harbour anchorage suitable for vessels up to 60 ft. draft.
HEALTH: Pratique is given on arrival by the port medical officer.
TUGS: None available.
STEVEDORES: Gangs should be ordered in advance by Agents on basis of Masters ETA. Loading and discharging is effected by ship's gear.
MEDICAL: 24 hours notice preferred if any medical requirements. Hospital facilities available. Vaccination can be arranged within 24 hours.
DENSITY: 1025.
FRESH WATER: Not available.
FUEL: Not available.
DEVELOPMENTS: Extension and widening of the existing breakwater and the construction of a second breakwater.
HATCHES: Hatches are opened and closed by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 opened bottle of alcohol is allowed each man.

IDENTIFICATION CARDS: Needed for crew men going ashore.
CONSULS: No local representation.
REPAIRS: No facilities for repairs.
REPATRIATION: Can be arranged.
TIME: GMT plus 2 hours all through the year.
HOLIDAYS: Cargo work can be effected on all holidays on payment of overtime.
POLICE: Tel. 222.
AUTHORITY: Port Authority of Itea.

KALAMATA: 37.02 N. 22.07 E.

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived vessel" and (subject to Charter-Party Terms) laytime commences to count are 0.5 mile from the breakwater red light, where Pilot boards.
DOCUMENTS:
5 Crew Lists (Greek flag vessels).
3 Crew Lists (foreign flag vessels).
2 Passenger Lists.
Customs documents.
Bill of Health.
Bill of Lading.
All ship's papers.
PILOTAGE: Notice of ETA required 48 hours before arrival. No VHF. Call Pilot by international code signals on arrival. Pilot boards by motor boat about 0.5 mile from the breakwater red light, weather permitting.
ANCHORAGE: Vessels waiting Pilot may anchor half-a-mile East of the breakwater red light.
MAX. SIZE: Vessels up to 29 ft. draft may enter harbour. For berthing alongside the West mole, max. length 382 m., max. draft 24 ft.
For berthing alongside the North mole, max. length 158 m., max. draft 13 ft.
For berthing alongside the East mole, max. length 170 m., max. draft 29 ft.
For berthing alongside the North-east mole, max., length 161 m., max. draft 29 ft.
A new dock under Construction max. length 145 m., max. draft 29 ft.
HEALTH: Port Health doctor boards vessel on arrival or alongside the berth. Master required to produce Fumigation Certificate and Declaration of Health. Health visit not necessary for vessels coming from a Greek port.
RADIO: Athens Radio, call sign SVA.
TUGS: No tugs available.
BERTHING: Agents require details of vessel's draft in advance to get berthing permission from Harbour Authorities. West Mole, length 430 m.
SPECIALISED CARGO HANDLING FACILITIES: There is a silo for grain. The other special cargoes discharging equipped by ship's gear. No facilities for containers or roll-on/roll-off traffic. For liquid chemical carriers there are 2 pumps with electric system. There are 2 cranes on vehicle, 3 and 40 tons capacity. Also there is 1 lifting machine. No other facilities.
STEVEDORES: Number of gangs required to be advised Agent in good time.
MEDICAL: Doctors and medical assistance available.
FRESH WATER: Can be supplied from the berth at about 15 t.p.h.
FUEL: Can only be supplied by road tankers – subject to advance notice.
DEVELOPMENTS: New berths under construction to accommodate vessels up to 30 ft. draft.
It is planned to build a shipyard at Kalamata. During the first phase the yard is likely to concentrate on the building of bulk carriers and tankers up to 75,000 tons d.w.t.
WATCHMEN: If required watchmen available from shore.
HATCHES: Can be opened and closed either by crew or by stevedores subject to regulation payments for this work.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.
CONSULS:

Sweden	tel. 22479
Netherlands	tel. 22881

REPAIRS: Minor repairs can be effected in shore machine shops. No dry docks.
REPATRIATION: Can be arranged.
AIRPORT: Situated 6 miles away. Flights to Athens 2 times a day.
TIME: GMT plus 2 hours all the year round.
HOLIDAYS: Additional local holidays are Ascension Day and St. Dionysio's Day.
POLICE/FIRE/AMBULANCE: Police tel. 22622; Fire tel. 28273; Ambulance tel. 25555.
SHORE LEAVE: Allowed. Shore passes issued by Harbour Authorities.
AUTHORITY: Kalamata Harbour Master's Office.

KALI LIMENES, Crete: 34.56 N. 24.50 E.

DOCUMENTS: Vessels may arrive for bunkering without obtaining free pratique. However, if pratique is effected, vessels should have ship's papers ready for inspection, also 4 Crew Lists, 4 Passenger Lists, Cargo Manifest and a List of Stores and Provisions.
PILOTAGE: 1 private Pilot employed by the bunkering company SEKA who undertakes pilotage for vessels calling for bunkers. Pilot boat is a small boat equipped with signal lamp. Pilot boards about 5 miles East of Aghios Pavlos (St. Paul) Islet. Vessels awaiting Pilot may anchor 15 miles East of Aghios Pavlos Islet.
ANCHORAGES: (See "Pilotage") Vessels may anchor in area between Aghios Pavlos Islet and Mavronissi, which is a safe anchorage.
MAX. SIZE: Vessels in ballast of up to 80,000 d.w.t. and max. draft 14 m. can enter port.
HEALTH: Vessels arriving from foreign ports wishing to obtain free pratique should cable Agents to arrange for boarding of Health Inspector. Free pratique automatic if arriving from another Greek port.
TUGS: There is 1 tug, but it is seldom used.
MEDICAL: Agent should be advised well in advance if medical assistance required. There are no hospitals or other local facilities and doctor has to be called from nearest town.
TANKERS: 3 berths North of Aghios Pavlos Islet, max. draft 14 m.
FRESH WATER: Unlimited supplies available.
FUEL: Unlimited supplies available subject adequate advance notice. Supplied by Mobil only.
FIRE PRECAUTIONS: Portable foam-fire extinguishers.
CUSTOMS ALLOWANCES: 200 cigarettes permitted to each crew member to be held out of bond, and 1 bottle of wine/spirits.
CONSULS: None.
REPAIRS: None.
AIRPORT: At Iraklion, 75 km. distant.
TIME: GMT plus 2 hours, permanent.
SHORE LEAVE: Permitted if free pratique requested and granted.
AUTHORITY: Port Authority Station.

KATAKOLON: 37.39 N. 21.20 E.

DOCUMENTS:
Maritime Health Declaration.
Usual Ship's Certificates.
3 Crew Lists.
3 Passenger Lists.
2 Lists of Stores and Provisions.
2 Lists of Crew's Personal Effects.
PILOTAGE: Not compulsory. Port has 1 private Pilot whom vessel may use provided sufficient advance notice passed through Agent.
ANCHORAGES: Vessels can anchor at a distance of 2 cables from the head of the breakwater (bearing 300°). Safe anchorage for vessels of up to 30 ft. draft between positions 37.40 N. 21.19 E. and 37.40 N. 21.20 E.
MAX. SIZE: Max. safe draft 24 ft. Depth inside port 8 m. Length of pier 204 m.
STEVEDORES: No advance notice required. No shore facilities. Vessels load/discharge with own gear.
MEDICAL: No medical assistance in Katakolon, but facilities exist at the town of Pyrgos 13 kms. distant.
FUEL: Not available ex-berth, but can be delivered by tank truck from Patras or Kalamata.
FRESH WATER: Available. Capacity 20 cu. m. per hour.
HATCHES: Usually opened and closed by crew but this work can be carried out by stevedores subject consent of Port Authority. Cost as agreed between Master and stevedores.
IDENTIFICATION CARDS: Passes issued by Port Authority.
CONSULS: None.
REPAIRS: Not available in Katakolon. Small quantities of engine spares available in Pyrgos.
AIRPORT: Andravis Airport 26 kms. distant. Flights to Athens twice weekly.
TIME: GMT plus 2 hours, permanent.
HOLIDAYS: Usual Greek holidays plus local holidays of 6th December and 17th December.
POLICE/AMBULANCE/FIRE: Police and Immigration, tel. 41202; Fire brigade (Pyrgos), tel. 22633; Ambulance (Pyrgos), tel. 22344.
TELEPHONES: No facilities for placing on board.
SHORE LEAVE: Permitted.
AUTHORITY: Port Authority of Katakolon.

KAVALLA: 40.55 N. 24.25 E.

DOCUMENTS:
5 Crew Lists.
2 Lists of Foreign Exchange.
4 Passenger Lists.
2 Cargo Manifests.
2 Lists of Crew Personal Effects.
Copies of Bills of Lading and usual Ship's Certificates.
PILOTAGE: 24 hours notice of ETA to be passed to Agents or direct to Port Authorities. Vessels requiring Pilot should indicate with light and sound signals code letter "G" on arrival 5 miles from Kavalla lighthouse. Pilot boat is a tug 9 m. length. Pilot usually boards about 0.5 mile from breakwater light. In event bad weather, Pilot does not board, and vessel may take refuge N.W. of Cape Prinos at the head of Thasos Island. If strong South or S.W. winds prevailing, vessels recommended take refuge Eleftheron Bay. Vessels awaiting a Pilot may anchor 0.5 mile South of Kavalla lighthouse.
ANCHORAGE: 0.5 to 2 miles South of Kavalla lighthouse, depth 30 to 40 m. Bottom sand and mud.
MAX. SIZE: Max. length 150 m. with proportionate breadth. Max. draft 27 ft. Tidal range 2 ft.

HEALTH: Doctor boards vessel with Port Officer. Maritime Declaration of Health and Deratisation Certificate required. In case suspected disease or fever on board, Master should radio Port Authorities in advance. Pratique is automatic if arriving from another Greek port.
RADIO: No local radio station. Cables may be routed through Athinai Radio.
MEDICAL: Advance notice of medical requirements necessary. General hospital in Kavalla and numerous private clinics.
DENSITY: 1025.
FRESH WATER: Available at berth.
FUEL: None.
HATCHES: Opened and closed by crew.
CARGO GEAR: Vessel should have cargo gear ready on arrival in order to avoid delay.
CONSULS:

France	Tel. 3163	Netherlands	Tel. 3255
Finland	Tel. 3467	Sweden	Tel. 3669

REPAIRS: Minor repairs available.
AIRPORT: Distance 7 km. One flight daily to Athens.
TIME: GMT plus 2 hours, permanent.
HOLIDAYS: Standard Greek holidays. Local holiday 29th June.
POLICE/AMBULANCE/FIRE: Police, Tel. 3291; Fire, Tel. 1999.
AUTHORITY: Kavalla Port Authority.

LAVRION: 37.42 N. 24.04 E.

DOCUMENTS:
Maritime Declaration of Health with Crew's Vaccination Cards.
Cargo Manifests.
4 Crew Lists.
PILOTAGE: Address of Pilot station, Port Authority of Lavrion. Pilot boat is a motor launch 8 m. long, black hull with white stripe flying code flag "H". Vessels requiring Pilot should flash or sound letter "G". Pilot boards about half a mile from Green Light (AK. Ergastiria). In event of bad weather, boarding position is inside the buoy. Vessels awaiting Pilot should anchor close to the Green Light depending on vessel's size.
ANCHORAGE: See "Pilotage".
MAX. SIZE: Max. length about 130 m., max. draft 21 ft.
HEALTH: Health Officer and Port Officer board vessel on arrival. Maritime Declaration of Health should be submitted to Health Officer who examines any sick crew. Free pratique is not automatic.
BERTHING: Harbour open to S.E. winds, but otherwise sheltered and safe. There are two quays: one 330 ft. length, depth alongside 20 ft., and one of 260 ft. length, depth alongside 13 ft.
Mining company owns bridge elevator with capacity of 700 tons per day.
STEVEDORES: Advance notice required in order to arrange gangs. No shore cargo equipment, and cargo operations effected by ship's gear.
MEDICAL: Medical assistance available.
FRESH WATER: Can be supplied to vessels alongside berth from tanker trucks.
FUEL: Only small quantities available as existing fuel tank only 10 tons capacity. Can be supplied by tank trucks from Piraeus.
HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: 200 cigarettes per crew member allowed out of bond.
REPAIRS: Minor repairs only.
AIRPORT: Athens Airport, distance 45 km.
TIME: GMT plus 2 hours.
POLICE/AMBULANCE/FIRE: Police, tel. 25218; Ambulance, tel. 25340; Fire, tel. 25249.
HOLIDAYS: Local holiday 26th July.
AUTHORITY: Port Authority of Lavrion.

MEGARA: 38.00 N. 23.20 E. **(See Plan)**

Pier owned by Hellenic Refinery. Berth depth 42 ft. 6 in. at S.W. end, 44 ft. at N.E. end. 46–50 ft. available 1 m. from the berth. With suitable fendering berth can accommodate vessels up to 85,000 d.w.t. 3 tugs required for berthing/unberthing. Tide about 1 ft. plus or minus depending wind direction.
also see "Piraeus".
SHIPMASTER'S REPORT: Vessel 255,090 d.w.t. Discharged part cargo of approximately 115,000 tons. (See Shipmaster's Plan).
Pilot boarded from a tug in position 1 mile South of Pakhi Island. Forward moorings consisted of 2 "first line ashore" 9 in. nylons in a long drift to the shore. This distance was estimated at about 300 m. 3×10 in. synthetic hawsers to buoys (2 to 1st buoy and 1 to 2nd buoy) with drifts of only 100 to 150 ft., the Pilot did not appear to have a lot of faith in the holding ability of the buoys. 3 × 5 in. wires led to the concrete jetty, and the 2 which were true backsprings, were very good with normal drift, but the wire from the after end of the foc's'le head to the stem of the jetty was very long and required a tug boat to carry it out as the boatmen could not handle it at the length. The starboard anchor, which was used for berthing was left out at 4 shackles.
Aft, the mooring consisted of 2 "first line ashore" 9 in. nylons in a long drift, exactly the same as forward. Then 2 × 10 in. synthetics to a buoy just clear of the quarter and 4 × 5 in. wires to the jetty. The 3 shown to the stem of the jetty all had to be carried out by a tug boat as forward.
My distrust of this berth is because of the lack of any wire breast lines and the main reliance being placed on the 4 nylons (two each end) which can stretch considerably if the breeze were to blow strongly offshore. There was only about 44 ft. of water alongside giving us a high freeboard.
At this berth it is necessary to use ship's gear to hold discharge hoses, 3 × 8 in. hoses being used.
According to the Pilot, it is preferable to use only ropes for mooring as they can be easily doubled up for length. His suggestion was that we should carry about 14 mooring ropes, with which I disagreed. He also advised that large tankers always berthed port side to, and I presume this is for V.L.C.C.'s as the next ship on berth came in starboard side alongside. She was about 50,000 tons.
With this ship there were 7 tugs in attendance berthing and 8 unberthing; at the most, 3 of them have sufficient power, the others were very weak when assisting us.

MILOS ISLAND: (Adamas, Voudia Bay) **(See Plan)**

DOCUMENTS:
4 Crew Lists.
3 Passenger Lists.
2 Provisions Lists.
2 Personal Effects Lists.
Vaccination Certificates.
Deratisation Certificate.
Manifest (in duplicate)
Certificate of Registry.
Load-line Certificate.
Safety Equipment Certificate.
Radio-telegraphy Certificate.
Certificate of Measurement.
PILOTAGE: No Pilot station. Vessels requiring a Pilot should sound 3 blasts on ship's siren. Pilot boards from small motor-boat. Agents may contact Pilot in advance of requirement by telephone.
ANCHORAGE: Safe anchorage in all parts of Milos Bay, where Adamas port is situated. Main anchorage in Milos Bay is on East side of Bombardos Cape, which has a lighthouse showing a fixed green light.
MAX. SIZE: Any size vessel may enter Adamas Port but berthing alongside is restricted to vessels of 16 ft. draft.
Ore loading berth at Voudia Bay, and at Kanaba. No facilities for tankers.
HEALTH: Authorities require 24 hours notice of arrival in order to grant free pratique to vessels arriving from a non-infectious country. Free pratique cannot be granted at Milos to vessels having disease on board nor to those arriving from an infected area. Such vessels are required to proceed to a main Greek port (Piraeus, Syros, etc.) to obtain health clearance.
RADIO: Athens Radio and Heraklion Radio.
TUGS: Not available.
STEVEDORES: Loading/discharging at Adamas is by means of ship's gear. Bagged cargo loading rate is 250 t.p.h. At Voudia Bay and Kanaba bulk ore is loaded at a rate of 500 to 800 t.p.h. (Conveyor Belt).
MEDICAL: No hospitals, nor private clinics available. There are 3 doctors and 1 dentist resident on the Island. Cholera, smallpox and yellow fever vaccinations are required.
FRESH WATER: Available to vessels alongside using ship's hoses. Delivery alongside up to 30 cu. m. in 12 hours.
FUEL: Small quantities lubricants available.
DEVELOPMENTS: Intentions to (1) extend existing wharf up to 70 m. with depth increases up to 30 ft. This development has been delayed for economic reasons.
OPENING/CLOSING HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and one opened bottle of spirits per person.
REPAIRS: Minor oxy-acetylene repairs available.
TIME: GMT plus 2 hours.
HOLIDAYS: Sundays and customary holidays. Cargo work can be arranged on these days at 75% increase on tariff rates.
TELEPHONES: Police 21204; Port Authority 41607.
SHORE LEAVE: Permitted.
DELAYS: Strong Southerly winds may delay berthing, or force vessel to leave loading berth at Voudia Bay.
SHIPMASTERS REPORT No. 1: *Voudia Bay:* Fresh water is available using vessels own hoses. Limited quantity of provisions are available. Hire of polypropylene ropes of 150 m. length is possible.
It is advisable to close ventilators before loading due to excessive dust.
Pilot remains on board during loading.
Cargo: Perlite.
Loading rate for bulk: 250 t.p.h.
Loading rate for bags: 18–20 t.p.h.
SHIPMASTERS REPORT No. 2: *Voudia Bay and Milos Island:* Situated on the N.E. corner of the island of Milos. When approaching from the S.E. the most prominent features are the scarred terrain, the factory building and the silo which is situated just above the berth. The loading gantry has both fixed red and white lights on it and is conspicuous.
Anchorage: The vessel anchored in a position with the loader bearing 302° T. distance 7.5 cables in 48.5 m. of water using 5 shackles of cable, the holding appeared to be good. The recommended anchorage is in a position with the loader bearing 328° distance 5 cables where holding is reported to be good. There was another vessel in that position at the time.

Caution: This anchorage is not recommended in strong South to S.E. winds due to the seas that build up in the Bay. Vessels are recommended to go to the North of Pilonisi Island and anchor in a position N.W. of the North West point, a distance of not less than 3 cables. This island is now joined to the main island by rubble from the factory, this is not shown on the Chart (1832).

Method of Berthing: (See Plans). Approach to the berth is made heading in a N.W.'ly direction, keeping the Northern most buoy (A) close to the starboard side and when the bow is passed about a third of the ship's length, the starboard anchor is let go and let run until about 4 shackles on deck, then it is checked, in the meantime a boat will take a breastrope from for'd, run from the port shoulder lead (1). Once this is ashore and the vessel begins to cant to starboard, the bow is worked into position by heaving on the breastrope and slacking the cable until there is about 6 shackles on the latter. Meanwhile, a line is run from the starbcard quarter (2) to buoy (B). A word of caution here, the berth is designed to take vessels up to 23,000 tons, so for a small vessel it will be necessary to have 2 ropes joined together for moorings (2), (4) and (5). The next line sent away is one from the Port Quarter to ashore as a breastrope (3), the stern is then brought into position in a similar manner to the bow. As the prevailing wind is from ahead usually, the next rope sent away is the head line (4) and finally the stern line (5). The latter two are used for shifting the vessel under the loader. Directly under the loading gantry, there is a dolphin arrangement to keep the vessel off the cliff, but on completion of mooring, the vessel should end up about 6 to 10 ft. off this.

Caution: In strong South to S.E. winds, the berth becomes dangerous and vessels have to leave and go to anchor and it is often necessary to leave the ropes on the buoys etc. as it is not possible to let them go. It is also advisable to retain some ballast on board for berthing.

There are 2 Pilots, both speaking English, the younger, an ex-Chief Officer has the better command of English and was the source of a lot of this information.

On leaving the berth, the last rope to be let go is (2) and with a smaller vessel, this can safely let go while weighing anchor. Vessel will then proceed to another anchorage close to, to secure, obtain clearance and clean up.

Loading Procedure: Loading is done by a chute and at an approximate rate of 300 tonnes per hour. The cargo is very dusty and everything should be securely battened down and it is strongly advisable to wear goggles and protective masks on deck as the dust is choking and if it gets in the eyes, they should not be rubbed as it is abrasive and can cause permanent damage. Eyes should be washed out. The ship will advise what weight she can take, and as the weighing procedure ashore is liable to break down after the first 500 tonnes, vessel is loaded according to draft, which has to be carefully checked, as when stipulating amounts required per hatch, they will not necessarily keep to this unless told. A boat is available for checking the draft, one blast on the whistle will summon it. Only method of getting ashore is by boat, so it is necessary to have the starboard gangway down. Both foreman and boatman have a fair knowledge of English, but foreman does not come aboard but stays on the loader, so it is necessary to shout instructions etc. The foreman will advise on shifting for position required, this is done with the aid of frequent blasts on a pocket whistle. Only one man comes aboard and that is to tend the chute.

There appears to be a continual short swell which makes draft reading a little difficult.

Entry and Clearance: Agent, Doctor, Customs and Harbour Master boarded the vessel at anchor and entered her there. Forms on board were not acceptable, but they transferred them to their own. I understand that the only acceptable forms are the standard IMCO ones, and if there are any of these on board they should be used.

Forms required:
2 Crew Declarations.
3 Crew Lists.
2 Bonded Stores List.
2 Stores Lists.
1 Vaccination list (Including Cholera).

There are various other forms to sign, but these are prepared by the Agent. The Health Declaration is made out by the doctor in his book. The Agent, who is from the Mining Company, spoke very good English.

Weather: Northerly winds predominate during the Summer and can become quite strong during September, mainly from midnight to noon.

AUTHORITY: Port Authority of Milos.

MITYLENE (incl. Geras Bay and Pamfyllon): 39.06 N. 26.35 E.

DOCUMENTS:
4 Crew Lists.
2 Cargo Manifests.
2 Passenger Lists.
2 Stores Lists.

PILOTAGE: No official Pilot, but if required the services of 2 experienced Mercantile Marine officers having knowledge of the port may be used.

ANCHORAGE: Before town of Mitylene, in depths of about 18 m., extreme East of Kastro Peninsula or Fokiotrypa light, bearing due North.

MAX. SIZE: Length 120 m. draft 17 ft. at Inner Port. Length 160 m., draft 28 ft. at Outer Port.

HEALTH: On arrival from foreign port, Port Officer, Customs Officer and Medical Officer board vessel for pratique. Pratique automatic if arriving from another Greek port.

BERTHING: At least 24 hours notice of ETA required for berthing allocation.

STEVEDORES: At least 8 hours notice of number of stevedores required to be given.

MEDICAL: In event of illness on board, Master should cable details prior arrival. Medical clinics and hospital available.

TANKERS: Geras Bay (Mamidakis) and Pamfila (Purfina).

FRESH WATER: Available. Supply rate 40/50 tons per vessel every 24 hours.

FUEL: Available at Purfina and Mamidakis installations. Supplies to Mitylene port by tanker trucks only, and advance notice required.

DEVELOPMENTS: A pier to be constructed in the Outer port, with depth of 15 ft. alongside.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes allowed per crew member out of bond.

CONSULS:

Sweden	Tel. 28494	Belgium	Tel. 28494
Netherlands ,,	28760	France ,,	28151

REPAIRS: Two local machine shops undertake very minor repairs.

AIRPORT: 8 km/s from the port. 2 daily flights to Athens.

TIME: GMT plus 2 hours, permanent. From 15th April until 10th October there is Summertime.

HOLIDAYS: In addition to usual Greek holidays, local holiday on 6th December. Cargo work can be arranged subject additional charge.

POLICE/AMBULANCE/FIRE: Police, Tel. 100 and 22021; Fire Brigade, Tel. 199; Hospital, Tel.28412 and 22005.

AUTHORITY: Mitylene Port Authority.

MYKONOS: 37.27 N. 25.20 E.

Vessels in excess of 22,000 d.w.t. have been accommodated. Loading of Barytes ore at rates up to 5,000 tons per day. In Winter when North winds prevail conditions are satisfactory for loading: however, loading position considered unsafe when S.W. or West winds prevailing. When sufficient cargo is available vessels can load in 2 days.

PATRAS (including Rio): 38.14 N. 21.45 E. **(See Plan)**

DOCUMENTS: Port Authorities: 2 Crew Lists, Customs: Declaration of Cargo and Passengers.

PILOTAGES: Advance notice of ETA to be passed to Agents who arrange Pilot. Vessels without Agents should advise authority of ETA through Athens Radio, or on arrival outside harbour make International Code sounds and signals for vessels requiring a Pilot. Pilot boat is small boat carrying pilot flag. Pilot usually boards less than 1 mile outside harbour entrance. VHF contact possible with Port Authority and Pilot on Channel 12.

ANCHORAGES: Port is not a natural harbour and does not offer safe anchorage when winds from W. and S.W. Depending weather conditions vessels can be protected at the Nafpaktos-Psathopyrgos and Deke (Aghios Vassilios) Bays.

RESTRICTIONS: Port entrance has depth of 34 ft. At main harbour vessels having draft in excess of 28 ft. cannot berth. The limit at the new berth is 34 ft. draft. There are 2 red light buoys in position of the intended line of extension to Northern part of breakwater (extension of 250 m.) where work is in progress. Buoys are about 500 m. from permanent lights marking North entrance to the harbour, and indicate shallow water.

MAX. SIZE: Vessels of less than 34 ft. draft. No restrictions on length or breadth. Height of tide, max. 0.55 m., does not affect size of vessel.

HEALTH: Pratique in accordance with International Regulations.

RADIO: Athens Radio.

TUGS: One tug 1,000 h.p. Use of tug compulsory for all vessels over 1,000 tons gross. Joins vessel at entrance to harbour. Ship's lines used.

BERTHING: In accordance with allocation given by Port Authority.

STEVEDORES: Advance notice of ETA required in order to arrange berth and order number of gangs to commence work immediately. General cargo rate about 80–100 t.p.h./gang, and bulk cargoes 75–90 tons. 7 shore cranes, capacity up to 25 tons available.

TANKERS: No facilities at Patras, but Texaco-Restis berth at Rio for vessels up to 18 ft. and 2,500 tons alongside. No residue discharge facilities.

FRESH WATER: Supply line connected to all berths.

FUEL: Deliveries by tank trucks at Patras. Available at Texaco-Restis berth at Rio.

FIRE PRECAUTIONS: Vessels refuelling or discharging explosives or inflammable materials must apply to Port Fire Brigade to stand by.

DEVELOPMENTS: *(a)* Outer breakwater to be extended 500 m. in total.

(b) 4 m. is the depth along the newly constructed quay between Custom's House and fish steps.

(c) St. Nicolas pier – length: 200 m. – is now available for berthing ships on both sides. Depths alongside are equal to those in North and South basins.

(d) Astingos pier is reconstructed now having a 160 m. length on

the South side and a 180 m. length on the North side. Depths alongside are same as in the basins.
WATCHMEN: Advisable to employ night-watchmen on large vessels.
HATCHES: Usually opened and closed by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits allowed out of bond for each Crew member.
IDENTIFICATION CARDS: Crew are supplied with passes by Port Authority.
CONSULS:

Belgium	Sweden
Germany	Finland
Denmark	France
Italy	Switzerland
Netherlands	

REPAIRS: Very minor repairs only.
REPATRIATION: All facilities for crew changes and repatriation.
AIRPORT: None.
TIME: Summertime – GMT plus 3 hours – from April 10 to end of September.
HOLIDAYS: In addition to general Greek holidays and Sundays, local holidays are 8th September, 30th November; 30th January. Work can be arranged on these days subject to payment of additional charges.
POLICE/AMBULANCE/FIRE: Port Police, tel. 277–622; Patras Police Station, tel. 277–261; Ambulance, tel. 274–444; Fire Brigade, tel. 199.
TELEPHONES: Facilities for connecting on board.
SHORE LEAVE: Permitted.
AUTHORITY: Central Port Authority of Patras.

PIRAEUS: 37.56 N. 23.40 E. (See Plan)

Incl. AGHIOS GEORGIOS 37.57 N. 23.36 E.; KERATSINI: DRAPETZONA 37.56.30 N. 23.37 E.; and PERAMA 37.58 N. 23.35 E.)

DOCUMENTS: All usual certificates including Registry, Measurement, Inspection, Load-line, Fumigation, Passenger Safety, Cargo Gear, and Radio.
5 Crew Lists.
2 Vaccination Certificates.
Cargo Manifest.
List of Provisions and Stores.
List of Spares.
Maritime Declaration of Health.
Crew Passports, or Seamen's Books.
Passenger Passports.
PILOTAGE: Cable Agent well in advance advising ETA. Agent informs pilot office of vessel's arrival time.

Pilots can be contacted on VHF Channel 16 for calling, Channels 7 and 12 for communication. Pilot boat is a wooden vessel about 10 m. length with black-painted hull, word "Pilot" painted in white.

Vessels requiring Pilot should signal letter "G" by morse light or by ships whistle. Pilot boards vessel about 1.5 miles off entrance to harbour, except when very strong South winds prevailing, in which case vessel advised by VHF or by signal light that conditions impossible for Pilot boarding, and whether vessel permitted enter harbour at Master's risk.

If awaiting Pilot, anchorage is possible inside pilotage area of Piraeus – Aghios Kosmos – Piraeus Anchorage – Perama Anchorage – Megara Anchorage (Pachi).
ANCHORAGES: As above. Depths between 9 and 35 fathoms.
RESTRICTIONS: No restrictions for Aghios Georgios Harbour or Drapetzona excepting draft. Harbours open throughout 24 hours for entry and departure subject prevailing weather conditions. No tidal restrictions.
MAX. SIZE: (also see "Tankers") Aghios Georgios max. draft 32 ft. Drapetzona max. draft 25 ft. Piraeus max. draft 32 ft. 6 in.
RADIO: Athinai Radio – SVA.
TUGS: Usually join vessel outside harbour, always using ship's lines. Over 30 tugs available. 10 of less than 1,000 h.p. and remainder over 1,000 h.p.
BERTHING: Agent must advise Piraeus Harbour Authorities in order to secure berth allocation.
CRANES: One gantry crane lifting capacity 10 tons, used for coal and bulk cargoes installed at Hercules Port. Hourly output of 160 tons.

39 electric wharf cranes with capacities of 2 to 15 tons installed along the wharf of the main port and at the dry and floating docks.
67 mobile cranes with capacities of 3 to 40 tons.
3 Straddle-carriers for containers, capacity 30 tons each.
1 container gantry with capacity 250 tons. The Port Authority have an additional gantry crane, capacity 41 tons on order.
3 floating cranes with capacities of 15, 30 and 100 tons.
BULK HANDLING FACILITIES: Silo suction-duct installations capable of moving grain at up to 150 t.p.h. and storage facility for 40,800 tons, as well as 2 mobile suction-duct units for bulk grain-cargoes.
STEVEDORES: Agent must submit letter of application to Piraeus Port Authorities for number of gangs required also time required to commence cargo work. Discharge usually effected with ship's own gear.

Normal work on loading/discharge of goods in the port is carried out by 2 regular shifts, the morning shift (0730 hrs. to 1430 hrs.) and the afternoon shift (1430 hrs. to 2130 hrs.). Likewise, upon application of the interested parties (ship-owners, Agents, consignees, shippers, etc.), and provided approval of the competent P.P.A. Service is obtained, a third, night shift can be assigned to the job if the necessary workers and operators are available. This shift is again of 7-hour duration, from 2030 hrs. to 0330 hrs. or can be extended to the morning hours if necessary. Exceptionally in the case of work on refrigerator vessels, on which work during the Summer period is limited to the afternoon hours, the Service can assign workers and operators of loading/discharge machinery, starting from 1630 hrs., for a 7-hour period which can be extended, if conditions warrant, to the morning of the next day. Loading/discharge work may also be undertaken on Sundays and other non-working days (holidays) such work being considered as totally extra, being burdened with extra charges accordingly.
MEDICAL: All medical and hospital facilities available. No advance notice required except in special cases.
TANKERS: Discharging effected at private installations.

Shell	max. draft 32 ft.	Petrolles	max. draft 29 ft.
B.P.	max. draft 36 ft.	Purfina	max. draft 28 ft.
Elvyn	max. draft 26 ft.	Mobil	max. draft 48 ft.

D.E.H. max. draft 36 ft. (outside steam generator factory, no facilities for going alongside).
DENSITY: 1025.
FRESH WATER: Available alongside berths. For vessels at anchor, water can be delivered by barges belonging to Piraeus Harbour authority at 50% additional cost.
FUEL: Gas oil, fuel oil and mixtures of both to a certain viscosity available. Advance notice of requirements should be sent to Agent order complete customer's requirements.
WATCHMEN: Required.
HATCHES: Opened and closed by stevedores.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per crew member allowed out of bond. Wine/spirits, one bottle.
CARGO GEAR: Before commencement of loading or discharge, cargo gear is examined by Piraeus Harbour Authorities.
IDENTIFICATION CARDS: Passes required for seamen going ashore.
CONSULS: The following countries maintain Consuls at Piraeus:

Denmark	Italy	Netherlands
Finland	Norway	Sweden

Other countries maintain Consulates resident in Athens.
REPAIRS: Facilities available for all kinds of deck and engine repairs.
DRY DOCKS: Two floating docks at Perama. *(a)* Length 202 m., depth 40 m., capacity 15,000 tons. *(b)* Length 113.6 m., depth 27.4 m., capacity 3,000 tons. Also see Eleusis and Syros.
REPATRIATION: All facilities for crew changes and repatriation.
AIRPORT: Athens Airport 10 km. distant from main harbour. Regular international flights.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: In addition to Sundays, local holidays are: 1st January; Epiphany; Whit Monday; 25th March; Good Friday; Easter Monday; 1st May; Holy Trinity; 15th August; 28th October; 12th December; 25th December; Boxing Day.

Cargo work can be arranged on these days subject extra payment of 75%.
POLICE/AMBULANCE/FIRE: In emergency telephone Harbour office 188 or 451–311. Subsidiary Harbour Department tel. 462–876. Harbour Guard Aghios Georgios tel. 462–876 or 451–311/139. Harbour Guard Drapetzona tel. 451–311/140. Police tel. 100. Fire service tel. 199.
TELEPHONES: Telephone connection on board can be made.
SERVICES: Compass adjusting, tank cleaning. No facilities for discharge of tank residues.
SHORE LEAVE: Permitted.
SPECIAL PRECAUTIONS: *Ship's Speed in Port:* Incoming or outgoing vessels must keep speed steady, provided weather conditions and vessel's manoeuvrability allow to do so, but never to exceed 5 knots.

Pollution in the Harbour: Throwing overboard of ballast, objects of any kind, oil, food rejects, and dirt in general is strictly prohibited. All such rejects can be jettisoned after ship's exit from the harbour and at a distance not less than 16 miles from the nearest coast. Alternatively, all such rubbish can be thrown in a special rubbish-collecting vessel in the port.

Sea Pollution by bunker oil or sediments: The jettisoning of oil products generally in any port or roadsteads less than 50 miles from the coast is strictly prohibited. Similarly prohibited is the pollution of the sea by jettisoning of oil-sediments during dry-docking or repairs of vessels.

Pollution of the Air: Strictly forbidden is the de-sooting of boilers of all vessels at Greek ports. Similarly prohibited is the exit of gases in the form of smoke, which poisons the atmosphere and endangers public health.

Overloading: If upon arrival or sailing the port authorities ascertain overloading of the vessel, heavy fines are imposed.
AUTHORITY: Central Piraeus Harbour Office, Second Harbour Department.

PYLOS: 36.55 N. 21.42 E.

(Including Sfaktiria and Navarino Bay)
DOCUMENTS:
For Port Authorities.
1. For ships under the Greek flag and foreign flag vessels of Greek ownership.
Inspection of all Ship's Papers.
7 Crew Lists with full details of crew members' home addresses.
For passenger vessels – 6 Passenger Lists including passport details, that is, number, date of issue and nationality.

2. Foreign Flag Vessels.
Inspection of all Ship's Papers.
3 Crew Lists.

For Customs
Crew Personal Effects List.
1 Crew List.
Passenger List.
Lists of goods or effects to be sent ashore.
3 Lists of Stores and Spares.
Bills of Lading.
Cargo Manifest.

PILOTAGE: No Pilot station. There is a private Pilot employed by the bunkering company named G. Mamidakis Limited. Agent and/or bunkering company should be advised in advance of vessel's ETA order arrange Pilot to meet vessel at entrance of Navarino Bay and take vessel to oil installations at Sfaktiria Bay. ETA should be passed by radio telephone at least 48 hours before arrival and thereafter confirming ETA within 24 hours of arrival. If ETA has not been passed by radio, vessel should wait at entrance to Navarino Bay, and request Pilot by signalling letter "G" by flashing light or ship's whistle.
ANCHORAGES: Safe anchorage may be made in all areas of Navarino Bay except within red sector of Helonaki Islet light.
MAX. SIZE: Any size vessel can enter and anchor in Navarino Bay. The small harbour of Pylos is only suitable for small vessels.
HEALTH: Doctor visits vessels that require free pratique, and those coming from infected ports. Master and Health Officer together sign Maritime Declaration of Health. Free pratique continues when vessel arrives from another Greek port. A vessel in transit must have free pratique if remaining in port more than 24 hours. Infected vessels or suspected vessels remain under quarantine in accordance with existing health regulations.
RADIO: Athinai Radio – OTE.
TUGS: No tugs available.
STEVEDORES: Labour requirements passed by radio at least 24 hours prior arrival. No shore loading/discharging facilities and this work effected by ship's gear. Average rate load/discharge 100 tons per gang every 8 hours.
MEDICAL: Agent should be advised by cable prior arrival of medical and medicant requirements. There are two chemists and a Red Cross hospital. Yellow-fever, cholera and smallpox vaccination certificates required.
TANKERS: Sfaktiria Island Installation (ESAPP. G. Mamidakis Limited). 2 flexible hoses diameter 6 in. and 1 gas oil hose diameter 2.5 in. No facilities for residue discharge. At Pylos small harbour there is jetty 100 m. length, the head of which is reserved for small tankers carrying wine and spirits, which moor stern to quay. At head of pier, depth of water about 4 m., but within short distance from pier, depth increases to 10 m. Only 1 vessel of 12 ft. to 15 ft., draft can moor stern to quay at any time. Loading/discharging is effected through flexible and portable pipe-lines belonging to Gialovi Wine Factory at Pylos, and cargo is transported by special tank trucks.
DENSITY: 1023 in harbour basin and whole of Navarino Bay.
FRESH WATER: Master or Agent must apply in writing to Customs Authority, and application is to include notice from water supplier giving quantity to be supplied and cost of supply. Water barge capacity 200 tons. Rate of supply 160 t.p.h. by canvas hoses. Barge belongs to Maritime Agency I. Vrettakos, Pylos. Water also available alongside Pylos harbour quay.
FUEL: Mamidakis Fuel Installations at Sfaktiria Island. Vessels should give 48 hours notice to Mamidakis (Athens Office, address: Eleftheriou Venizelou 56; Tel. 622543 Tel. 284) Pylos Tel. 22282.
FIRE PRECAUTIONS: No unusual fire precautions at Sfaktiria Installations, but at main port of Pylos authorities do not allow loading/discharging of 2 vessels at same time, as the only 2 berths available are very close to each other.
DEVELOPMENTS: Work in progress to extend existing Pylos harbour pier to 215 m. length, 20 m. width, and 15 m. depth at head of pier. Depth inside pier to be 10 m.
WATCHMEN: Usually not necessary to employ watchmen, but if required, available.
HATCHES: Usually opened and closed by crew.
CUSTOMS ALLOWANCES: 2 packets of cigarettes per crew member/day allowed out of bond according to duration in port and this quantity to be declared on Stores List. Store orders for supply of additional quantities are allowed on the basis of the number of crew and the length of voyage, basis 2 packets per day per crew member. 1 opened bottle wine/spirits allowed out of bond.
IDENTIFICATION CARDS: Shore passes issued against submission of seamen's books.
REPAIRS: 3 workshops for minor repairs.
REPATRIATION: Crew changes and repatriation facilities available.
AIRPORT: Kalamata Airport, 40 km. from Pylos. Kalamata/Athens flights every day at 17.50 hrs. Athens/Kalamata every day flights at 19.10 hrs.
TIME: GMT plus 2 hours permanent.
HOLIDAYS: *(a)* Standard Government Holidays; *(b)* Local holidays: 9th May (St. Nicholas) holiday for port workers; 24th September; 20th October (Anniversary of Battle of Navarino). During these holidays, cargo work can be arranged subject overtime payment.
POLICE/AMBULANCE/FIRE: Police (Pylos) 223-16; Greek Red Cross Hospital Pylos 223-15; Kalamata Fire Brigade 28373.
TELEPHONES: No facilities for placing on board.
GENERAL: Very severe fines imposed on oil pollution.
SHORE LEAVE: Allowed.
AUTHORITY: Port Authority of Pylos.

RHODES (including Akantias): 36.25 N. 28.17 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Cargo Manifest.
1 Stores and Provisions List.
Usual Ship's Documents.
PILOTAGE: 24 hours notice required by Rhodes Port Authority. Pilot boards 1 mile from port.
ANCHORAGE: Suitable anchorage up to a distance of 300 m. from the port East of the pier extension.
RESTRICTIONS: Port entry can be difficult and sometimes impossible with strong North or N.E. winds.
MAX. SIZE: Up to 24 ft. draft.
RADIO: Rodos Radio, 2182 kc/s.
BERTHING: Pilot will advise Master of berthing place in accordance with Port Authority instructions.
2 diesel motor-driven cranes capacity 2 and 3 tons available for discharging. No facilities for containers.
STEVEDORES: 24 hours advance notice required in order to arrange gangs.
MEDICAL: General hospital and private clinics available.
FRESH WATER: Available – supplied by canvas hoses.
FUEL: Deliveries only by tank trucks.
DEVELOPMENTS: Extension of the Merchant Port Pier by 110 m. to North and 140 m. to S.E. Also an extension of the new harbour (Akantias) pier, to the East of the Marine Harbour. Length to be 480 m. with a depth of 6.5 m. alongside.
HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: 60 cigarettes per day per crew member and 1 bottle wine/spirits per Crew member allowed out of bond.
CONSULS:

Germany	Tel. 7479	France	Tel. 2318
Italy	,, 7432	Turkey	,, 3362
Sweden	,, 3379		

REPAIRS: Minor repairs only.
AIRPORT: Distance 15 km/s. During Winter, flights twice daily to Athens, and during Summer, flights 5 times daily.
TIME: GMT plus 2 hours, permanent.
HOLIDAYS: 1st January, 6th January, 7th March, 25th March, Good Friday, Easter Monday, 21st May, 15th August, 28th October, 8th November, Christmas Day, Boxing Day.
POLICE/AMBULANCE/FIRE: Police, tel. 7690 or 2220; Ambulance, tel. 2555; Fire Brigade, tel. 3333.
DELAYS: Sometimes necessary to remain outside harbour up to 3 hours to allow coastal passenger vessels to berth if other berths are full.
AUTHORITY: Central Port Authority of Rhodes.

SUDA BAY, Crete: 35.29 N. 24.09 E.

PILOTAGE: Compulsory. Naval Pilot boards West of N. Soudha Island.
TANKERS: Marathe POL Depot has wooden-faced concrete jetty. 10 in. discharge lines. No bunkers. No slop discharge facilities.
FRESH WATER: Available by barge.
ANCHORAGE: Good anchorage for any size vessels.
GENERAL: Cargo pier depth up to 32 ft. alongside, also grain silo with similar depth alongside.

SYROS: 37.26 N. 24.56 E.

DOCUMENTS: *Ships under the Greek flag* – documents required are:
Ship's Register.
Seaworthiness Certificate.
Log Books and Ship's Papers.
Load-line Certificate.
Radio Station Licence.
Fumigation Certificate.
4 Crew Lists.
2 Passenger Lists.
Ships under foreign flag, Greek owned – documents required are:
Ship's Articles.
Load-line Certificate.
Seaworthiness Certificate.
Ship's Papers.
Radio Station Licence.
Fumigation Certificate.
4 Crew Lists.
1 Passenger List.
Ships under foreign flag – documents required are:
Seaworthiness Certificate.
Fumigation Certificate.
Load-line Certificate.
Radio Station Licence.
2 Crew Lists.
1 Passenger List.
PILOTAGE: Pilot to be ordered by ship's Agent at least 24 hours before arrival notifying approximate ETA. Pilot boards from private motor launch, about 0.5 miles off the port, weather permitting. In bad weather Pilot boards in harbour entrance.
ANCHORAGE: Vessels awaiting Pilot anchor outside the harbour South of a line between the green breakwater light and the North end of Gaidaros Island. Anchorage in the Southern part of the harbour in depths of 20–30 m.

MAX. SIZE: Length 200 m. Vessels of small draft may go alongside the Neorion Pier or moor stern to the pier. Deeper-draft vessels remain at anchor in the harbour.
HEALTH: Free pratique is given when ship's declaration of health has been endorsed by a Health Officer.
RADIO: Loutsa Radio.
TUGS: 2 tugs available. Tugs usually join vessel 1 mile from harbour entrance. Payment for use of tug-line is obligatory.
STEVEDORES: At least 1 day's notice required to arrange gangs.
MEDICAL: No advance notice required if medical assistance needed. Hospital and general clinic available.
TANKERS: Discharge alongside terminal of A. E. Seica at Lazareta, near the entrance to the harbour.
DENSITY: 1026.
FRESH WATER: Limited quantity can be supplied by private company. Delivered by barge.
FUEL: Can be supplied by A. E. Seica, by barge or pipe-line.
WATCHMEN: Not required.
HATCHES: Opened and closed by ship's crew.
CUSTOMS ALLOWANCE: Each man allowed 40 cigarettes per day for period not exceeding 5 days. Each man allowed 1 opened bottle of spirits. No restrictions for wine.
IDENTIFICATION CARDS: Shore passes are issued on production of seamens books or passports.
CONSULS: France – tel. 3–62. Netherlands – tel. 7–20.
REPAIRS: Neorion Syros Shipyards can undertake any kind of engine and hull repairs and alterations. Holds LTC licence for piston reconditioning.
DRY DOCKS: Two floating docks, one for ships up to 20,000 d.w.t., and one for vessels up to 75,000 d.w.t.

Dimensions of larger dock; 210 m. length over keel blocks; 36.20 m. inner width; 17.40 m. moulded depth.
DEVELOPMENTS: Port being dredged to permit entry of larger vessels. Shipyard installing facilities for building vessels up to 15,000 tons.
REPATRIATION: Can be arranged.
TIME: GMT plus 2 hours all the year round.
REGULATIONS: Port Captain should be contacted for any queries not covered by lists of regulations provided on arrival.
HOLIDAYS: Work may be arranged on all holidays on payment of 75% additional to tariff.
POLICE/FIRE/AMBULANCE: Police tel. 6–10; Fire 3–33; Ambulance 5–55.
TELEPHONES: Cannot be connected on board.
SHORE LEAVE: Crew may go ashore after pratique is given, carrying shore leave passes issued by Port Authority.
AUTHORITY: The Harbour Office of Syros.

THESSALONIKI (Salonica); 40.38 N. 22.56 E. (See Plan)

PORT LIMITS: A vessel is considered as an "arrived vessel" when she has passed the line connecting the Small Kara Point and Paliomanna light buoy.
DOCUMENTS: For Greek flag and Greek-owned vessels:
List of Foreign Exchange.
Crew list (additional for Port Authority).
All vessels:
4 Crew Lists (Port Authority, Customs, Immigration and Health).
1 List of Stores.
1 List of Personal Effects.
Copies of Bills of Lading and Cargo Manifest.
PILOTAGE: Apply for Pilot through VHF Channel 12 or by international code signals. Pilot meets vessel about 1,000 m. S.E. of breakwater light (white). Pilot boat is small motor-boat carrying pilot flag.
ANCHORAGES: Area from 500 to 1,000 m. S.E. of port offers safe anchorage.
MAX. SIZE: Average safe depth of water 10 m. 2 berths of 35 ft. depth. Also see "Tankers".
HEALTH: Health Officer boards vessels from foreign ports to grant free pratique.
RADIO: Radio Thessalonika. 24 hours notice of ETA required to obtain berth and stevedores.
VHF: Operative throughout 24 hours on Channel 12, Central Port Authority.
TUGS: 6 tugs available. Meet vessel about 1,000 m. from port. Tug's lines used for berthing at no extra charge. Ship's lines used unberthing.
MEDICAL: Advance notice not required – all facilities available.
SPECIALISED CARGO HANDLING FACILITIES: The port has silos of capacity 20,000 tons.

AGET Installation: 1 berth for discharging cement in bulk by special constructed ships equipped with automatic discharging gear. Max. draft 30 ft.
CRANES: 35 cranes of 3–27 tons capacity. 21 mobile cranes of 9–30 tons capacity. 1 floating crane of 70 tons capacity.
TANKERS: 1. *Esso-Pappas installation. (a)* Sea Island berth capable of accommodating 2 vessels of 24,000 tons and 14,000 tons respectively. Max. draft 32 ft. 8 lines, diameter 16 in. (1). 10 in. (3), 4 in. (3), 6 in. (1). *(b)* 7 buoy mooring for vessel of up to 80,000 tons. Max. Draft 44 ft. Submarine 34 in. pipe-line for crude oil discharge. 2 flexible discharge lines 10 in. diameter.

2. *Mamidakis' Installation.* Stern discharge berth. Max. draft 32 ft. 2 submarine lines enable 2 grades of cargo to be discharged through 8 in. line at 200 t.p.h. and 6 in. line at 160 t.p.h.

3. *Ethyl Oil Berth,* length 320 m., depth alongside 10m.
DIRTY BALLAST: 2 tanks of 600 tons each and 1 of 6,000 tons are available for the reception of dirty ballast at Esso-Pappas installation.

The discharge overboard of any oil or oil contaminated water is strictly forbidden and every precaution must be taken to avoid pollution.
DENSITY: 1025.
FRESH WATER: Unlimited supplies available.
FUEL: Unlimited quantities available. Usual notices required. Suppliers B.P., Shell, Esso-Pappas, Mamidakis.
FIRE PRECAUTIONS: Safety tug in position at tanker installations.
DEVELOPMENTS: *(a)* Channel. Dredging in progress to enable any size vessel to enter port. *(b)* Construction of sixth jetty, length 1,000 m., width 600 m. Will be used as a container terminal. Expected to be completed in 1978.
WATCHMEN: If required, cost by private negotiation.
HATCHES: Opened/closed by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits allowed out of bond for each Crew member.
CARGO GEAR: Adequate shore gear available.
IDENTIFICATION CARDS: Passes issued to Crew members of foreign vessels.
CONSULS:

U.S.A.	Austria	Belgium
France	Germany	Yugoslavia
Denmark	Switzerland	Japan
Italy	U.K.	Norway
S. Africa	Netherlands	Sweden
Turkey	Finland	

REPAIRS: Only minor repairs.
REPATRIATION: Facilities for crew changes and repatriation available.
AIRPORT: Distant 12 km/s. S.E. of town. 6 flights daily to Athens.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: (National): 1st January, 6th January, 25th March, Good Friday, Easter Monday, 21st April, 1st May, 15th August, 28th October, Christmas Day, Boxing Day. (Local): 26th October. Work may be arranged on holidays at double costs.
POLICE/AMBULANCE/FIRE: Port Police, tel. 531-502; Ambulance, tel. 531-531; Fire, tel. 199.
TELEPHONES: Facilities available for placing on board.
SHORE LEAVE: Permitted without restriction. For tankers, the Master should arrange transport with Agent for seamen to the landing pier in Thessaloniki Harbour. Seamen will not be permitted to pass through refinery area.
AUTHORITY: Port Authority of Thessaloniki.

VOLOS: 39.21 N. 22.56 E.

DOCUMENTS: See "Piraeus."
PILOTAGE: Pilot boards about 1 mile outside port. Pilot boat is small launch coloured grey and black.
ANCHORAGE: Suitable anchorage situated 1–2 miles outside harbour in depths of 14 to 20 m.
RESTRICTIONS: Vessels in excess of 10,000 tons unable enter at night.
MAX. SIZE: Max. draft 36 ft., no limitation on length or breadth.
HEALTH: Port Officer acts as Health Officer and pratique effected on doctor's advice. If arriving from another Greek port, pratique automatic.
TUGS: Join vessel at entrance to harbour.
STEVEDORES: Advance notice required order arrange gangs. No shore gear and all cargo operations handled with ship's gear.
MEDICAL: Advance notice of required medical attention is necessary. Hospital and medical facilities available.
TANKERS: One berth; depth alongside 27 ft.
FRESH WATER: Only available at main pier and silos pier.
DEVELOPMENTS: A new pier is under construction.
HATCHES: Usually opened and closed by crew, but if by stevedores, additional costs apply.
CUSTOMS ALLOWANCES: 1 to 2 packets cigarettes allowed per crew member per day. 1 bottle wine/spirits allowed out of bond.
CONSULS: Germany, tel. 25379, France, tel. 25870, Sweden, tel. 27662.
REPAIRS: Minor repairs can be effected.
AIRPORT: Situated at Anchialou. 2 weekly flights to Athens.
TIME: GMT plus 2 hours, permanent.
HOLIDAYS: Usual Greek holidays. Local holiday 6th December; cargo work can be arranged subject to additional cost with the exception of 6th December.
POLICE/AMBULANCE/FIRE: Police, tel. 24500; Ambulance, tel. 27531; Fire, tel. 5000.
AUTHORITY: Port Authority of Volos.

YALI ISLAND: 36.38 N. 27.07 E. (See Plan)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Cargo Manifest.
Bills of Lading.
List of Ship's stores and Spares.
Health Declaration.
Ship's Certificates.

PILOTAGE: A Mooring Master is available from Piraeus. Mooring Master boards at the anchorage.
ANCHORAGE: Safe anchorage in the roads except in strong Southerly winds.
MAX. SIZE: Length 250 m., draft 33 ft.
HEALTH: Port authorities will board by launch from Nissyros to arrange free pratique. Any sick crew members will be disembarked to Nissyros by the same launch.
TUGS: Not available.
BERTHING: The vessel is moored at loading berth on 8 buoys in addition to port anchor. During loading operations the vessels have to be shifted from hatch to hatch.

The facilities of loading consist of a cement pylon holding a horizontal chute-conveyor belt of about 50 ft. length. This chute-conveyor belt is fed from ashore by rotating buckets of 1.3 tons each. The vessel has to be at a distance of about 40 to 50 ft. from the cement pylon in order to load the holds.
STEVEDORES: Workers are employed by private loading company.
MEDICAL: Nearest medical and hospital facilities are at the island of Kos, 7 miles north of Yali.
FRESH WATER: None available.
FUEL: Not available.
HATCHES: Opened and closed by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 opened bottle of spirits are allowed each man.
CONSULS: No local representation.
REPAIRS: No facilities exist.
AIRPORT: Nearest at Kos with daily flights to Athens during the Summer. 4 flights a week during the Winter.
HOLIDAYS: Do not affect vessels loading.
SHORE LEAVE: Allowed.
AUTHORITY: Clerk of Mandraki, Port of Nissyros. Yali Quarry Manager.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Greenland

GENERAL

CUSTOMS: The Master is not allowed to distribute tax-free cigarettes or other tax-free tobacco in a Greenland port.

DOCUMENTS: Following documents must be on board:
Speed Certificate.
Crew List.
Radio Station Certificate.
Safety Equipment Certificate.
Clearance Certificate.
Health Declaration.
Tonnnage Certificate.
Certificate of Registry.
Deratisation Certificate.
Sailing Orders.

RESTRICTIONS: Foreign-flag vessels do not normally have access to Greenland ports unless they have special permission. If such vessels have this permission, the crew may go ashore subject approval of Port Authorities and following presentation of Health Certificate or a medical check on board.

ICE INFORMATION: Ice Centre Narssarssuaq is transmitting daily at 1200 hrs. GMT and 2200 hrs. GMT the latest information of the ice in Southern Greenland Waters. Information is transmitted in Faximile (Mufax) on frequency 2780 and 6970 kc/s drum speed 120. Ships can, free of charge, request telegraphic ice information from following coastal radio stations:
OZL—Angmagssalik
OZN—Prins Christian Sound
OXF—Julianehab
OZA—Frederikshab.

WATCHMEN: Ship is required to appoint a crew member as ship's guard on board.

TIME: GMT minus 3 hours. Permanent.

HOLIDAYS: As applicable to Denmark.

CONSULS: None.

WORKING HOURS: Normally from 0600 hrs. to 1800 hrs. with 2 meal breaks.

RADIO: In ports where there is a local radio station, vessels are prohibited from using ship's station for sending messages.

HEALTH: Before commencing voyage to Greenland, at the port of departure, Master is required to obtain a Health Certificate from an authorised medical practitioner, stating that there are no dangerous or contagious diseases on board, such as pest, cholera, yellow-fever, smallpox, or typhus. The crew list is to be included in this certificate stating that there are no venereal or other contagious diseases amongst the crew members. The Health Certificate is only valid if it has the stamp and signature of the Royal Danish Consul or Vice-Consul of the district in which the port of departure is situated. On arrival at the first Greenlandic port, the Master is to present the Health Certificate to the Port Authorities. Health Certificate may also be issued by a doctor in the first Greenlandic port of call.

REPORT: Immediately upon arrival of a vessel in Greenland, the Master must report to the Port Authorities.

WASTE DISPOSAL: It is forbidden to throw waste material of any description overboard into port waters.

EGEDESMINDE: 68.43 N. 52.53 W.

(Also see "General Information" at beginning of Greenland Section)

DESCRIPTION: Roadstead, Inner Port (inside Bay), Anchorage, Boat Port, and Atlantic quay.

DAYLIGHT: Polar darkness from 2nd December to 11th January, and midnight sun from 22nd May to 23rd July.

CONDITIONS: *(a)* Current: flows Eastwards between the islands at Egedesminde from 3 hours before, to 3 hours after high water, following which, current flows Westwards for 6 hours. *(b)* Ice: Winter ice normally occurs from mid-December to early May, but can occur earlier, in November. New ice in the port can be up to 60 cm thick; 1st January covering ice up to 30 cm and by 1st February about 45 cm. Icebergs sometimes enter port area and stop all shipping movement. *(c)* Tide: high tide height 2.6 m. (max. 3.1 m.). Low tide height 1.5 m. Direct West wind causes 0.3 m. rise above tidal height, and South or S.E. wind about 0.5 m. below.

PILOTAGE: No official port Pilot, but assistance arriving and sailing may be obtained from a local seafarer having good knowledge of the area. This local assistance should be ordered if required in ETA cable to Port Authority at least 24 hours prior arrival. The Port Manager usually acts as local expert as part of his normal duties.

There is VHF radio installation in office of Port Authority and it is usually possible to obtain VHF contact within 30 miles of Egedesminde.

Local area expert will board vessel from port boat at meeting place usually arranged just outside entrance to port.

No special pilotage regulations and no Outer Anchorage where Pilot may be taken on board. However, in waters North and N.E. of port entrance vessels may stop or proceed at very slow speed in order to embark local expert.

ANCHORAGES: No special anchorages, and vessel is only allowed to anchor for a short period at the entrance to port subject permission of Port Authority.

MAX. SIZE: Largest vessel to berth alongside Atlantic quay was length 102 m., breadth 40 m., draft 6.2 m.

ENTRY: Day or night.

TUGS: None. 2 port boats to take lines and assist mooring.

RADIO: Godhavn Radio. RDF station beacon East of the town. Radio link between Egedesminde and Transitoen, and between Transitoen and Roeveo.

BERTHING: Atlantic quay. Length 70m., depth alongside 8.1 m., at medium low tide and 10.7 m., at medium high tide. Height of quay at medium tide about 1.5 m., above w/l. One 5-ton mobile crane and some fork-lift trucks used in discharging.

MEDICAL: Hospital, doctor and dentist available.

FRESH WATER: Available at Atlantic quay and at tank-station.

FUEL: Only gas-oil available for local fishing vessels from the tank-station.

AIRPORT: Heliport.

SALVAGE: Salvage-station in the area.

REPAIRS: Radar and radio technicians available.

AUTHORITY: Director of Commerce.

FAERINGEHAVN: 63.41 N. 51.34 W.

(Also see "General Information" at beginning of Greenland Section).

DOCUMENTS: Bill of Health: Doctor's certificate mentioning each member of crew by name to be free of contagious diseases. This document to be signed by Consulate in the port of delivery to be prepared by competent authority, passengers excluded. One Manifest with Bill of Lading. Ordinary Ship's Papers.

PILOTAGE: As a rule Pilot can be ordered in the months May–October, notice 12 hours before arrival is required.

ANCHORAGE: Inside fjord area.

RESTRICTIONS: None.

MAX. SIZE: Oil-carriers about 26,000 d.w.t., draft 40 ft. Ordinary cargo-ships 20 ft.

HEALTH: Captain to apply with documents at harbour office for free pratique.

RADIO: Faeringehavn Radio: OYU, or Godthab Radio: OXI, connected Faeringehavn by Telex and Telephone.

VHF: Oil company and fishing company are listening on VHF during working hours.

TUGS: Salvage tug stationed on West coast of Greenland. Stationed at Faeringehavn May–October, no fixed rates.

STEVEDORES: None, but fishing and service company "Nordafar" may act as stevedores.

MEDICAL: Local sick room and nurse available in Summer. For medical service, apply Godthab.

TANKERS: Load/discharge lines 6 and 8 in. Smaller diameters for bunkering when necessary.

FRESH WATER: Only available May to November.

FUEL: Available. Light fuel, gas oil, aviation turbine fuel A1, gas oil, oct. 97.

GANGWAY/DECK WATCHMEN: Not required (ship's crew).

OPENING/CLOSING HATCHES: Must be carried out by ship's crew.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Small repairs only. Workshop available May to November.

REPATRIATION: Available, via Godthab by air to Copenhagen.

AIRPORT: Nearest airport is Godthab, distance 35 miles regular airlines.

TIME: GMT minus 3 hours.

HOLIDAYS: Danish holidays.

POLICE/AMBULANCE/FIRE: Police tel. Faeringehavn 34; Ambulance Faeringehavn 25.

TELEPHONES: Not available on board.

GENERAL: Bunker station open all year; during Winter-time sometimes difficulties caused by ice.

SHORE LEAVE: Allowed.

DELAYS: Bunker station closes for arrivals between 2200 hrs. and 0600 hrs. local time.

AUTHORITY: Kontrolloren, (Harbour Master).

AGENT: Nordafar A/S, 3908 Faeringehavn, Greenland.

FREDERIKSHAB: 61.59.7 N. 49.40.8 W.

(Also see "General Information" at beginning of Greenland Section)

LOCATION: The port is in the inner part of a small bay.

DESCRIPTION: Atlantic quay; fishing quay; anchorage.

CONDITIONS: *(a)* Current: none. *(b)* Ice: big ice reaches to the North of the port; smaller ice reaches the port especially to the North, but South of the port it is usually ice-free. The best period of finding the port ice-free is between March and April, and from the end of August. *(c)* Tide: height of average high water is 3.8 m., low water 2.0 m. (max. 2.4 m).

PILOTAGE: Pilot should be requested in ETA cable via Frederikshab radio. Pilot will meet vessel at Satuarssugssuaq (Fyroen).

ANCHORAGE: S.E. of Skarvo. Holding ground is not good and anchoring should be carried out at very slow speed.

MAX. SIZE: Length 100 m., draft about 6 m.

ENTRY: Day or night.

TUGS: None. Port boats assist in mooring.

RADIO: Local radio station. RDF station beacon East of the town.

BERTHING: Atlantic quay. Length 60 m., depth alongside at average low tide, 7 m., depth in harbour about 10 m. Cranes up to 5 tons capacity and fork-lifts trucks used in discharging.
MEDICAL: Hospital, doctor and dentist available.
FRESH WATER: Available alongside Atlantic quay.
FUEL: Refuelling quay, depth about 5 m., Gas-oil and diesel oil available.
AIRPORT: Heliport.
REPAIRS: Workshop available.
GENERAL: Police Station, Fire Brigade, radar and radio technicians, and service for IFD rubber dinghies. Cable address "Fladeservice FRH".
AUTHORITY: Director of Commerce.

GODHAVN: 66.56 N. 53.40 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port consists of a mooring inside a bay.
DAYLIGHT: Polar darkness from 25th November to 15th January, and midnight sun between 19th May and 26th July.
CONDITIONS: Ice: Winter ice is fast from November–December until end May or beginning of June. Thickest observed Winter ice is about 100 cm.
ENTRY: Day or night. Port is open from May to November. Between mid-April until May the port can only be used by specialised tonnage.
PILOTAGE: Boarding point arranged with Port Authority in ETA advices.
ANCHORAGE: Good anchorage in the bay – outer port.
MAX. SIZE: Largest vessel to date length 100 m., draft 6.5 m.
TUGS: None. Port boats assist with mooring.
RADIO: Local radio station. RDF Station beacon.
BERTHING: No alongside berths. Vessel moors to 2 anchors and stern-lines to the shore. Mobile cranes on shore capacity up to 5 tons. Depths in bay about 6.82 m.
MEDICAL: Hospital. Doctors and dentist available.
GENERAL: Arctic Scientific Station, Fire Brigade, Cable Office.
AUTHORITY: Director of Commerce.

GODTHAB: 64.10 N. 51.44 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Narrow entry to port, but well protected, with good modern berths and anchorages.
CONDITIONS: *(a)* Current: sometimes strong between anchorage and the berths. *(b)* Ice: only very occasional large quantities of ice reach the port and into the fjord. If ice in area South of Godthab, S.W. storms force drift ice into the fjord. In recent years the port has begun to freeze over in Winter, and small vessels have at times become icebound. *(c)* Wind: S. and S.W. storms spring up suddenly but only last for brief periods. *(d)* Tide: height of high water 4.4 m. (max. 5.1 m.); low water 2.1 m.
ENTRY: Port open day and night all year round.
DAYLIGHT: Godthab situated South of the border for midnight sun and Polar darkness.
PILOTAGE: Port Manager normally acts as Pilot for ships, but is not an authorised Pilot. Pilotage may be arranged by VHF contact with Authority during normal working hours.
ANCHORAGES: Good anchorages available inside fjord. Larger vessels should anchor close to Rypeo and in Malene Bugt.
MAX. SIZE: Largest vessel to berth at Atlantic quay was length 135 m., breadth 17 m., and draft 7 m.
TUGS: None. 2 port boats to take lines and assist mooring.
RADIO: 24 hours notice of ETA should be passed to Authority, cable address "Handel Godtham". Radio beacon at Kookoerne.
BERTHING: Larger vessels should contact Port Authority before approaching port at night-time. Atlantic quay, length 170 m., has a depth alongside 7 m., approx. for the most Northerly 120 m., and between 4.5 – 5 m. at MLWS for the most Southerly 50 m.

Vessels normally berth starboard side alongside, unless fitted with bow thrusters, when a port side berthing is feasible. Mobile cranes capacity 5 tons.

Skonnertkej Quay is 52 m. long, with a depth of 4.7 m., approx. Vessels normally berth bow Westward.

On the Kyst passerkej length 30 m., depth 5.4 m., vessels usually berth with bow to the North.

There are several other small quays for the use of trawlers, and cutters, and a sand discharging berth length 30 m., depth 5 m.
TANKERS: Tankers can anchor and stern moor out from the gas installations, using an oil pipe-line connection. A mooring arrangement is being established for tankers of 25,000 – 30,000 d.w.t. below the tank and gas farm on the hillside.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Available at Atlantic quay.
FUEL: Small quantities gas-oil available at Atlantic quay.
REPAIRS: Repair workshop available.
AIRPORT: Heliport.
GENERAL: Police, Fire Brigade, radar and radio technicians, radio station post, and cable office.
AUTHORITY: Director of Commerce who also acts as Port Manager.

HOLSTEINSBORG: 66.56 N. 53.40 W.

(Also see "General Information" at beginning of Greenland Section)
LOCATION: Harbour is situated on Northern side of Tommermandsoen.
CONDITIONS: *(a)* Tide: average height of high tide 3.5 m. (max. 4.4 m). low tide 2 m. *(b)* Ice: Winter ice up to 1 m. thick. Ice normally occurs from December to March or April.
ENTRY: Port open day and night, and normally all year round.
PILOTAGE: Arrange with Authority through Holsteinsborg's radio, cable address "Director of Commerce Holsteinsborg". Pilot meets vessel at Jakobs Skaer, 2 miles S.W. of Mollersoe.
ANCHORAGE: Large vessels can anchor outside port and discharge into barges.
MAX. SIZE: Largest vessel that can berth alongside Atlantic quay, length 102 m., breadth 14 m., draft 6.2 m.
TUGS: None. Port boats take lines and assist mooring.
RADIO: Local radio station. VHF connection in Port Director's office. Radio technicians available, cable address "Polar Radio".
BERTHING: Atlantic quay, length 60 m., depth alongside 6 m., at average low water. Height of quay 2 m., above w/l. If berth occupied, loading/discharging of larger vessels at anchorage with barges. At Atlantic quay there is a mobile crane with capacity of 3 tons and fork-lift trucks. Belt conveyor for coal.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Obtainable at Atlantic quay.
AIRPORT: Heliport.
GENERAL: Post and cable offices. Telephones not normally available for connection on board, but vessels at anchor can call Port Director's office on VHF during daytime.
AUTHORITY: Director of Commerce who acts as Port Master and Harbour Master.

IVIGTUT: 61.12 N. 48.10 W.

(Also see "General Information" at beginning of Greenland Section)
OPERATORS: A/S Kryolitselskabet Oresund.
CONDITIONS: *(a)* Current: strongest about 3 hours before and 3 hours after high water, and vessels arriving and sailing should take this into consideration. *(b)* Tide: height of average high tide 3 m. (max. 3.4 m.), low tide 1.6 m. *(c)* Wind: calm for about half the year otherwise winds are usually from South or S.E. The dangerous winds for moored ships are the infrequent storms from North or N.E.; these storms seldom occur but if they do occur they do so in the Autumn. *(d)* Ice: Winter ice usually occurs from December onwards in the fjord outside Ivigtut and disappears in the beginning of April. Outside Ivigtut Winter ice always occurs, sometimes reaching a thickness of about 1 m. Information concerning ice conditions always obtainable on telegraphic request to GLK.
ENTRY: Day and night and usually all year round.
PILOTAGE: No official Pilot but an acting Pilot can be arranged through connection with Port Authority, cable address "Manager Ivigtut", at least 24 hours prior arrival.
MAX. SIZE: Largest vessel to have berthed at Kryolit pier was length 102 m., breadth 14 m., draft 6.2 m.
TUGS: None. Motor-boat will assist mooring.
BERTHING: Kryolit quay, depth alongside about 7 m. height of pier about 2 m. above w/l. Berthing during daylight only. Kryolit not exported from mid-December to end March. Crane capacity 3 tons.
RADIO: The radio station at Ivigtut is closed but telephone connection to radio station at Gronnedal.
FRESH WATER: Available.
FUEL: Deliveries of small quantities of gas-oil.
REPAIRS: Machine tool workshop. Diver assistance obtainable.
MEDICAL: Hospital in Ivigtut, but doctors and dentists are in Gronnedal.
AUTHORITY: Ivigtut Cryolite Mines.

JAKOBSHAVN: 69.13 N. 51.06 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port is a narrow open bay, entrance to the N.W., having outer port and inner port. In outer port is Atlantic quay and bunkering station, and inner port has another quay and a fishing harbour.
CONDITIONS: *(a)* Tide: height of average high tide 2.8 m. (max. 3.3 m.) low tide 1.6 m. *(b)* Wind: usually East to N.E. In Autumn winds are strong especially in the morning. *(c)* Ice: impression can be gained when approaching port that port is closed due to icebergs. On closer approach channels between icebergs will be found but if these openings appear too narrow a wider passage should always be found to the North. *(d)* "Kanele": a natural phenomenon that occurs at this port causing regular and heavy swell, height up to 2 m. Wave characteristic, long and flat, frequency about 6 minutes. Pilot should be consulted for full information.
ENTRY: Port usually open day and night, from mid May to end November.
DAYLIGHT: Polar darkness between 1st December and 12th January and midnight sun between 21st May and 24th July.
PILOTAGE: A Pilot should always be used by larger vessels and request made to Port Authority in ETA cable. Pilot boarding place to be agreed with Authority.

MAX. SIZE: Largest vessel to berth at Atlantic quay was length 86 m., draft 6.8 m.
TUGS: None. Port boats take lines and assist mooring.
BERTHING: Outer port depth 6.5/7 m., inner port 5.5/6 m. Atlantic quay length 40 m. Depth alongside Atlantic quay 7 m. at average low tide. Height of quay about 1.1 m. above w/l. Permission to enter port should be obtained prior arrival from Port Authority. Mobile crane capacity 5 tons, also fork-lift trucks.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Obtainable alongside Atlantic quay.
AIRPORT: Heliport.
REPAIRS: Machine workshop.
GENERAL: Police, Fire Brigade, Port and cable office.
AUTHORITY: Director of Commerce who acts as Port Manager.

JULIANEHAB: 60.43 N. 46.02 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port is an open bay, facing South with Atlantic quay.
CONDITIONS: *(a)* Current: flows N.W., but in Southern part of port from little current effect. *(b)* Tide: average height of high tide 2.8 m. (max. 3.2 m.); low tide 1.4 m. *(c)* Ice: drift ice between January and July occasionally fills whole port. *(d)* Wind: the most frequent wind is from East or N.E., normally occurring as storms during Winter months and as strong winds in Summer. Winds can be violent and cause rapid rise in temperature. Very secure moorings are advisable.
PILOTAGE: Port office is equipped with VHF which should always be used to contact Port Authorities before arrival, and to arrange Pilot's boarding position.
MAX. SIZE: Largest vessel to berth at Atlantic quay was length 100 m. and draft 6 m.
ENTRY: Port open day and night normally throughout year, but from 1st January to 1st August, only available to specially constructed tonnage.
TUGS: None. Port boats take lines and assist mooring.
RADIO: Local radio station. Radio beacon station at Simiutaq about 10 miles West of entrance to Julianehab Fjord.
BERTHING: Atlantic quay – length 60 m., depth alongside between 7/9 m. on average high tide. Height of quay is 1.3 m. above w/l. Mobile cranes, lifting capacity up to 5 tons.
MEDICAL: Hospital, doctor and dentist available.
FRESH WATER: Available from Atlantic pier during Summer months.
FUEL: Gas-oil available at Atlantic pier.
REPAIRS: At repair quay there is a stationary crane lifting capacity 35 tons.
AIRPORT: Heliport.
AUTHORITY: Director of Commerce – acting as Port Manager.

MARMORILIK: 71.07 N. 51.17 W. (See Plan)

DOCUMENTS:
International Load Line Certificate.
Safety Raid Certificate.
PILOTAGE: Optional for coastal vessels entering Davis Strait. Agents are to make arrangements if Pilot required.
GENERAL DESCRIPTION: The berth is located at the North end of the West side of Agfardlikavsa Fjord.

Agfardlikavsa Fjord, West Greenland, (entrance approximately 51° 18′ W. and 71° 08′ N.) is located at the end of the larger Qaumarujuk Fjord.

Qaumarujuk Fjord, the Northeastern arm of Ingnerit, has its entrance between Qegertanguit and the Western extremity of Akuliarusikavsak, a mainland projection about 2.5 nautical miles S.E. Ingnerit is one of the largest of the branch fjords and flows into Umanak Fjord. It is entered between Tuperssuatsiait, the S.E. extremity of the Alfred Wegener Peninsula, and Akuliaruseq, a point about 4 miles S.S.E. The waters of the Umanak Fjord flow into the Nordost Bay.

The Agfardlikavsa Fjord is separated from the Qaumarujuk Fjord by a shallow, narrow bar. Depth at the centre of the sill is approximately 30 m.

There is a considerable surface water run-off along the Fjord walls including occasional rock slides. The bottom of the Fjord is filled with 6 to 8ft. of fine silty materal.

Marmorilik (71° 08′ N., 51° 18′ W.) lies on the S.E. side of the Qaumarujuk Fjord at the Western entrance point of the Agfardlikavsa Fjord.

The larger fjords and Nordost Bay are encumbered with islets and rocks requiring extreme care in navigation. In particular, a shoal is known to exist some 350 m. N.W. of Marmorilik Point and extra care is required in this vicinity.
ANCHORAGE: There is an anchorage at Agfordlikowsa in depths of 20 to 35 m. Tankers can anchor near the berth in depths of 24 to 50 m., but must be aware of an unmarked 6m. shoal about 300°True, and 375 m. (approx.) from the discharge point.
MAX. SIZE: Max. d.w.t. 36,500. Min. depth alongside ore terminal is 12.5 m. at LW.
RADIO: Ship-to-shore communications will be maintained using the following frequencies: 2182 kHz, 2210 kHz and 2738 kHz.

Information on ice conditions in the fjord can be obtained from shore personnel. During loading operations, Greenex will supply the vessel with 2 portable radio transceivers for communications between the carrier and the loading control station.
TUGS: 1 tug available, 720 h.p. The tug will assist with berthing and unberthing if required, and will break up any thin ice in the vicinity of the berth and entrance to the fjord.
BERTHING: The Marine Terminal is used for loading ore carriers up to 36,500 d.w.t. The berth consists of 4 breasting dolphins with bollards for springs and breast-lines. On the shore are 7 bollards for head and stern lines spread over a distance of 366 m. The min. depth of water alongside is 12.5 m. at LW.

Vessels normally berth port-side alongside and use the starboard anchor to assist in berthing. No. 1 hatch is lined up under the loader as it is the first hatch to be loaded.

Initially the headlines go to the Northernmost dolphin and stern lines to the Southernmost bollard on the shore.

Loading: Zinc and lead are loaded with a luffing and slewing ship-loader. The ship-loader is fitted with a 20 ft. conveyor to distribute the cargo in the hold. Communication is maintained between the vessel and control room by portable radios. The average loading rate is 500 metric t.p.h.

Notice of readiness will not be accepted at time of arrival at the dock unless the vessel is in all respects ready to load.

General Cargo: Unloaded into barges with vessel's gear and towed ashore to a separate lightering dock located about 500 m. N.E. of the ore terminal.
MEDICAL: Emergency medical and dental treatment can be arranged and should, when possible, be requested by the vessel's Master in his ETA message to the mine site office.
TANKERS: Diesel fuel oil and turbo-fuel are stored in a tank farm located on-shore about 500 m. West of the point at Marmorilik on Qaumarujuk Fjord, at an elevation of 50 m.

Vessels usually berth using both anchors, 5 shackles on the port anchor, and about 4.5 shackles on the starboard anchor, using a heavy chain from the stern to the S.E. point of the oil installation. The chain is available from the shore. Tankers can also moor to the N.N.W. of the oil installation, but must remain outside the 6 m. line.

The tanker hoses are connected to an 8-inch flange connection for diesel oil or a 4-inch hose adaptor with dust-cap for turbo-fuel. The static head on the lines is about 70 m when the tanks are full. An anti-static cable is provided.

On the shore, there are two 50-ton bollards and one 20-ton stock. No breasting or mooring dolphins are provided.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: No facilities.
TIME: Standard time is GMT minus 3 hours.
GENERAL: *Repairs:* While alongside the dock, no repairs are to be undertaken that will prevent the main propulsion machinery from being activated at very short notice.

Vessel's Whistle: The vessel's whistle shall be operational during operations. One long blast on the whistle means "Emergency – stop operations".
AUTHORITY: Greenex A/S.

NARSSARSSUAQ (Isrecognosceringsstation): 61.08 N. 45.26 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Ice outlook station, with quay.
CONDITIONS: *(a)* Current: occasional strong N.W. current. *(b)* Tide: average height of high water 3 m. (max. 3.6 m.) low water 1.6 m. *(c)* Wind: S.E. wind sometimes reaches typhoon strength. *(d)* Ice: in Winter ice thickness sometimes reaches 1 m. Ice breaker not available.
PILOTAGE: Not available. Base representative should be advised of ETA well in advance of arrival.
TUGS: None. Port boats assist mooring.
MAX. SIZE: Largest vessel to berth at quay was length 130 m., draft 8 m.
ENTRY: Open season from mid-May to mid-October. During season, port open day and night.
BERTHING: Quay length 140 m., depth alongside (West) 6–11 m. (East) 5–8 m. Height of pier 2 m. above w/l. 2 vessels may berth, 1 on either side of quay. Heavy mooring equipment on the quay, and should be used by larger vessels. Mobile cranes capacity up to 4 tons, and fork-lift trucks.
WATER: Obtainable at quay, about 80 tons per single off-take.
AIRPORT: Landing-strip for aircraft. Ice station usually uses DC.4 aircraft and S61 Helicopter.
RADIO: Local radio station supplying ice information.
AUTHORITY: Representative of Ministry for Greenland.

NORTH STAR BUGT (Thule Air Force Base): 76.36 N. 68.52 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Supply port for the Thule Air Force Base. Port is operated by and belongs to the U.S. Air Force.
DAYLIGHT: Polar darkness from 1st November to 10th February and midnight sun from 23rd April to 20th August.
CONDITIONS: *(a)* Ice: port is frozen over from end October to beginning July. From beginning of November, large areas of compact ice appear, and these can sometimes be up to 20 miles

wide. During May, compact ice areas commence breaking up; however, large quantities of drift ice remain along the coast until end July. Winter ice is normally about 180 cm. thick. *(b)* Temperature: in January and February average temperature is 29° below zero. In July, June and August, average temperature is usually above freezing-point, but for the rest of the year it is below freezing. *(c)* Tide: mean Spring tide is 3 m. (max. 3.4 m.). Mean neaptide 1.7 m.
ENTRY: Normally, port is open early July depending upon ice situation.
PILOTAGE: No authorised Pilot, but American Port Authority assists in mooring and should be advised of ETA well in advance.
TUGS: None. Port boats assist mooring.
ANCHORAGE: Good holding ground in depth between 20 and 40 m., but anchoring should only be carried out following advice of Port Authority.
MAX. SIZE: Largest vessel to berth alongside quay was length 130 m., and draft 7 m.
BERTHING: 2 vessels may berth at the quay. Depth alongside about 7 m. Height of pier about 2 m. above MHW. Mobile cranes and fork-lift trucks; however, equipment varies from year to year and Port Authorities should be contacted well in advance. 3 amphibious craft for vessels discharging in the roadstead.
FRESH WATER: Available alongside quay.
AIRPORT: Two rescue helicopters stationed at this base.
REGULATIONS: The area is a Military Defence area and special permission is necessary to enter the port. Shore leave is prohibited.
MEDICAL: Hospital, doctor and dentist available.
AUTHORITY: U.S. Air Force.

SONDRE STROMFJORD (Camp Lloyd): 66.00 N. 53.35 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port is used for the supply of an American base, transit port for passenger carriage, and for air communication to Copenhagen. Port has a quay and a sea terminal for tankers.
DAYLIGHT: Camp Lloyd is situated South of the border for polar darkness but has a midnight sun from 15th June to 1st July.
CONDITIONS: *(a)* Current: the current at entrance and at the West of Sondre Stromfjord is N.E. at flood tide, and S.W. at ebb tide, and can reach a speed of 7 knots. *(b)* Tide: high water at Camp Lloyd is about 3 hours later than at the entrance of Sondre Stromfjord. Height of average high tide 3 m. (max. 3.6 m.). Low tide 1.6 m. *(c)* Ice: Sondre Stromfjord is frozen during winter throughout whole of inner harbour, but about 55 miles from Camp Lloyd, ice thickness varies from 5 cm to 90 cm. *(d)* Winds: strong winds can occur from East and S.E.
ENTRY: On account of ice, the fjord is closed from beginning of January to end-June, but can be used day or night from beginning of July to end-October.
PILOTAGE: No authorised Pilot, but Harbour Master will assist berthing.
ANCHORAGES: Good anchorages about 2 miles S.E. of Emmons Pynt in depth of about 40 m. Great care should be taken in anchoring, since sea bottom is shelving.
BERTHING: *(a)* A quay which is located North of Emmons Pynt, depth alongside only 3 m. *(b)* Tanker sea terminal about 700 m. S.S.E. of Emmons Pynt where there is mooring with discharge lines. Depth of water 24–26 m. on the South side of the mooring position; 15 m. at the mooring, and 10 m. on Northern side of mooring with rapid shelving to the North.
The Port Authorities should be contacted before mooring at the sea terminal. There are mobile cranes with lifting capacity up to 5 tons, and fork-lift trucks.
RADIO: ETA should be given well in advance of arrival to the Royal Greenlandic Commercial Representative and also to the Port Authority. The arrival should be reported at least 24 hours in advance through GLK. The Harbour Master can be contacted on 2716 kc/s. and this contact should be established at least 1 hour before vessels arrival.
MEDICAL: Hospital, doctor and dentist available.
REGULATIONS: Camp Lloyd is an American Defence Area and is restricted. American supply ships have preference in mooring at all installations.
AIRPORT: Heliport.
AUTHORITY: The Royal Greenlandic Commercial Representative – Harbour Master.

SUKKERTOPPEN: 65.25 N. 52.54 W.

(Also see "General Information" at beginning of Greenland Section)
LOCATION: Harbour situated on S.E. side of Manitsoq island, and has Atlantic quay.
CONDITIONS: *(a)* Tide: height of average high water 4.2 m. (max. 4.8 m.), low water 2 m. *(b)* Ice: Winter ice occurs from December to April. *(c)* Wind: advisable not to enter harbour area if winds are strong. Most obstructive winds are storms from South or S.W.
ENTRY: Port open day and night, normally all year round.
PILOTAGE: Pilot is arranged by cable to Sukkertoppen radio when giving ETA, which should be sent well in advance. Pilot will meet vessel as arranged outside the harbour, or at Faltings Skoer.
TUGS: None. Port motor-boats assist mooring.
MAX. SIZE: Largest vessel that can berth at Atlantic quay is length 100 m., draft 6 m. Vessels up to 4,000 tons have used the port.
BERTHING: Depth in harbour is about 27 m. and alongside Atlantic quay about 6.2 m. Height of quay is about 2 m. above w/l. Cranes up to 5 tons capacity and fork-lift trucks.
WATER: Available at quay.
REPAIRS: Repair workshop for minor repairs.
MEDICAL: Hospitals, doctors and dentist available.
AIRPORT: Heliport.
GENERAL: Telex, telephones, Police, Fire Brigade.
AUTHORITY: Director of Commerce.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Guatemala

CHAMPERICO: 91.55 W. 14.17 N.

DOCUMENTS:
Clearance from Last Port.
Travel Memorandum (original and 4 copies).
Declaration of Maritime Health.
Exemption Certificate of Deratisation.
5 Crew Lists.
5 Passenger Lists or "no passengers" Declaration.
5 Provision Lists.
5 Dangerous Cargo, inflammable or explosives, declaration,
5 Mail Lists or "no Mail" Declaration.
Manifests of Cargo from each port (original and 11 copies).
Bills of Lading from each port.
Vaccination Certificates for whole crew.
12 Ballast Manifests, if no cargo on board.

PILOTAGE: None.
ANCHORAGES: Without limit but recommended *not to anchor* less than 1 km. from beach.
MAX. SIZE: Vessels work cargo at anchorage in depth consistent with vessel's draft.
HEALTH: Give notice of any suspicious illness or fever on board when the doctor comes for official visit.
RADIO: ETA cables through Cristobal CZ.
TUGS: No tugs required.
STEVEDORES: No advance notice necessary. Possible to arrange gangs within an hour.
MEDICAL: Adequate advance notice required depending on gravity of case. Hospital half an hour away and possible to arrange transport for patient, also to arrange for doctor on board. Crew must have current International Vaccination Certificates.
TANKERS: No facilities for tankers.
DENSITY: Changes from 1.0226 gr./cu.cm. in October to 1.0270 gr./cu.cm. in April. Percentage of salt: Changes from 30.5 parts per thousand in October to 36.4 parts per thousand in April. Temperatures: an annual average of 28.5° C.
FRESH WATER: Free within port limits.
FUEL: No facilities.
DEVELOPMENTS: Project to build a modern port with an entrance channel, artificial bay and capacity for 8 merchant vessels and facilities for fishing ships and tourist ships.
GANGWAY/DECK WATCHMEN: When requested cost 5 dollars per person per day.
OPENING/CLOSING HATCHES: Either by crew or by stevedores.
CUSTOMS ALLOWANCES: Without limit on board. Prohibited to take tobacco, wine or spirits ashore.
CARGO GEAR: Ship's gear used for loading/discharging.
IDENTIFICATION CARDS: Not needed.
CONSULS: None.
REPAIRS: Minor repairs only.
REPATRIATION: All facilities available.
AIRPORT: International airport 3 hours distant with regular airlines all over world.
TIME: GMT minus 6 hours. No alterations to clock during year.
HOLIDAYS: No work on 1st January, Maundy Thursday and Good Friday, 1st May and 25th December. The rest of the year work day and night.
POLICE/AMBULANCE/FIRE: All available.
TELEPHONES: Cannot be placed on the vessels.
GENERAL: Possible to supply provisions, especially vegetables and shell-fish at good prices.
SHORE LEAVE: No restrictions.
DELAYS: Some days in April and October the surge is very strong and work has to be suspended.
AUTHORITY: Capitan del Puerto.

PUERTO BARRIOS: 15.44 N. 88.36 W.

DOCUMENTS:
Clearance from Last Port.
Crew List, 1 legalised and 9 copies.
Passenger List 1 legalised and 7 copies or negatives.
Cargo Manifest, 1 legalised and 21 copies.
Stores/Provisions List 3 copies.
Voyage Memorandum 4 copies.
Bills of Lading, 2 sets.
Declaration of Health.

PILOTAGE: Pilot boards 2 miles off Puerto Barrios, from small unmarked launch. If awaiting Pilot, vessel may anchor about three miles North of Puerto Barrios, keeping port entrance clear. No VHF.
ANCHORAGE: In Santo Tomas Bay, depths up to 6 fathoms.
MAX. SIZE: length 600 ft., draft 30 ft.
HEALTH: Advise Agent in advance if any fever or contagious disease suspected on board. Otherwise pratique granted on arrival. Officials board only between 0600 hrs. and 1800 hrs.
RADIO: Coastal radio in Costa Rica, call sign TIM operating on 8485 kc/s.
TUGS: No tugs available.
BERTHING: One pier owned by International Railway used to discharge fuel oil. 1,000 ft. berthing length on each side. A flag is shown on the pier to indicate where vessel will berth. Berthing recommended during daylight hours only. Tankers discharge on South side of the pier.
See Shipmasters Report for Santo Tomao de Castilla
FRESH WATER: Available at the pier.
FUEL: Not available.
MEDICAL: Doctor available. All crew require International Vaccination Certificates.
CUSTOMS ALLOWANCES: Normal daily consumption on board. No tobacco, wine or spirits to be taken ashore.
IDENTIFICATION CARDS: Required.
TIME: GMT minus 6 hours; no alterations during the year.
SHORE LEAVE: Allowed.
AUTHORITY: Commandante del Puerto.

SAN JOSE: 13.55 N. 90.50 W.

DOCUMENTS:
Clearance from Last Port.
Crew List, 1 legalised and 4 copies.
Passenger List, 1 legalised and 7 copies.
Passengers in Transit List, 4 copies.
Cargo manifest, 1 legalised and 19 copies.
Stores/Provisions List, 3 copies.
Voyage Memorandum, 4 copies.
Cargo Check Lists, 18 copies.
Mail List, 7 copies.
Bills of Lading, 2 sets.
Baggage Declaration, per passenger, 4 copies.
Declaration of Health.

PILOTAGE: Not required and no resident Pilots available, except for Tankers where services of a Pilot could be made available upon request.
ANCHORAGE: San Jose is a lighter port (open roadstead). Vessels anchor about 0.25 mile from pierhead in 8–9 fathoms of water.
RESTRICTIONS: Normally no pratique granted after 1900 hrs., although in some instances and if prior arrangements made, vessels could be received by Port Authorities up to 2300 hrs. Tankers moor in daylight only.
MAX. SIZE: Size immaterial since no docking facilities. Cargo transported from vessel to pier and vice-versa by means of steel lighters or barges of 35 tons capacity each. This applies to dry cargo only. Bulk, liquid cargo at respective terminals (oil and oil by-products, imports, and molasses export), where vessels proceed after pratique.
HEALTH: Pratique automatic (0700 hrs. to 1900 hrs.), irrespective of previous port of call. Master's obligation to notify Authorities on arrival of any suspected disease and/or fever on board, in order that adequate precautions taken.
RADIO: Messages should be routed via Guatel.
TUGS: None available or required for manoeuvring vessels.
STEVEDORES: No gangs available after 2100 hrs., unless another vessel is working in port. Rate of discharge/loading: dry cargo: 15–20 tons per gang hour. Max. gangs available: 3. Bulk cargo handled ten times faster.
MEDICAL: Hospital available. No vaccination/fever certificates required.
TANKERS: 2 buoy berths for tankers. Discharging: 8 in. diameter lines. ESSO Terminal: Mooring Master assists berthing. IRCA Terminal: Stern discharge.
FRESH WATER: None available.
FUEL: None available.
GANGWAY/DECK WATCHMEN: None required or necessary.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: On board, no restrictions, but no crew member allowed to bring ashore more than amount required for personal use.
CARGO GEAR: Ship's gear used for loading and discharging dry cargo. Vessels must bring own lines to tie lighters alongside.
IDENTIFICATION CARDS: Necessary for those on shore leave.
CONSULS: All Consulates located in Guatemala City, where vessels' Agents, when and if required, have special documents legalised. Normally, however, Agents can take care of regular certifications required, through port officials, who are authorised to certify documents in absence of a consul of a particular nation.
REPAIRS: No facilities available.
REPATRIATION: Possible. Usually arranged by Agents in cooperation with vessel's Agent in Guatemala City.
AIRPORT: Nearest airport Guatemala City, 108 km. due North of San Jose. Daily flights to and from all parts of world.
TIME: Central Standard Time, GMT minus 6 hours. No changes during year.
HOLIDAYS: January 1st; Holy Thursday; Good Friday; Easter Saturday; March 19th; May 1st; June 30th; July 25th; September 15th; October 20th; November 1st; December 24th; December 25th; December 31st.
POLICE/AMBULANCE/FIRE: These can be contacted through Agent at San Jose and/or Guatemala City.
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Allowed.
DELAYS: Only 2 dry-cargo vessels can work simultaneously. A third vessel must await departure of 1 of the first 2. Only 1 tanker can work at each bulk liquid cargo terminal.
AGENT: Agencia Maritima, SA, Port Operators, San Jose, Guatemala. Main office: PO Box 385, Guatemala City, CA. Cable address: "Agmar, Guatemala City". Telex not available.

SANTO TOMAS DE CASTILLA: 15.42 N. 88.37 W.

DOCUMENTS:
Clearance from Last Port.
Crew List, 1 legalised and 9 copies.
Passenger List, 1 legalised and 7 copies.
Passengers in Transit List, 4 copies.
Cargo Manifest, 1 legalised and 21 copies.
Stores/Provisions List, 3 copies.
Voyage Memorandum, 4 copies.
Cargo Check List, 18 copies.
Mail List, 7 copies.
Bills of Lading, 2 sets.
Baggage Declaration, per passenger 4 copies.
Declaration of Health.

PILOTAGE: Pilot can be taken on board at 2 stations on ship's request, 1 at Manabique Point and the other 1 mile distant from the Villedo lighthouse.

The pilot station and the Control Office of Maritime Traffic of the Navy maintains listening on R.T. frequencies 2738 k/cs., and 156.8 mHz.

ANCHORAGE: Outside of access channel to Santo Tomas de Castilla the whole N.W. side, approximately area of 2 miles with depth between 4 and 5.5 fathoms.

MAX. SIZE: Max. length 600 ft. Currently the port entrance channel is dredged to enable passage of vessel up to a max. draft of 32 ft.

HEALTH: In case of any contagious illness or fever on board the Sanitary Authority will be informed through respective Agent and vessel will moor to be examined by doctor in charge whether to subject vessel to quarantine or not. No automatic pratique.

RADIO: ETA cables to Agent and Receiver made through Coastal Station in Costa Rica; Signal: TIM on 8485 kc/s. or 8/12 mc/s.

TUGS: Tugs' service not compulsory. Use of tug lines, charge is included in tug service.

BERTHING: Possible to arrive at any time. Vessels work cargo alongside quay 2980 ft. berthing length available.

STEVEDORES: Arrangements made between Agent and ship owner. Agent requests services.

MEDICAL: No advance notice necessary. Hospital facilities available. International vaccination certificate required.

TANKERS: Diameter of pipe-lines 16 in. and load/discharge lines 14 in. No slop discharge facilities. Only 1 mooring berth for tankers and max. draft permitted 30 ft. Also see "Shipmasters Report".

DENSITY: 1015.

FRESH WATER: Pipe-lines alongside quay. Delivered by hoses belonging to port, Rate 15 t.p.h.

FUEL: Available, no advance notice required. (Bunker: 60°, and diesel: 38°).

FIRE PRECAUTIONS: No specific precautions for tankers. Hydrants available to combat fires, besides tug's services and Coast Guard ships of Navy.

GANGWAY/DECK WATCHMEN: Not essential. If necessary provided free by port.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits: No definite quantity and usually regulated by Captain.

IDENTIFICATION CARDS: Necessary.

CONSULS:

Italy	Germany	Honduras
Holland	Mexico	El Salvador
Sweden		

REPAIRS: Only minor deck and engine repairs.

REPATRIATION: Possible.

AIRPORT: 10 km. distance. Aviateca has daily flights to the capital and to Flores Peten.

TIME: GMT minus 6 hours.

HOLIDAYS: 1st January; 7th March; Maundy Thursday and Good Friday; 1st May; 30th June; 15th September; 1st November; 25th December.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Possible.

SHIPMASTERS REPORT: October 1976

Approaches: No difficulty once position is ascertained approaching the Gulf of Honduras. The Pilot boarded 3 miles North of the Villedo Shoal Beacon. Pilots have VHF Channel 16 call Porto Barrios Pilots. Only 1 pilot speaks English so if he is on duty there is no difficulty in communications.

The lights on the approach beacons are said to be unreliable but all were found to be good radar targets.

At the present time a dredger is working on a new approach channel to give a 32 ft. buoyed channel past Puerto Barrios up to Santo Tomas de Castilla.

General: There is no tug supplied by the Port Authorities but there is a tug working with the dredger which can be hired on request through the Port Authorities. The Pilot advised that this vessel have the tug for berthing as the ship has a 220 degree turn to make in a restricted turning basin off the berth. The same case applied at unberthing where the Pilot considered it necessary to have the tug to swing the vessel out into the departure channel.

The area is still recovering from the severe earthquake some 8 months ago in which the finger pier at Puerto Barrios was destroyed. This now constitutes a submerged hazard while in the channel on the approaches to Santo Tomas de Castilla. The channel is poorly marked and at present there are numerous survey buoys which can be confusing.

The berth is stern to at the Eastern end of the cargo jetty at Santo Tomas using 2 anchors and backing up to 10 ft. off the jetty from where the hose is passed up to the stern line by a mobile crane. The connection is made by the ship's crew. There is a 1 × 8 in. hose for all grades into a 10 in. shore line which is approximately 5 km. long. The requested back pressure of 8.5 kg. was easily maintained using 2 pumps.

AUTHORITY: Port Commander.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Guinea, Republic of

CONAKRY: 09.30 N. 13.44 W.

DOCUMENTS:
7 Crew Lists – Crew list with vaccination date for health service.
5 Passenger Lists.
5 Lists Port of Call (the last ports).
3 Stores Lists.
3 Lists Crew Declaration (personal effects).
5 Manifests of Cargo (if any).
2 Copies of Bills of Lading.

PILOTAGE: Telegraphic address Pilot station: "Harbour Master's Office, Conakry". Pilot meets vessels N.E. of sea buoy Tonnelier.
ANCHORAGE: Safe deep anchorage.
RESTRICTIONS: No entry at night. Channel depth 8 m. MLW.
MAX. SIZE: 600 ft. long. Max. draft for tankers 31–32 ft. high water.
HEALTH: Valid yellow fever and smallpox inoculation Certificates.
RADIO: Conakry Radio 2182-2586 kc/s.
TUGS: Tugs normally connect to starboard side. Ship's lines used.
BERTHING: All tankers berth according to high water. No berthing at night. Berthing 0700 hrs. to 1900 hrs. 10 berths, max. depth 11.5 m.
STEVEDORES: ETA to "Navalguinee" in order arrange gangs.
MEDICAL: Advance notice required for medical service, hospital facilities available.
TANKERS: Pipe-line 5,280 ft. long, 10 in. diameter. 2 tanker berths, 31/32 ft. high-water max. draft at these berths.
DENSITY: 1016 in the port with particular relation to state of tide.
FRESH WATER: Available by connection from pier. Rate of delivery with good pressure 30 t.p.h.
FUEL: Not available.
FIRE PRECAUTIONS: Special fire service for tankers.
GANGWAY/DECK WATCHMEN: Compulsory, particularly for tankers.
OPENING/CLOSING HATCHES: Normally by crew. Stevedores if requested by Master.
CERTIFICATES: Certificate of Deratisation; Log Book.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes out of bond. Wine and/or Spirit, 1 litre of spirit and 1 litre of wine per day out of bond.
IDENTIFICATION CARDS: Necessary.
CONSULS: All major maritime nations.
REPAIRS: None available.
REPATRIATION: All facilities exist for effecting crew changes and arranging repatriation to Europe.
AIRPORT: International airport distant 15 km. served by regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day (1st January); Women's National Day (9th February); Labour Day (1st May); 1958 Referendum Day (28th September); Independence Day (2nd October); All Saint's Day and Guinea Army's Day (1st November); Anniversary of the Basic Law of 8th November 1964 (8th November); Assumption (15th August); Anniversary of Youth's Creation (J.R.D.A.) (26th March); Christmas (25th December).

Varying holidays which depend on the position of moon: Ramadan – End of fasting; Tabaski – Pilgrimage day at Mecca; Mahouloud – Day after Prophet Mahomet's Birthday.

Work available during holidays, except Labour Day, Independence Day, Ramadan and Tabaski.

POLICE/AMBULANCE/FIRE: Police 17; Ambulance 16; Fire 18.
TELEPHONES: Not possible to place telephones on board.
SERVICES: None.
SHORE LEAVE: Crew allowed ashore.
SHIPMASTER'S REPORT *(JULY 1974):*

There are no shore or harbour lights in operation. The Tonnelier Buoy is off station together with all channel buoys other than Nos. 3, 6 and 9 all of which are unlit. There is no plan to replace or re-light these navigation marks.

Only 1 tug is available.

Fresh water can only be obtained by Fire Brigade Tanker truck of 4 tonnes capacity at a cost of £1.60 per tonne. This water if received needs chlorination and boiling before use.

Consuls – There is no British Consular Officer resident in this port. The nearest is located at Dakar in Senegal.

Repatriation of crew members by air is possible but difficult. Procedure is as follows;

Air ticket must be purchased outside Guinea. Airline then advises their office at Conakry that purchase has been made. Airline office at Conakry in turn advise ship's agents when ticket and flight are available. Only then can Immigration formalities be commenced. Entry and exit visas are required and the overall operation may take up to one week.

Time – GMT is kept.

In the rainy season vessels should be prepared for the African Tornado. This usually occurs at night and produces winds reaching 90/100 knots from calm in a matter of minutes. It is as quickly over. The best indication of approach of this weather is a steep rise in the barometer, the highest winds usually Northerly being experienced during the rise.

Vessels berthed at the banana berth should be well fendered as they are subject to considerable movement due to invisible ground swell. A slight starboard list when alongside is an advantage.

SHIPMASTER'S REPORT (MARCH 1975):

Radio: Conakry Radio not working on radio telephony as stated, although same information given in List of Coast Stations. (Freetown Radio helped me with the relaying of my messages to Conakry and Europe).

Fresh Water: Only available by truck loads and after written application to Harbour Master, stating exact amount required. (Water is very expensive).

Identification Cards: Seamen's Books or passports used. (No landing permits issued).

Time: GMT.

AUTHORITY: Harbour Master.

PORT KAMSAR: 10.39 N. 14.37 W. **(See Plan)**

DOCUMENTS:
1 Vaccination List.
5 Crew Lists.
5 Passenger Lists.
1 Crew Declaration (Personal effects) List.
1 Stores List.
5 Last Ports of Call Lists.
7 Manifests of Cargo.
5 Copies Bills of Lading.

To ensure the best possible turn-round for general cargo vessels complete sets of the required cargo documents should be made available to the authorities by hand of the Master. Delays have been occasioned by the late arrival of documents sent by post. It would be of help for the Master to send hatch distribution and the amount of refrigerated cargo, if any, at the same time as ETA.

Quarantine, Immigration and Customs: Representatives of the departments board after the vessel has been made fast alongside. The normal "Q" flag should be flown by arriving vessels.

ARRIVAL ADVICE: Masters are required to send ships ETA, addressed to Shipping Superintendent C.B.G., through Port Kamsar Radio Station, 7 days, 5 days, 3 days and 1 day before arrival at Port Kamsar.

APPROACHES:

Approaches to Rio Nunez: Port Kamsar formerly known as Kakande is located on the East bank of the Rio Nunez river and is approximately 17 km. from the sea.

Vessels bound for Port Kamsar will find there are few natural features to aid a landfall. The most prominent feature is Cape Verga situated to the eastward of the Rio Nunez entrance. This cape can be observed by radar at a distance of approximately thirty miles. At present the light on Cape Verga is extinguished.

To the westward of the Rio Nunez entrance are the Compony shoals and Conflict reef. These are screened by a series of light buoys and vessels approaching from the West should keep them well on the port hand.

Another prominent feature is Gonzales Rock on the starboard side close to the entrance to Rio Nunez. During daylight the hull and superstructure of a wreck stranded six cables North East of the old Gonzales light structure is visible and may be picked up by radar at a distance of between ten and fifteen miles. A light buoy is positioned screening the rocks and is identified as buoy No. VII.

Vessels proceeding to Port Kamsar should anchor and await the arrival of the Pilot in the area bounded by latitudes 10° 26″ N and 10° 28′ N. and longitudes 14° 44′ W. and 14° 46′ W.

Vessels must not proceed beyond 10°28′ N.

Kamsar Buoyage System: Approaches to Rio Nunez Sea-Buoys

		Position			*Visibility*
No.	*Shape–Colour*	*N.*	*W.*	*Characteristic*	*(miles)*
I	Red cylindrical	10° 20.0′	15° 28.5′	GP. FL. 3 Ev. 15 sec.	5
II	Red cylindrical	10° 12.3′	15° 25.5′	FL. 10 secs	5
III	Red cylindrical	10° 09.4′	15° 12.1′	GP. FL 4 Ev. 15 secs	11
IV	Red cylindrical	10° 13.5′	15° 01.5′	GP. FL. 2 Ev. 10 secs	5
V	Red cylindrical	10° 19.2′	14° 52.5′	GP. FL. 3 Ev. 10 secs	5
VI	Red cylindrical	10° 25.5′	14° 47.5′	FL. 5 secs	5
VII	Black conical	10° 23.5′	14° 44.5′	GP. FL. G 4 Ev. 10 secs	2.6
VIII	Red cylindrical	10° 29.5′	14° 43.9′	FL. 10 secs	5

Charts of the area are as follows:
British Admiralty:
600 Cacheo River to Iles de los.
1562 Rio Nunez and Riviere Compony.
United States Naval Oceanic Office:
51580 Ponta Caid to Cap Verga.
Service Hydrographique de la Marine (These charts are recommended by the Port Captain):
6148 Embouchure du Rio Nunez.
6228 Acces au Rio Nunez.
6288 Abords du Port Kakande.

Rio Nunez Transit: The channel from the mouth of Rio Nunez to the bauxite loading wharf at Port Kamsar is 17 km. in length and 120 m. wide and is well marked by 21 light buoys. The channel is subdivided into an inner and outer channel. The bottom of which consists of mud and sand.

The inner channel extends from the bauxite wharf to point "F" and is dredged to between 8.25 and 8.50 m. below Reference Datum Level (R.D.L.) which is defined at +0.15 m. above the lowest water registered (British Admiralty Tide Tables L.L.W.S. = 0.00).

The outer channel extending from point "F" seaward is dredged to a depth of 9.00 m. below R.D.L. increasing to a depth of – 12.00 m. from km. 15.3 to the sea.

The turning, waiting basin for inbound vessels is dredged to –7.75 m. below R.D.L. the bottom of which is mainly mud and it is good holding ground.

PILOTAGE: Pilotage service is compulsory for all vessels over 150 ft. OAL. Vessels under 150 ft. OAL will also be required to have a

pilot aboard on their first calls, but may be exempt thereafter by consent of the Harbour Master and approval of the Port Director.

Pilots are supplied from the Director's Office. Pilots board vessels in the designated waiting area, the pilot will pass instructions by VHF radio, aldis lamp or loud hailer from the pilot boat, and when conditions are too unfavourable for a pilot to board the vessel at the designated area the vessel will follow the pilot boat in until conditions are suitable for boarding.

Pilot boats are fitted with VHF radio can be contacted on Channel 16 or 12.

ANCHORAGE: See "Approaches".

MAX. SIZE: Max. LOA 225 m. Shipmaster reported max. draft at LW 42 ft. 8 in.

HEALTH: Authorities board when vessel is alongside the berth. Smallpox, yellow fever and Cholera vaccination certificates required.

RADIO: The Port Radio Station is operated by the Post, Telegraph and Telecommunications Department. The equipment includes a 5 kW. transmitter (both voice and telegraph) with the following frequencies.

A.	*Frequency*	*Power*	*Mode*	*Call Letters*
	6383 kHz	5,000 Watts	A 1	3X0 27
	8702 kHz	5,000 Watts	A 3	3X0 28
	12885 kHz	5,000 Watts	A 3	3X0 29
	484 kHz	1,000 Watts	A 1	3X0 30
	500 kHz	1,000 Watts	A 1	3X0

NOTE: *Watchhours are at the GMT times shown below:*

0800 – 0850	500 kc/s.
0850 – 0950	6383 kc/s.
0950 – 1100	500 kc/s.
1100 – 1200	6383 kc/s.
1600 – 1700	500 kc/s.
1700 – 1800	6383 kc/s.
2000 – 2100	500 kc/s.
2100 – 2200	6383 kc/s.

B. *Port Operations:* VHF Channel 16 and 12. Watchkeeping hours: 0800–1200; 1400–1700 and as required.

C. A further means of communication is through Port Kamsar Post Office through which international connections may be made.

Telegraphic address: BCTR KAMSAR.
Telex : 817 Kamsar.

TUGS: One 825 h.p. tug is on station and will assist vessels in docking and undocking. It is anticipated that a further more powerful tug will eventually be stationed at Port Kamsar.

BERTHING: Located 17 km. from the channel entrance is the bauxite wharf.

The area alongside the wharf has been dredged to a depth of 13.5 m. below R.D.L. Fendering is separate from the wharf proper, and consists of 12 flexible steel dolphins spaced 21.6 m. apart and protruding 4 m. from the face of the wharf.

A vessel proceeding to the bauxite wharf will normally swing off the berth and make fast port side to, heading seaward, during the flood tide. If the berth is occupied the vessel will be anchored in the turning basin to await the berth.

There is a single loading berth at the wharf. The longest vessel berthed had a LOA of 225 m., which is considered to be the maximum length permissible.

The mobile shiploader has a travel of 165 m., and an outreach of 21 m. from the outside face of the fendering. It is rated at about 4,000 tonnes/hour.

A vessel's air draft, i.e. distance from the waterline to the top of the hatch coaming, must not exceed 11.28 m. at Highest High Water.

Weight of bauxite loaded is determined by a formula using deadweight survey and weightometer. The weightometer is used for loading runs.

Stowage factor of the dried bauxite is 28.

Bauxite vessels sail from Port Kamsar during the flood tide. Maximum departure draft is regulated according to tidal conditions.

Facilities for the discharge of petroleum products are also available on the bauxite wharf. Attached to the shiploader is a chicksan arm with an eight inch connection. This feeds 2 main lines, one 16 in. line for Bunker "C", and one 8 in. line for Diesel. Discharge rates average about 450 tonnes/hour at 100 lbs. per sq. in. back pressure at the ships pumps.

Storage facilities are three 10,000 tonnes Bunker "C" tanks, and two 3,000 tonnes diesel tanks.

There are 2 small general cargo wharves located at the entrance to the Dougoufissa Creek, where vessels of up to 100 m. LOA with a maximum draft of 6 m., may berth. As there is only 3.5 m. at Lowest Low Water, these vessels will be aground at low water periods.

One of these wharves is equipped with a heavy lift crane – derrick with a maximum S.W.L. of 110 tonnes. Safe Working Loads are as follows:–

Radius of derrick (metres)	*Lifting capacity (tonnes)*	*Height under hook (metres)*
16.5	110	29
26	75	23
32 (max.)	45	11

The derrick is also equipped with a secondary hook with a capacity of 20 tonnes.

At the same wharf there is a 4 inch line for the discharge of petrol (gasoline) by coastal tankers. Discharge rates average 50,000 litres/hour. The storage capacity is 850,000 litres.

Two 400 tonnes and two 200 tonnes barges are available for loading and discharging midstream.

WIND/WEATHER/TIDE: In the Rio Nunez approach area waves up to 4 m. can be encountered. At the entrance to the fairway or channel they are generally less than 1 m. high during the rainy season, and less than 0.5 m. high in the dry season. Waves and swell in the inner channel and harbour area are generally very moderate.

The tide, in the the proximity of the buoyed channel, runs N.N.E. and S.S.W. at 2.5 knots under normal conditions, but can reach 6 knots during spring tides in the rainy season.

The flood tide runs parallel with the line of the bauxite loading wharf at a speed of up to 4 knots. The ebb tide, augmented by water coming out of the Dougoufissa Creek, runs through the bauxite wharf at an angle of approximately 20° at a speed of up to 6 knots on spring tides in the rainy season, tending to set the vessel off the wharf. It is therefore absolutely essential to tend moorings continuously, particularly on the stern of a loading vessel.

The salinity of the Rio Nunez at the bauxite loading wharf varies between 1013 (rainy season) and 1028 (dry season) at high water.

Port Kamsar has a typical tropical climate, which is characterised by two separate seasons.

Rainy season from June to October

Maximum rainfall	is during July and August mainly at night.
Relative humidity	is 70 to 80% during the day and 90 to 95% at night.
Temperatures	range from 17 to 38° C, with an average of between 22 to 28° C.
Wind conditions	Variable from between South and West, Force 3 to 6 Beaufort Scale. Possible tornados from between North and N.E. with wind reaching force 10 Beaufort Scale for short periods.

Dry season from November to May

Little rainfall.	
Relative humidity	is 30 to 50% during the day, and 80 to 90% at night. There is often coastal fog in the mornings.
Temperatures	range from 15 to 42° C, with an average of between 20 to 35° C.
Wind conditions	Light breezes from the Southwest to West, force 1 to 3 Beaufort Scale.

MEDICAL: Hospital facilities at Port Kamsar are available only on an emergency basis.

TANKERS: See "Berthings".

TIME: GMT.

HOLIDAYS: New Year's Day (1st January); Labour Day (1st May); Anniversary P.D.C. (14th May); Independence Day (2nd October); Victory Day (22nd November); Christmas Day (25th December); Tabaski (Variable date); Ramadan (Id il Fitri) (Variable date).

All Sundays are also declared Public Holidays. The President may also, at his discretion, declare any other day to be a Public Holiday.

The loading of bauxite is generally continued without stoppage for Public Holidays.

General cargo will not, except in special circumstances, be worked on Victory Day, Tabaski and Ramadan (Id il Fitri). All other Public Holidays are normally worked.

SHORE LEAVE: Crew members are not granted shore leave at present.

GENERAL: *Stores:* Provisions are scarce and therefore not available to calling vessels.

Gangways: Vessels must provide and attend their own gangways. A vessel berthing at the bauxite wharf should have its gangway swung out and ready to lower.

Normal practice of the port is for the foot of the gangway to be heaved out and landed on the wharf after the vessel is fast alongside.

Port Directors Office: The office of the Port Director is solely responsible for the operation of Port Kamsar, which includes the provision of Pilotage, tugs and launches.

The Office acts as sole agent for all vessels calling at Port Kamsar, including the normal ships business functions performed by ships agents.

SHIPMASTER'S REPORT: (1974)

Density: Varies from 1013–1028 according to season.

Fresh Water: Available, rate 20 t.p.h. Not recommended as drinking water.

Repairs: Small repairs can be carried out in an emergency.

Airport: Nearest airport is Conakry which is 8 hours away by car.

AUTHORITY: Port Captain.

Guinea Bissau, Republic of

BISSAU: 11.51 N. 15.34 W.

DOCUMENTS:
Entrance Declaration.
Clearance from the last Port of Call.
List of all Passengers on Board, either in transit or disembarking in Bissau.
Provisions List.
List of the Crew Members Effects.
2 Lists of Passengers Baggage.
List of Cargo to disembark in Bissau, Baldeade (Bolama) or otherwise in transit to be disembarked in another port.
List of Cargo (inside sealed envelope).

PILOTAGE: Pilot's base and radio beacon located at Caio Point, (small island at the entrance of Geba's channel). To call the Pilots and/or the radio beacon, send telegram to Servicosmarguine, informing of the ETA at Caio; pilotage is compulsory.

ANCHORAGE: Between Bissau and the Ilheu do Rei.

MAX. SIZE: Draft, 24 ft.

HEALTH: Visit of port doctor compulsory if ship has no doctor, or if permission for exemption has not been required; permission can be requested by radio. When needed, the health services in Bissau can be used by passengers or crew members. Yellow fever and smallpox vaccinations required.

RADIO: Station call sign CQF weekdays on at 0900, 1300, 1600, 1800 hrs. GMT. Sundays 0900 and 1100 hrs. GMT. Frequency 500 kHz, CW.

TUGS: 1 tug of 320 h.p. and 1 of 800 h.p. available.

BERTHING: Ponte, Cais de Bissau, length 131 m., width 25 m., depth 8 m. 1 lifting crane with a max. lifting capacity of 25 metric tons. 1 lifting crane with a max. lifting capacity of 15 metric tons. 7 lifting cranes with a max. lifting capacity of 1.5 metric tons.

STEVEDORES: 1,500 stevedores available for loading and unloading cargo.

FRESH WATER: Available; pumping rate, 10 t.p.h.

FUEL: Diesel available; pumping rate, 6 t.p.h.

CONSULS: Belgium, tel. 3737; France, tel. 2470; Lebanon, tel. 2737.

REPAIRS: Small repairing work can be done on machinery or ship's hull.

AIRPORT: 7 kms. from Bissau; 3 flights to Lisbon per week.

TIME: GMT minus 1 hour all year round.

HOLIDAYS: 1st January; 10th June; 5th October; 1st November; 1st, 8th and 25th of December.

POLICE/AMBULANCE/FIRE: Police, tel. 3925; Ambulance and Fire, tel. 2222.

TELEPHONES: Line connection land-ship, if requested to the Post Office authorities.

AUTHORITY: Port Director.

AGENT: Guinemar Sociedade de Agencias e Transportes da Guine, Lda. Rua Dr. Oliveira Salazar, 4, Bissau. Tel. 2675-3022/3. After office hours 3658. Cables: Guinemar Bissau.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Guyana

ESSEQUIBO RIVER (Bartica): 06.24 N. 58.37 W.

DOCUMENTS: See "Georgetown".
PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 24 hours in advance to Pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light.

Essequibo light (steel framework tower with red and white horizontal bands) marks seaward end of Essequibo main ship channel. Vessels in vicinity of Demerara Pilot station should listen for pilot boat on VHF Channel 16.
RESTRICTIONS: The Essequibo Bar is composed of hard mud and sand. The least depth of water is 3 ft. less than for Demerara Bar. Vessels should not attempt to cross the Essequibo Bar drawing more than 3 ft. less than that predicted for the Demerara Bar.
MAX. SIZE: Controlled by Bar draft predictions.
HEALTH: Pratique given at Georgetown when Pilot boards. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.
RADIO: Demerara Radio call sign 8RB operating on 2182 kc/s. Georgetown Lighthouse operates VHF on Channel 16 and HF on 2738 kc/s. 24 hours a day. Also SSB 8281.2 kHz.
TUGS: Not available.
MEDICAL: Hospital at Georgetown and Bartica. All crew members need valid smallpox vaccination certificates.
DENSITY: 1000, fresh water.
FRESH WATER: Not available.
FUEL: Not available.
OPENING/CLOSING HATCHES: By ship's crew.
CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.
CONSULS: At Georgetown.
REPAIRS: Government dry dock situated at Mazaruni, approximately 40 miles up river at junction of Essequibo and Mazaruni rivers. Extreme dimensions; 160 ft. by 35 ft.
AUTHORITY: Transport and Harbours Department.

GEORGETOWN: 06.49 N. 58.10 W.

PORT LIMITS: Seaward by an arc of a circle with radius 1 nautical mile, with the Georgetown lighthouse as centre.
DOCUMENTS:
Certificate of Registry.
8 Crew Lists.
8 Provisions and Stores Lists.
4 Passenger Lists.
Customs Documents:
2 Reports of Ships Stores (Form C1).
2 Lists of Crew Personal Effects (Form C2).
1 List of Unmanifested Cargo (Form C3).
12 Health Declaration Forms (W.H.O.2)
Health Documents for Crew (1 copy for each Crew member).
5 Cargo Manifests.
5 Bills of Lading
PILOTAGE: Vessels apply for Pilots through local Agents or direct to Chief Pilot, Georgetown, through "Demerara Radio, 8 Romeo Bravo", 12 hours in advance of ETA at Pilot station when vessel is proceeding in to Georgetown Harbour. Pilot boarding ground is in North-Western quadrant of circle with radius 5 cables and centre the Outer Georgetown Light. Normal international day or night signals for "I require a Pilot" are used. All pilot cutters are painted black (hull) and white (superstructure) with the word "Pilot" painted in white on black ground. Cutters are approximately 50 ft. in length.
ANCHORAGE: There are 5 with a least depth of approximately 20 ft. MLW named A to D from North to South. Vessels are safely anchored at any of the above anchorages 1.5 to 2 cables from Georgetown park line. Bottom is soft mud and provides good holding ground.
RESTRICTIONS: No entry restrictions except those on draft imposed by the bar at estuaries.
MAX. SIZE: Draft 21 ft. 6 in.
HEALTH: Radio Pratique is not given, and pratique is only given at Georgetown. This does not normally involve a visit from the Health Authorities if the vessel is clear. Pilot may grant pratique if vessel has just arrived from a British port, and if vessel has not been to a Central or South American Spanish-speaking port or French-speaking port (West Indian or otherwise) or any of the ports of New Orleans, Mobile or Tampa within 4 weeks of its arrival at the Pilot station. If a vessel is "suspect" or "infected" Master should advise Harbour Authority by special message through Demerara Radio or Georgetown Lighthouse and await advice of Port Health Officers; meanwhile, if in the vicinity of Georgetown, vessel may anchor at the specified quarantine anchorage near the Outer Georgetown Beacon as entry into the limits of the port without the authority of the Ministry of Health is prohibited if the vessel is suspect or infected.
RADIO: Name of radio station "Demerara Radio", call sign "8RB", always standing by on 2182 kc/s., will give latest weather report or RDF bearings on request. Georgetown Lighthouse operates VHF on Channel 16, HF 2738 and SSB 8281.21 kHz.
TUGS: At present, vessels dock stem on to the tide without aid of tugs.
BERTHING: There are 14 main wharves all privately owned, situated along the river frontage at Georgetown and varying in length from 210 ft. to 730 ft. Depths alongside range from 16 to 20 ft. at low water springs, but as the bottom is soft mud vessels may safely lie aground alongside. Ships work cargo with their own appliances.
BULK HANDLING FACILITIES: The sugar berth is 416 ft. in length with least depth alongside of 18 ft. MLWS and can accommodate vessels up to 530 ft. in length. Loading rate is 500 t.p.h. using 2 chutes. Vessels should not be more than 63 ft. beam.
STEVEDORES: Ship's Agent normally arranges for gangs in accordance with cargo plans or Master's cable advice. Gangs are unionised. Stevedores work around the clock every day of the week though they are paid overtime between hours of 1600 and 1900 and they earn time-and-a-half or double time on public holidays according to which one of the 12 public holidays they work.
MEDICAL: No special advance notice of required medical attention is necessary, and hospital facilities are always available. All crew members need to have valid smallpox vaccinations certificates on entry.
TANKERS: There are no residue discharge facilities at this port. There are 5 tanker berths in the Georgetown area.
Rome Terminal (Shell) – depth alongside is 15 ft.
Ramsburg Terminal (Esso) – depth alongside 16 ft.
Timehri Terminal – depth alongside 16 ft.
DENSITY: Average density in port is 1015, though during the rainy season (March-May; October-December) density of water may be as low as 1000 at low water in the harbour.
FRESH WATER: Fresh water is available, and is delivered alongside. The ship is required to pay for labour, overtime, etc., involved in the delivery.
FUEL: In case of emergency, providing advance notice is given by Master, vessels may be partially bunkered at any of Shell, Texaco or Esso installations. Vessels may be required to go alongside 2 hours before high water and leave not later than 1 hour after high water at the above-mentioned installations. Grades of fuel available are "Bunker C" and diesel fuel.
CONSULS:

Belgium	France	China (People's Republic)
Brazil	India	Sweden
Canada	Italy	Trinidad and Tobago
Columbia	Mexico	United Kingdom
Costa Rica	Netherlands	U.S.A.
Denmark	Norway	Venezuela
Eire	Panama	

FIRE PRECAUTIONS: There are no stated precautions other than regulations against pumping out residual heavy oil (e.g. "Bunker C"). Ships having cargoes of ammunition, high explosives, dynamite, etc., are required by Harbour Regulations to anchor North of Georgetown Lighthouse prior to proceeding alongside wharf to unload.
DEVELOPMENTS: Proposals are in hand for the dredging of the Demerara Bar and the Georgetown Harbour to permit entry of ships up to 27 ft. at high water.
GANGWAY/DECK WATCHMEN: Services of watchmen are necessary and can be obtained through a watchman's pool by ships' Agent.
OPENING/CLOSING HATCHES: Normally carried out by ship's crew.
CUSTOMS ALLOWANCES: Each crew member is permitted up to 200 cigarettes aboard held out of bond, but is only allowed to take ashore 40 at any time. Only on a *final discharge* would a member of crew be permitted a tobacco allowance of half-a-pound. Each crew member is allowed to keep out of Bond, 1 (one) bottle of wine or spirits, but is prohibited from taking any of it ashore. Each member of crew is allowed tax-free only one-sixth gallon wine and one-sixth gallon spirits *when he is finally discharged.*
IDENTIFICATION CARDS: Not required.
REPAIRS: Every type of deck or engine repair is undertaken at Sprostons dry dock. Above waterline and engine-room repairs of any type are undertaken on vessels exceeding the dimensions mentioned below while vessel is anchored in the stream.
DRY DOCKS: Sprostons Dry dock: A graving dock 210 ft. × 37 ft. 9 in. at entrance situated South of Sprostons No. 2 Wharf, which is privately owned and operated on normal commercial lines. 198 ft. length of dry dock is on blocks. Breadth: top 46 ft. 4 in., bottom 40 ft. 9 in., depth on sill at HWOST 92 ft.

Government Dry dock: Situated at Mazaruni approx. 40 miles upriver at junction of Essequibo and Mazaruni rivers is a graving dock and has extreme dimensions of approx. 160 ft.×35 ft.
REPATRIATION: Can be arranged.
AIRPORT: Timehri International Airport is situated approx. 30 miles South of Georgetown with highway connection and is served by many intercontinental airlines.
TIME: 3 hours 45 minutes behind GMT. No alterations made to clocks during the year.
HOLIDAYS: New Year (January 1st); *Eid-ul-Ahza; *Phagwah; Republic Day (Feb. 23rd); Good Friday (April 12th); Easter Monday (April 15th); Labour Day (May 1st); *Youman Naubi; Commonwealth Day (First Monday in August); *Deepavali; Christmas Day (December 25th); Boxing Day (December 26th). *Religious holidays are variable.
POLICE/AMBULANCE/FIRE: Tel. 3211, Emergency 999; Ambulance 2411, Emergency 999; There are Police/Ambulance/Fire Stations on the waterfront.
TELEPHONES: Only connected to naval vessels.
SHORE LEAVE: Allowed.
AUTHORITY: Transport and Harbours Department.

LINDEN: 06.00 N. 58.17 W.

DOCUMENTS: See "Georgetown".
PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 12 hours in advance to Pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light.
From Georgetown to Linden, Pilot not compulsory, but advisable to use Sprostons Pilot.
RESTRICTIONS: Governed by depth of water at Demerara River Bar. Entrance normally at high-water.
ANCHORAGE: Vessels proceeding to Linden in ballast and drawing less than 15 ft. may anchor at Southern limit of Georgetown in depth of 20 ft. MLWS.
MAX. SIZE: Draft 21 ft. 6 in.
HEALTH: Pratique given at Georgetown when Pilot boards. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.
RADIO: Demerara Radio call sign 8RB operating on 2182 kc/s. Georgetown Lighthouse operates VHF on Channel 16 and HF on 2738 kc/s., 24 hours a day. Also SSB 8281.2 kHz.
TUGS: Not available.
BERTHING: There are 2 bauxite berths accommodating vessels of up to 570 ft. One loader for metal grades has an airdraft of 29 ft. 8 in. and a loading rate of 800 t.p.h. The second loader for calcined bauxite has an airdraft of 34 ft. and a loading rate of 350 t.p.h.
The Alumina berth has a travelling tower with an airdraft of 64 ft. and a loading rate of 400 t.p.h.
MEDICAL: Hospital at Georgetown, 59 miles distant. All crew members need valid smallpox vaccination certificates.
DENSITY: 1000, fresh water.
FRESH WATER: Can be supplied.
FUEL: Can be supplied.
OPENING/CLOSING HATCHES: By ship's crew.
CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.
CONSULS/REPAIRS: At Georgetown.
AUTHORITY: Transport and Harbours Department.

NEW AMSTERDAM (Everton, Berbice): 06.14 N. 57.31 W.

DOCUMENTS: See "Georgetown".
PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 24 hours in advance to Pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light. Pilots may also board ships bound for New Amsterdam within 5 cables Westward of Berbice Light. This beacon marks the seaward end of the channel and is to be passed on the port hand when entering.
RESTRICTIONS: The Berbice Bar is composed of fairly hard mud. Vessels may cross the Berbice Bar on even keel loaded to 3 ft. less than the Demerara Bar predictions.
MAX. SIZE: Controlled by Bar draft predictions.
HEALTH: Pratique given at Georgetown when Pilot boards. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.
RADIO: Demerara Radio call sign 8RB operating on 2182 kc/s. Georgetown Lighthouse operates VHF on Channel 16 and HF on 2738 kc/s., 24 hours a day. Also SSB 8281.2 kHz.
TUGS: Not available.
BERTHING: The Bauxite berth is about 1,500 ft. long, and has a fixed loading arm with an average loading rate of 500 t.p.h. The airdraft is 36 ft. Vessels berth starboard side alongside.
There is a strong ebb current of about 4–5 knots, although the flood runs at about 1 knot.
MEDICAL: Hospital at Georgetown. All crew members need valid smallpox vaccination certificates.
DENSITY: 1000, freshwater.
FRESH WATER: Can be supplied.
FUEL: Can be supplied.
DEVELOPMENTS: Proposals in hand for dredging Berbice Bar.
OPENING/CLOSING HATCHES: By ship's crew.
CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.
CONSULS/REPAIRS: At Georgetown.
AUTHORITY: Transport and Harbours Department.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Haiti

CAP HAITIEN: 19.46 N. 72.12 W.

GENERAL: For all general information refer to "Port-au-Prince".
APPROACHES: The current is about 3 knots in the entrance to the port when the river is in flood.
ANCHORAGE: Vessels which are unable to moor alongside because of deeper draft are anchored off the wharf.
BERTHING: The wharf at Cap Haitien was constructed by the Compania Industrial Maritima. The construction is in reinforced concrete. It extends for a length of 900 ft. in an Easterly direction and comprises 3 sections. The most important section is 600 ft. long and has berths for deep sea vessels on the South side in depths of 30 ft. The Western section, nearest the shore, is 300 ft. long with variable depths of 7 to 9 ft. alongside, with berths for motor vessels of small tonnage and sailing ships. The central section accommodates the customs offices. 2 metal warehouses border the East and West ends of the wharf. Between the warehouses is 1 fixed crane of 30 tons capacity.
FRESH WATER: Fresh water is available at Cap Haitien.
FUEL: Available, only in drums.

MIRAGOANE: 18.25 N. 73.04 W.

GENERAL: For all general information refer to "Port-au-Prince".
BERTHING: The facilities at Miragoane are 1 small jetty for loading and discharging general cargo with a depth alongside of 18 ft. max.

There is a wharf for loading bauxite, belonging to the Reynolds Company, with a depth alongside of 34 ft. Total annual export about 350,000 tons.

PORT-AU-PRINCE: 18.33 N. 72.21 W.

APPROACHES: The port of Port-au-Prince is situated at the extreme S.E. of the bay. It can be approached from the North and from the South by 2 channels.

One may approach from the N.E. by the Saint-Marc channel or from the West by the Gonave channel, between Trou-Forban Point and the village of Ca-Ira. The bay extends between Trou-Forban Point in the North and the village of Ca-Ira about 20 miles to the South. The position of Ca-Ira is 18° 32′ N. 72° 39′ W. From Ca-Ira the South coast of the bay extends about 2 miles N.E. and about 12 miles East to Pointe Lamentin.
PILOTAGE: Pilotage is compulsory for all movements of ships in the port. The Pilot boards to the West of the fairway buoy and is accompanied by port officials, i.e. Port Doctor and Representatives of Immigration, Police and Customs. These officials insist on using the accommodation ladder to board the vessel. Masters must arrange with their respective Agents the time which they will require a Pilot to leave the port. If they are ready to depart before the hour arranged they may call the Pilot by 3 blasts of the ship's whistle.
ANCHORAGE: Vessels must anchor to the West of the large red buoy number 29 or at the quarantine buoy, situated about 0.5 mile N.N.W. of buoy number 29. A bottom of sand over coral is to be found all over this region in depths of 10 to 18 fathoms.

Vessels may anchor or depart at any hour of the day or night.

In order to facilitate the rapid movement of vessels, these are normally anchored in order of arrival.
WEATHER: The bay of Port-au-Prince is nearly always calm except at certain times of the year; for example, during the months from May to November, occasional strong winds may interrupt normal loading and discharging movements.

A light breeze from the East or N.E. blows after dawn, but in the afternoon a breeze 3 times stronger blows in the opposite direction.

The height of the tide is only 1.5 ft. Currents in the port are almost negligible, except that, when mooring or unmooring a vessel, one should pay attention to a Northerly current of about a quarter of a knot.
RADIO: All deep-sea vessels which enter the territorial waters of Haiti are obliged to advise the Port Radio Station.

The radio station is situated at the Bureau de Port. It is in operation 24 hours a day.

Visual light signalling may also be carried out as far as it is possible to do this.

The following apparatus is used at the radio station:

1. VHF Channels 11, 12, 13, 14 and 16, power 50 watts, range 40 miles.
2. Medium frequency "Pearce-Simpson" amplitude moderation, frequencies 2,182 kc/s., 2,738 kc/s., power 85 watts, range about 200 miles.

In addition to the VHF Channels, the Pilots may use radio-telephone on the following frequencies:

2,182 kc/s., 2,638 kc/s., 2,738 kc/s., 2,770 kc/s., and 2,806 kc/s.

All messages addressed to the Port Authorities and messages concerning pilotage must be handled at this radio station.

Masters are particularly required to give the radio station, as soon as they arrive, the following information:

Vessel's draft and net tonnage, amount of cargo for discharge, number of gangs required.

The telephone number of the radio station is 23235.
TUGS: The port has at present 1 small tug. At all times 2 wooden mooring launches, each 32 ft. long, are available for Pilot's use.
BERTHING: For passenger cruise liners there is a concrete finger pier, length 888 ft., with berths on both sides, with depth alongside of 30 ft.

The commercial quay is a construction of reinforced concrete supported by wooden piles, encased in concrete, with traverse wooden fendering.

The quay is orientated in an East-West direction and is constructed in 3 sections.

Quay No. 1 – South side – length 453 ft. with depth alongside of 12–17 ft.
Quay No. 2 – central sections – length 540 ft. with depth alongside 17–23 ft.
Quay No. 3 – Seaward section – length 640 ft. with depth alongside 23–28 ft.

There is an angular portion of 100 ft. between Quays No. 1 and 2 which may not be used for mooring, but which the bow of the ship may overhang. Vessels must be secured by at least 2 mooring cables at the bow and at the stern.

The Port Authorities require for vessels manoeuvring in the port a minimum of 2 ft. of water under the keel. This regulation may be modified by special authorisation of the Chef de Port.

In addition to the public pier, there are 5 jetties belonging to private companies used for handling products in bulk. These jetties belong to the following companies:

A. La Hasco, sugar refinery established at Port-au-Prince.
B. La Minoterie, flour mill situated at Laffiteau.
C. Le Ciment d'Haiti SA, cement factory situated at Fonds Mombin.
D. Jean Ackmed, fuel installation situated at Simonette.

The above jetties are established on the North side of the bay.

E. Installations of Shell Company and Tropigas on the South side of the bay, equipped with their own mooring buoys for tankers.

CARGO HANDLING: For vessels loading and discharging at the public pier, cargo is transported on railway trucks of 25 tons max. capacity.

1 quay is equipped for container ships. 1 quay is equipped to handle roll-on/roll-off traffic.
STEVEDORES: Loading and discharging of ships is carried out by gangs of private workers who are engaged by the ship's Agents under the supervision of a chief stevedore. The working gangs use the ship's own equipment for loading and discharge.

Handling rates are normally about 15 t.p.h. for general cargo, or about 25 t.p.h. for heavy articles, such as drums, planks, bundles of steel rods, etc.

Normal working hours in the port are from 0700 to 1900 from Monday through Saturday. Overtime is payable for work required at other than these hours and also for work required on Sundays and holidays.
FRESH WATER: Drinking water is available in the port; however, the ship must provide its own connections. Rate of loading varies from 4 to 10 t.p.h.
FUEL: There is no service for coal bunkers. Fuel oil may be supplied by barge.
REPAIRS: There are no proper facilities for ship's repairs although minor repairs may be effected by small private workshops ashore. There is a small dry dock at Bizoton about 1 mile from the port, with a capacity of about 1,000 tons and able to receive vessels up to 175 ft. in length. This yard is managed by the Haitian Army Coast Guard.
MEDICAL: There are adequate medical facilities, pharmacies and hospitals.
AIRPORT: An international airport for jet planes connects Haiti with Principle U.S. and Carribean points. A local air service connects Port-au-Prince with principal towns of the Republic.
FIRE-FIGHTING EQUIPMENT: The Port Authority does not own any equipment for fire-fighting or assisting vessels in need. However, there is a town fire service organised by the Army.
HOLIDAYS: *Legal Holidays:*

Independence Day (1st and 2nd January); Labour Day (1st May); Flag Day (18th May); Ascension Day; Assumption (15th August); All Saints (1st November); Commemoration Day (13th November); Discovery of Haiti (5th December).

Authorised Holidays:

Lundi-Gras (half-day); Mardi-Gras; Good Thursday; Good Friday; Pan-American Day (14th April); President's Day (22nd June); Dessaline's Anniversary (17th October); United Nations Day (24th October); Fete des Morts (2nd November).
SERVICES: Fresh provisions are obtainable locally.

There are no facilities for refuse collection, but nevertheless it is forbidden to throw refuse, cinders or any other polluting material overboard.

Launches used for the transport of tourists are available at Port-au-Prince and these are operated by private companies. The Port Authority does not take an active part in the traffic of tourist passengers. Those who disembark on the wharf from cargo vessels or cruising liners must make their way on foot to the taxi station to take part in excursion tours. However, the majority of tourists coming on passenger liners anchored in the roads disembark by launches belonging to the Department of Tourism. They disembark at the Quai Colomb, which is under the authority of the Department of Tourism.
DEVELOPMENTS: New port facilities are presently under construction, located 800 ft. North of and parallel to the existing pier. Initial usable facilities are to be available in November 1977

with final completion in May 1978. Prime features of the new facilities are:
Length of berthing space 1,400 ft.
Width of apron 93 ft.
Container crane on rails on the apron with 30 ton capacity.
Depth alongside, 32 ft.
One additional ro/ro platform. Two metal and concrete, clear-span, transit sheds, each 60,000 sq. ft. Paved open storage area and roadways approximately 25 acres.

SHIPMASTERS REPORT: (December 1975)
Documents:
Clearance from last port.
4 Crew Lists.
4 Passenger Lists
2 Cargo Manifests
18 Cargo Check lists
International Declaration of Health
Vaccination/Inoculation List (1) with valid dates.
International Vaccination Cards, these may be examined by Port Health.

Pilotage: Compulsory, 24 hour service arriving/departing. Require ETA to Agent 24 hours in advance. May be contacted on voice radio 2738 kHz. Pilots board at quarantine anchorage buoy. Pilot boat has black hull, with yellow superstructure. 2 ft. freeboard. "Pilot" clearly painted on hull.
Anchorages: The harbour affords good anchorage in depths of 5 to 14 fathoms, clear of the entrance ranges southward. The Quarantine Anchorage is located about 2.5 miles East-northeastward of Pointe Lamintin.
Restrictions: See Sailing Directions for Prohibited Anchorages.
Max. Size: This ship is 495 ft. in length, with 69 ft. beam, we were accommodated easily. Passengers ships of 620 ft. in length are regular callers at the port. Maximum depths at the pier is 30 ft. Mean High Water Interval at the port is 08H 23M. Spring tides rise 1.5 ft. Currents in the approach set East in the Canal de la Gonave, and Northwest in the Canal de Saint Marc. All buoys, lights, and navigation aids are unreliable.
Health: Pratique is now granted at the dock. Ship displays "Q" flag until cleared.
Radio: ETAs to Agents/receivers are best sent through WNU (Tropical Radio) at New Orleans, Louisiana or ITT station at Lantana, Florida, these stations then telex direct. Port Pilots will relay messages to Agents on voice radio 2738 kHz. Short range reception on voice radio has been experienced.
Tugs: None available at this time.
Berthing: Main pier, has 1,700 ft. of berthing space on its Southern side with depths of 18 to 29.5 ft. Ship's always berth port side to, using the starboard anchor to assist in docking and undocking. A T-head pier with a pipe-line is located 2 miles Westward of the city. Mooring buoys lie off the end of this pier. It has been reported, (unverified) that this pier accommodated a tanker 560 ft. long, with a draft of 31.5 ft. in 1957.
Stevedores: Advise Agent tons per hatch at least 24 hours prior to arrival. Maximum amount of labour is available. Rate of discharging/loading is approximately 18 to 30 tons per gang hour on sacks, bales, cases, general cargo. Work after midnight is overtime with charges quite high.
Medical: Give Agent prior notice for any required medical attention. 3 hospitals available. Minor dental work can be accomplished. International Certificates with Cholera and Smallpox are required.
Density: 1025 as per this ship's test.
Fresh Water: None available at this time.
Fuel: None available at this time.
Developments: A 25 million dollar port expansion and construction project commenced October 1975 and should be completed October 1978. This new area is located 800 ft. North of the general cargo pier. From the shore in a Westerly direction the new pier shall extend 1,685 ft. in length, 469 ft. in width, with a working apron on the South side 81 ft. from the end of the ship's side. The pier will contain 2 warehouses; one 207 by 1,101 ft., and the other 180 by 447 ft. The Eastern end shall have 2 separate roll-on/roll-off sections. A container crane on rails shall traverse the entire South side working apron, capable of loads not to exceed 30 long tons. Dredging and filling has commenced and they are working towards a 30 ft. maximum depth at completion.
Gangway/Deck Watchmen: Cost unknown, supplied by Agent. Gangway watchman is recommended. If transit cargo is pilferable, I recommend using crew members for cargo hold security.
Hatches: (Automatic hatches) opening/closing normally carried out by stevedores with crew member supervision.
Customs Allowances: Bonded stores were not sealed, store lists were not required. Ship allowed each crew member 200 cigarettes. Local Customs Officials make no special requirements.
Cargo Gear: All loading/discharging by ship's gear. Fork lifts are available. There is a shortage of pallets and railroad flat cars which are used to accept cargo direct from the ship's gear on the dock. Warehouse space is limited.
Identification Cards: Shore passes not required, none issued by local authorities.
Consuls: United States of America; Panama; Lebanon; Republic of China, France.
Repairs: No facilities available.
Dry Docks: None available.
Repatriation: Possible.
Airport: 1 major airport. Located 40 minutes from the port area. Daily flights to North America. (Miami and New York)
Time: GMT plus 5 hours. No alterations to clocks during the year.
Holidays: December 5th Columbus Exploration Day; Christmas, New Year's Eve, New Year's Day. Cargo work can be arranged on most holidays at overtime rates.
Police/Ambulance/Fire: Utilise Agent for emergencies of this type, or have watchman make use of telephone from dock. "Fire". There are no international hose fittings on the dock, and limited means of handling shipboard fires from ashore.
Telephones: None available for placement on board the ship.
Services: Special services non-existent.
Shore Leave: Crew members are allowed ashore. No curfews, no passes required.
Port Regulations: Nothing unusual or out of the ordinary.
Delays: Possible berthing delays exist due to ship congestion. Delays in discharging may occur due to lack of warehouse space, pallets, or rail cars.
Agents: Agents and most officials including watchmen and stevedore supervisors speak English. All official documents and ship's clearance papers are written in French. The language spoken is predominately French (patois) with inflections that are easy on the ears, but difficult to utilise operationally.
AUTHORITY: Administration Portuaire de Port-au-Prince.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Honduras

AMAPALA: 13.18 N. 87.39 W.

DOCUMENTS:

Maritime Declaration of Health.
Crew List, 3 legalised and 7 copies.
Provisions List, 3 legalised and 7 copies.
Passengers Disembarking List, 3 legalised and 7 copies.
Passengers in Transit List, 3 legalised and 7 copies.
Voyage Memorandum, 6 copies.
Cargo Manifest, 2 legalised and 14 copies.
Cargo Tally Books, 15 copies.
Mail List, 4 copies.

Documents are legalised at loading port by Honduran Consul or consul of friendly nation. If no consul, then by the Port Captain. 2 copies of Cargo Manifest, Freight List, Bills of Lading, and Stowage Plan should be airmailed to Agent in advance.

If documents legalised by the Port Captain, 1 copy of each manifest should be sent by airmail to "Secretaria Economia y Hacienda Tegucigalpa", and "Custom House, Amapala".

Shipmaster's report: Papers required for entering as follows:

10 Spanish Crew Lists with I.D. Nos.
10 Passenger Lists.
10 Store Lists.
3 Memorandum of Voyage.
1 Maritime Declaration of Health.
5 Mail Reports (only if carrying mail).

I.D. books asked for and checked with crew list. Bond not sealed. Shop not sealed.

PILOTAGE: Pilot available, to be ordered by Agent in advance.
ANCHORAGE: Open anchorage area in depths up to 32 ft.
RESTRICTIONS: Vessels enter and leave at high water only, max. recommended draft 28 ft.
MAX. SIZE: Vessels up to 10,000 g.r.t. have entered, with 30 ft. draft.
HEALTH: Vessels are cleared by Health Inspector on arrival. International Health regulations apply.
RADIO: Contact via "Tropical Radio".
TUGS: None available.
STEVEDORES: Arranged by Agent. Working hours 0700–1200 and 1300–0700.
MEDICAL: No hospital facilities. Only minor cases can be dealt with locally.
FRESH WATER: Not available.
FUEL: Not available.
IDENTIFICATION CARDS: Not required.
CONSULS: San Salvador, Nicaragua, and Peru represented locally.
REPAIRS: Not possible.
TIME: GMT minus 6 hours, no alterations during year.
SHORE LEAVE: Allowed, no restrictions.
SHIPMASTER'S REPORT:

(1) I found that the safest approach is through the passage between Isla Conchaguita and Isla Jeanguera. It is also the best place to anchor and wait for a Pilot.

(2) The Charts covering this port do not appear accurate, and no further approach towards Amapala should be made without the guidance of a Pilot or a boat.

(3) There are no buoys, and the light on Isla Caracolita is extinguished.

(4) The passage from anchorage towards Amapala along the West Coast of Isla Del Tigre is very narrow and water depth recorded by ship's soundings gave only 24 ft. in places, with a maximum of 30 ft. There is room only to swing the ship on her axis.

(5) Pilot is available, or otherwise there is a boat guiding vessel into Amapala.

(6) Cargo operations are performed at anchorage about 3 cables from Amapala. Cargo is discharged into barges. Stevedores are not very professional and cargo damage may be expected. Many stevedores work in bare feet and thus accidents on board may be expected.

AUTHORITY: Port Commander.
AGENT: Servicios Portuarios S.A. de C.V. Cables "Seposa Amapala."

PUERTO CORTES: 15.50 N. 87.55 W.

DOCUMENTS:

Health Declaration. 2 copies.
Zarpe or Clearance Permit from the Last Port.
General Cargo Manifest (in ballast if that is the case) of all the cargo to be discharged in Puerto Cortes, and 14 copies.
Crew List and 10 copies.
Passengers in transit, or no passenger declaration and 10 copies.
Deratisation Certificate, only in first call.
Stores List and 8 copies.
Mail Sacks declaration (negative or positive).
Bills of Ladings (if some cargo is coming) 3 complete sets.
Hatch list and 5 copies.

All the original documents must be signed and stamped by the Honduran Consul at the port before calling Honduras and should be made in Spanish.

If no consul of Honduras available, documents to be legalised by consul of a friendly nation or by the Chamber of Commerce, stating the facts.

PILOTAGE: Compulsory for vessels over 300 g.r.t. ETA to the Agent, 72, 48 and 24 hours ahead of arrival required. Pilot on VHF Channels 16 and 6.
ANCHORAGES: Once the ship enters the bay, *if no berth space has been notified to the Master*, she should anchor at a distance beyond 0.5 miles from the nearest pier, and wait for the boarding of the official party to be granted free pratique.
ENTRY RESTRICTIONS: Vessels may enter the port day or night but not visited by Port Authorities between 2000 hrs. to 0600 hrs., only in special cases.
MAX. SIZE: Dry cargo vessels up to 30 ft. draft. Tankers up to 43 ft. draft.
HEALTH: Pratique granted after Port Authorities (including doctor) board vessel between 0600–2000 hrs. Pratique granted if no contagious illnesses aboard, otherwise quarantine restrictions imposed. No automatic free pratique when arriving from another port of Honduras.
RADIO: Lantana Radio WOE. New Orleans Radio WNU. Limon R. TIM. Balboa Radio NBA. Miami Radio WAX. Messages routed via Tropical Radio.

Port Authority operates a VHF station HQSU, monitoring on 2738 kHz, but by appointment can reply in any other position. Telegrams to be routed via Tropical Radio. Lanatana WOE. New Orleans WNU. Limon TIM. Balbao BNA. Miami WAX.

Ship's radio not to be used in port except for communication with the port authority. Vessel is fined if there is a violation. Also see VHF.
VHF: Puerto Cortes Radio: Call sign "Cortes Radio". Channel 16.

Hours: Weekdays 0600–2200; Saturdays 0800–1200 and Sundays Nil.

BERTHING: The Agent to supply information as to berth, and time of docking. Pilot will board the vessel and berth it, assisted by a launch to hold ropes. Departure should be effected when the despatch documents are on board and operations finished.

Pier No. 1 (Texaco Pier), for tankers or ships loading diesel or lub-oil; depth 45 ft.
Pier No. 2 (Banana Pier) length is 810 ft.
Pier No. 3 630 ft.
Pier No. 4 1,020 ft.

STEVEDORES: Vessels must give accurate ETA at least 24 hours in advance to enable Agents order necessary gangs. Gangs ordered 0700 and 2100 hrs. working 12 hours (daytime) and 9 hours (night-time) excluding the meal hours (0600–0700; 1200–1300; 1700–1800 and 2300–2330). No work on Holy Friday, May 1st (Labour Day), other holidays work is possible with double payment.
MEDICAL: No advance notice necessary for medical attention, except in very urgent cases. At San Pedro Sula (35 miles by road) you can obtain very good medical service but several medical clinics are serving this Port. No inoculations required but Master should possess International Health Cards for each member of crew.
TANKERS: Discharge at Texaco Oil Refinery, cable address "Reftexa".
DENSITY: 1028/1030.
FRESH WATER: Water available at wharf face at 100 ft. intervals. Rate, approx. 8–10 t.p.h.
FUEL: All grades available. 24 hours notice is required for good service.
GANGWAY/DECK WATCHMEN: Shore watchmen not usually required and this service left to discretion of the Master.
OPENING/CLOSING HATCHES: On liners normally by crew with assistance stevedores, otherwise according Charter Party.
CERTIFICATES: On first call, Registered Tonnage Certificate; thereafter not required unless gross/net tonnage be changed.
CUSTOMS ALLOWANCE: No restrictions, free use on board. Customs officials check no sales shore without special permit.
IDENTIFICATION CARDS: New port regulations includes identification card must be shown to gate watchman when crew members come back aboard.
CONSULS: None in the port. American Consulate at Tegucigalpa, 200 miles by road.
REPAIRS: Local marine repair companies can undertake limited repairs of general nature; pre-advice recommended.
REPATRIATION: All facilities available for effecting crew change and repatriation by sea or air.
AIRPORT: International Airport Ramon Villeda Morales served by regular airlines. 35 miles by road.
TIME: GMT less 6 hours, no changes during year.
HOLIDAYS: January 1st; April 14th; May 1st; Thursday, Friday and Saturday in Easter week; August 15th; September 15th; October 3rd, 12th and 21st; and December 25th. Cargo work can be arranged on those days, except on Good Friday, and May 1st (Labour Day).
TELEPHONES: Not customary except in United Fruit Co. pier (Tela Railroad Company, concessionary of banana pier) where telephones connected on board. Overseas calls may be arranged by Agent.
SHORE LEAVE: Permitted without restrictions.
AGENTS: Agencia Guzman Co. S.de R.L. Cable address "Guzco Puerto Cortes".

Ship Agents, Forwarding Agents, Lloyd's Agents at Honduras. Puerto Cortes, Honduras Central America.

TELA: 15.47 N. 87.30 W.

DOCUMENTS:

1 original Health Certificate.
1 ,, 16 copies Manifest.
1 ,, 11 ,, Cargo Book.
1 ,, 6 ,, Store List.
1 ,, 6 ,, Crew List.
1 ,, 6 ,, Passenger List.
1 ,, 6 ,, Baggage.
1 ,, 4 ,, Voyage Memorandum.

All documents must be in Spanish; Cargo Book should be in alphabetical order.

PILOTAGE: Pilot available if requested. There is a small boat that assists docking by handling mooring lines from vessel to wharf. 48 hours advance notice of ETA required.

ANCHORAGES: 1 mile out from wharf, 100 ft. or more; no boundaries.

MAX. SIZE: Max. permissible length 485 ft., breadth no restrictions, draft 30 ft.

HEALTH: Agents arrange pratique; in case there is a suspicion of disease or fever aboard, the vessel will be placed in quarantine for a minimum of 5 days.

RADIO: WNU New Orleans and TIM Puerto Limon via Tropical Radio.

TUG: No tug available.

BERTHING: Time for berthing is from 0600 to 2000 hrs.

General Cargo Berth: East side of pier, starboard side alongside.

Banana Berth: West side of pier, port or starboard side alongside, depending on which side elevator space is required. 4 elevators available, type camel back. Rate per elevator 3,500 boxes per hour.

STEVEDORES: ETA advice should be given 48 hours prior to arrival in order to arrange gangs. Labour rates are subject to surcharge of 25%, 50%, 75% and 100% to cover overtime, depending on hour or day worked.

Gangs: For bananas: 180 men, 3 gangs. General cargo: No restrictions.

MEDICAL: Hospital facilities available, also inoculation, vaccination and certificates.

TANKERS: Discharging lines only, crude 12 in., diesel 6 in., spray oil 6 in. Berth available for 1 tanker, max. permitted draft 30 ft.

DENSITY: Average density in port is 1029.

FRESH WATER: Delivered by hoses at rate of 100 gallons per minute.

FUEL: Available, rate 250 t.p.h.

FIRE PRECAUTIONS: Extinguishers and water hoses available.

GANGWAY/DECK WATCHMEN: Watchmen can be obtained at day-time rates plus 25%, 50%, 75% and 100% to cover overtime, depending on the hour or day worked.

OPENING/CLOSING HATCHES: Work done by stevedores.

CERTIFICATES: Health and deratisation certificates needed.

CUSTOMS ALLOWANCES: 1 carton cigarettes and 1 bottle wine or spirits for each man.

CARGO GEAR: Must have current valid certificate.

IDENTIFICATION CARDS: Cards needed.

CONSULS: None.

REPAIRS: Only minor repairs.

REPATRIATION: Repatriation can be made on request by Master.

AIRPORT: Distance from wharf to airport is about 80 km. served by regular airlines; 4 flights per day which connect with Panamerican every day.

TIME: GMT minus 6 hours.

HOLIDAYS: January 1st, work impossible; April 3rd, work possible; April 4th, work impossible; April 5th, work possible; April 14th, work possible; May 1st, work impossible; September 15th, work impossible; October 3rd, work possible; October 12th, work possible; October 21st, work possible; December 25th, work impossible.

POLICE/AMBULANCE/FIRE: Contact telephone operator.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Ships must have Honduran flag on board.

SHORE LEAVE: Crew members allowed ashore, providing they do not have any diseases.

DELAYS: Delays can be expected any time there are 2 ships docked.

AUTHORITY: Port Commandant.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Hong Kong

HONG KONG: 22.18 N. 114.10 E. (See Plan)

PORT LIMITS (Approximately): Western Entrance – the N.S. line between S.E. extremity of Tsing Yi Rock and the flashing light at S.W. corner of Green Island. Eastern Entrance – the N.E./S.W. line between the on-shore FL.W and the FL.R lights either side of the Lei Yue Mun Pass.

DOCUMENTS:

Marine Department (arrival)
- Marine Department Shipping Report (Form MO. 144).
- Certificate of Registry.
- Passenger ship: Safety Certificate.
- Passenger or cargo ship: Load Line Certificate.
- Cargo ship: Radio Certificate.
- Cargo ship: Safety Equipment Certificate.
- Cargo ship: Safety Construction Certificate.
- Ship's Articles of Agreement with the crew (if the ship is British, or is a foreign ship belonging to a nation not represented by a consul in Hong Kong).
- Derating Certificate or Derating Exemption Certificate.
- 1 copy of the ship's Passenger List (if specifically requested).
- Clearance Certificate from the Last Port.
- 1 copy of the Import Cargo Manifest (if specifically requested).
- 3 copies of the Dangerous Goods Manifest (if applicable).
- Compulsory Insurance Certificate (Tankers).

Note: All the above documents/forms must be submitted to the Port Control Division of the Marine Department within 24 hours of a ship's arrival with the exception of the Dangerous Goods Manifest which should be submitted at least 48 hours prior to the vessel's arrival.

Marine Department (departure)
- Application for Port Clearance (Form MO. 7).
- 3 copies of the ship's export Dangerous Goods Manifest (if specifically requested).
- 1 copy of the ship's Export Cargo Manifest (if specifically requested).

Port Health Officer (arrival only)
- Maritime Declaration of Health.
- 1 copy of the ship's Passenger List.
- 1 copy of the Crew List.
- Derating Certificate or Derating Exemption Certificate (whichever is applicable).
- International Vaccination Certificate against smallpox for each passenger and Crew member on board.

Note: The above documents/forms must be produced for the inspection of the Port Health Officer on boarding at the quarantine anchorage.

Department of Commerce and Industry (arrival and departure)
- 2 copies of the ship's Import/Export Cargo Manifest.
- 2 copies of Import/Export Statement in respect of dutiable goods (Forms C. and I. 309 and C. and I. 309A).
- 2 copies of the declaration in respect of dutiable stores required during a vessel's stay in port (Form C. and I. 303).

Immigration Officer (arrival)
- 2 Transit-Passenger Lists.
- 2 Landing-Passenger Lists.
- 3 Crew Lists.

Note: The above forms must be produced for the inspection of the Immigration Officer on boarding after the ship has been 'cleared' by the Port Health Officer.

(departure)
- 2 Lists Passengers boarding.
- 2 Lists Transit Passengers.
- 2 Crew Lists.

Post Office (arrival only)
- 1 copy of the Ship's Mail Manifest.

Hong Kong Police
- 1 copy of The List of Arms and Ammunition on board (Nil return required) to be handed in at the Entry and Clearance Office with Marine Department papers.

ARRIVAL ADVICE: On entering Hong Kong waters shipmasters should contact MARDEP on VHF Channel 12, and report their position, ETA at Pilot station, final berth, and intended route inwards, East or West. If entering from the East then the vessels mast height above the water should also be reported. (This is needed for information to the airport where the runway extends close North of the Hung Hom fairway). Shipmasters are also asked to report any other relevant information such as dangerous goods on board. If the vessel is taking a Pilot, reference should be made to the 'Sailing Directions' in the China Sea Pilot Vol. I, with regard to the positions of the Pilot stations, and Pilots should only be embarked or disembarked at these points. Additional radio reports to MARDEP during the vessels inward or outward passage aid in the safe movement of all vessels in the port and approaches.

APPROACHES: A. (Dry-cargo vessels): The approaches are reasonably free from hazards and are well marked by day and night. Vessels working at buoys with drafts up to 29 ft. are requested to enter port via the Western Entrance. Other vessels with drafts up to 36 ft. by Lei Yue Mun entrance.

B. (Tankers): The tankers which berth at the Esso Company installation at Tsing Yi, and at the Mobil installation, also at Tsing Yi enter the harbour, but with the exception of the approaches to the Esso Terminal which was specially dredged for the purposes of accommodating vessels at 42 ft. draft, there is no limitation on depth save that at the individual berth.

C. Buoyage. The system of buoyage used in Hong Kong harbour conforms to the uniform system of maritime buoyage adopted by the lighthouse authorities in Britain. The main stream of flood tide within the harbour limits is from East to West and buoyage is laid accordingly. Several terrestrial navigational beacons within the waters of Hong Kong are also painted to conform with the uniform system of maritime buoyage.

Compulsory traffic separation lanes are in force for both the East and West approaches. Up-to-date Admiralty charts should be consulted for details.

PILOTAGE: Although pilotage is not compulsory in the port, Pilots licensed by the Pilotage Board are available to board ships at either entrance on request. The Hong Kong Pilotage Association, provide pilotage services. Pilots generally board in-bound ships using the Eastern entrance in the vicinity of the Lei Yue Mun turning buoy (Lat. 22° 16.4′ N. Long. 114° 16.3′ E.) and disembark at the same point from outward-bound ships. At the Western entrance, Pilots embark and disembark to the West of Green Island. It is a contravention of regulation 3(1) of the Merchant Shipping (Control of Ports) Regulations, for any vessel to pick up or discharge a Pilot within a distance of 7.5 cables from the centre of either the Lei Yue Mun Pass or Sulphur Channel. Maximum speed inside harbour, 8 knots.

ANCHORAGES: Examination anchorages (quarantine and immigration) for clearance inwards are situated within the harbour limits to cover the entry of shipping from East and West. The principal dangerous goods anchorages are situated at the Western end of the harbour and at Pun Shan Sek (tankers), whilst there are others at Junk Bay, Tsuen Wan and Rocky Harbour.

An anchorage for the discharge of logs has been designated. This was necessary because logs, which were being discharged and stored within harbour limits were endangering small craft, waterside installations and navigation.

The Western examination anchorage works 24 hours a day whereas the Eastern examination anchorage works from 0700–1900 hrs.

See also "Shipmaster's Report".

MAX. SIZE: Largest vessels calling regularly have been, dry-cargo: container vessels, length 965 ft., with drafts up to 40 ft.; tankers length 776 ft., draft 42 ft. Maximum size governed by draft of vessel. No limit as to length and beam. Draft in harbour: "A" class buoys 25 ft. to 44 ft. "B" class buoys 18 ft. to 27 ft.

PRATIQUE: The following conditions must be fulfilled before radio pratique can be granted: The ship must not have called at an infected port within 14 days prior to arrival at Hong Kong. There must be not more than 24 passengers on board at the time of arrival, provided that a vessel carrying more than 24 passengers may, at the discretion of the Chief Port Health Officer, be granted radio pratique if there is a ship's doctor on board.

The Master must furnish the following information to the Port Health Office not more than 20 hours and not less than 8 hours before his expected time of arrival at Hong Kong:

1. ports of call during the 14 days prior to arrival;
2. number of passengers on board;
3. a statement that all persons on board are healthy and in possession of valid international certificates of vaccination against smallpox;
4. a statement indicating whether any case of infectious disease has occurred on board during the voyage;
5. whether any person on board is sick;
6. the date of issue of the derating or derating exemption certificates.

Note 1: Shipping companies or Agents must send their applications for radio pratique in writing and, if granted, will be responsible for notifying the Master concerned.

Note 2: Maritime declarations of health and passenger and crew lists must be collected by the shipping companies or Agents and forwarded to the Port Health Office within 24 hours of the ship's arrival.

Note 3: Ships granted radio pratique will be required to display the following signal on arrival in the quarantine anchorage: Day: International code flag "TO". Night: 3 white lights in a vertical line 6 feet apart.

Note 4: The Master of the ship concerned will be held responsible for the accuracy of the statements contained in his cablegram requesting radio pratique.

Port Health. The hours of duty of Port Health Officers in the examination anchorages are similar to those of the Immigration Department. The Port Health launch exhibits the international code flag "Q" by day and a red light over a white light at night. The appropriate quarantine signal should be flown by a vessel until the Port Health Officer has completed his inspection.

IMMIGRATION: Immigration formalities take place at the Eastern or Western examination anchorages after clearance by the Port Health Authorities. Immigration launches are on duty 24 hours a day in the Western anchorage and from 0630 to 1800 hrs. in the Eastern anchorage throughout the year.

RADIO: Cable Agent via Radio Hong Kong call sign "VPS".

Signal Stations. 4 signal stations operated by the Marine Department are situated in the Eastern and Western approaches to, or within, the harbour limits as follows:

Eastern approaches: Waglan Island, (Lat. 22° 11′ N., Long. 114°

18.1′ E.). Western approaches: Green Island (Lat. 22° 17.1′ N., Long. 114° 06.5′ E.).

Marine Department Port Communications Centre, Lat. 22° 17.4′ N. Long. 114° 11.8′ E. North Point Signal Station, Lat. 22° 17.7′ N., Long. 114° 11.8′ E.

These stations are manned 24 hours a day throughout the year and contact can be made by means of international code flags or by signal lamp. In addition, the Marine Department Headquarters Signals Station can be contacted by VHF radio-telephone on Hague Plan Channel 12. Communication between the stations is provided by radio, land-line telephone and a teleprinter circuit.

It is mandatory for the Master of every ship arriving within signalling distance of any of the above signal stations to hoist the national colours and (if one shall exist) the house flag and the signal letters of the ship, and to identify the vessel to the signal station by visual signals if requested. On recognition of a ship in the approaches to Hong Kong, the name is immediately relayed to the Port Control Office of the Marine Department, and the ship's owners or Agents can be notified on request.

Wireless Telegraphy: Radio communication apparatus on board a merchant vessel is not permitted to be used while the vessel is within Hong Kong territorial waters except in the following circumstances:

When a vessel is proceeding through Hong Kong territorial waters such apparatus may be used to communicate on minimum power with the nearest coast station or, if communication with the nearest coast station is impracticable and the safe navigation of the vessel so requires, with a more distant coast station or another vessel;

For the purpose of summoning assistance on an occasion of danger to the life of any person or to the vessel;

For the purpose of carrying out experimental tests for which permission in writing must first be obtained.

Broadcasting arrangements – Typhoon Warnings: After the hoisting of local storm signal No. 8 or above, Radio Hong Kong and Commercial Radio will extend their hours of operation and simultaneously broadcast typhoon warnings in English and Chinese at 2 minutes to the hour and half past the hour precisely, throughout the day and night. Warnings in English will be broadcast by an announcer at each station; warnings in Chinese will be broadcast by a Chinese announcer from the Radio Hong Kong booth at the Royal Observatory. On certain occasions these arrangements will come into force should local storm signal No. 3 remain hoisted at the time when the radio stations normally close. The foregoing arrangements continue until the signal drops below No. 8 once again.

Frequencies: Radio Hong Kong (English Service) 545 kHz., 91 kHz.; (Chinese Service) 640 kHz., 94 kHz. Commercial Radio (English Service) 1530 kHz., 196 kHz.; (Chinese Service No. 1) 1050 kHz.; 1170 kHz.

VHF: Control Station, Hong Kong Port Radio call sign "Mardep" Channel 12. 24 hours listening watch. Range up to 35 miles.

Maritime VHF Radio-telephone Service (Hague Plan): This service operates in Hong Kong on 2 international channels, Nos. 16 and 26. Channel 16 (156.8 mc/s) is the simplex distress and calling frequency on which contact is made between shore and ship before changing over to the public correspondence channel, No. 26. The latter is a duplex channel and Hong Kong transmits on 161.9 mc/s and receives from ships on 157.3 mc/s.

Local connection to the service is *via* the Hong Kong Telephone Company and is made in the same way as for overseas radio-telephone calls by dialling "100". The local operator should then be informed that a telephone call is required on "the Maritime VHF Hague Plan Service". The operator will ask for details of the call, such as the name of the ship and the person required, and will then connect the call *via* Cable Wireless. Calls can also be sent from ship to shore. The range is about 50 miles and the service is available at all times of the day and night.

Harbour phones: Cable Wireless Ltd., on behalf of the Hong Kong Telephone Company, will install and maintain VHF radio-telephones on ships at buoys in the harbour for the duration of a ship's stay in port. Calls may be made between any 2 ships so equipped, and between a ship and any telephone number on the Hong Kong or Kowloon exchanges.

Shipmaster's Report: VHF Channel 8 is used for search and rescue.

TUGS: Available for berthing and unberthing. Advance booking is required. See Table B.

WHARVES: *China Merchants S.N. Co. Limited* – berths suitable for coastal shipping:

		Length (ft.)	Depth (ft.)
West Point	Berth No. (1) E.	320	35
	Berth No. (2) W.	320	35
H. K. and Kowloon Wharf Co.			
	Ocean Terminal	1,250	35
	Pier No. (3) S.	600	32
	Pier No. (3) N.	600	34
	Pier No. (4) S.	700	32
	Pier No. (4) N.	700	33
	Pier No. (5) S.	800	34
	Pier No. (5) N.	800	36
North Point Wharves			
	No. (1) E.	700	30
	No. (2) W.	530	30
Kwai Chung Container Terminal			
	6 berths	1,000	40
Whampoa Terminal Ltd.		600	30

BERTHING: Berthing of dry-cargo vessels alongside wharf can be performed any time during day and night. Berthing at tanker wharf not permissible after sunset. Ships carrying explosives must obtain permission from the Marine Department before berthing is allotted.

When berthing at Kowloon Wharf signals will be exhibited on the signal station on top of the Kowloon Star Ferry pier. Code flag Y by day and 1 green light over red light at night indicates anchor and await instructions. Crossed bamboo poles on which are displayed code flags N and B, when sited at the end of a pier denotes that the vessel is required to berth stern to the praya wall.

Boatmen. Labour to handle ships' moorings lines when berthing and unberthing at any of the wharves in Hong Kong waters is supplied by the owners of the wharf concerned, the cost being included in the berthing fee. For berthing at a Marine Department mooring buoy it is usual for the ship's Agent to arrange for boatmen to handle the ship's slip wire and anchor cable, unless the ship's crew undertake this task. The services of boatmen are generally obtained through the Hong Kong Pilotage Association. For night berthing 2 boats are normally required – one to handle the wire and cable and the other to provide a lighted marker for the mooring buoy.

Mooring Buoys. See "Max. size" All ships are required to secure to Marine Department mooring buoys by their chain cable. The maximum length of a ship permitted to berth at an "A" class mooring is 600 ft., the swing circle encompassing each buoy having a radius of 700 ft. The maximum length of a ship permitted to berth at a "B" class mooring is 450 ft., the radius of swing circle around such buoys being 550 ft. It is therefore within the limits of safety for a vessel, when secured to a Marine Department mooring, to slack out to "1 shackle on the windlass" and still clear ships berthed at adjacent buoys, except in exceptional circumstances. As all Marine Department moorings are of the 1-legged type, it is permissible, should circumstances make it necessary, for a ship, when attempting to secure to a mooring, to drop an anchor at not less than 50 feet from the buoy without fouling the mooring chain. It should be noted, however, that moorings sited within the man-of-war anchorage and the Hongkong and Whampoa Dock Company's private mooring H.W.D. No. 1 in Hung Hom Bay are either of the 2 or 3-legged type, and it is therefore not permissible to use an anchor when berthing.

44 "A" class mooring buoys and 29 "B" class mooring buoys for ocean going vessels. Additionally 2 "B" class mooring buoys available at Yam O Bay, Lantan Island, for vessels with cargoes of logs.

STEVEDORES: The following table shows the average handling rates per gang hour:

Cargo	*Place*	*Loads tons per gang hour*	*Discharge tons per gang hour*
General	Wharf	12	15
General	Stream	10	12
Bale or bag	Wharf	20	25
Bale or bag	Stream	15	20

Stevedores work 24 hours per day except Mid-Autumn Festival and Chinese New Year Holidays.

TANKERS: Any leaking of oil to water will be subjected to heavy fines. If not gas-freed, not allowed through harbour. Max. draft for berthing 42 ft. See Table A.

DENSITY: 1017.

FRESH WATER: Available but the supply is sometimes limited, depending on the storage levels in Hong Kong's reservoirs. The supply to ships is made at commercial wharves and from water boats. See Table C.

FUEL: Excellent facilities exist for bunkering vessels with fuel oil and coal. Fuel oil can be obtained either at the wharves adjacent to the oil installation, or from harbour oilers owned and operated by the oil companies. Fuel oil from these vessels can be pumped on board without impeding cargo operations. Adequate stocks of good quality bunker coal suitable for coal-fired marine boilers are maintained in the port. Fuel oil available with viscosity up to 1,000 sec. Redwood. 24 hours notice for supply is required. Also gas oil and marine diesel available. See Table D.

FIRE PRECAUTIONS: The Fire Services Department operates fire floats. One of these, the "Alexander Grantham" is one of the largest and most powerful in the world, being equipped with machinery capable of pumping 10,500 gallons a minute at a pressure of 90 lb. per square inch through a battery of monitors. This vessel is equipped to deal with any type of fire on any size vessel, and is designed to operate both in the port and at sea.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended.

OPENING/CLOSING HATCHES: Usually performed by ship's crew.

CERTIFICATES: Following certificates to be presented to the Marine Office before clearance could be granted:

Ship's Register and/or Tonnage Certificate.
Load Line Certificate.
Radio Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Derating Certificate or Derat Exempt Certificate.
Last Port Clearance.

CARGO GEAR: Normal routine gear, wire and rope slings, nets, grabs, boardtrays and floating cranes up to 100 tons available.

Vessel's cargo gear must be used for working cargo at all alongside berths.

IDENTIFICATION CARDS: No identification card is required for crew or passengers going ashore except when vessel has exceeded a limit of stay of 14 days, after this period all Crew members must deliver to the Immigration Office through the Agents a signed copy of the Immigration Disembarkation Card.

Table A. OIL INSTALLATIONS

Company	Location	Length of berth	Depth alongside (Chart Datum)	Grade of oil	Capacity (water tons)	Delivery rate	Hose connection
(i) Shell Co. (H.K.) Ltd.	Kwun Tong	670′	34′	Boiler fuel	4,500	120	6″
				Marine diesel fuel	4,200	140	6″
	Tai Kok Tsui	180′	10′	Boiler fuel	610	20	2″
				Marine diesel fuel	220	25	2″
	North Point	140′	10′	Gas oil	1,740	27	2″
	Ap Lei Chau	900′	60′	Boiler fuel	143,000	400	10″
				Marine diesel	18,000	400	10″
				Gas oil	25,600	450	8″
(ii) Caltex Oil Hong Kong Ltd.	Tsuen Wan	710′	29′	Boiler fuel	27,700	400	8″–10″
				Gas oil	13,600	200	6″–8″
(iii) Mobil Oil Hong Kong Ltd.	Tsing Yi	Any length	38′	Boiler fuel	39,000	500	10″
				Mobil diesel	26,000	300	8″
				Kerosine	17,000	300	8″
(iv) H.K. Oil Co. (Gulf Products)	Tsuen Wan	292′	28′	Boiler fuel	22,589	300	8″
				Marine diesel fuel	2,794	200	6″
	Tsing Yi	Any length	40′	Boiler fuel	39,662	300	10″
				Marine diesel fuel	17,489	300	8″
(v) Esso Standard Oil (H.K.) Ltd.	Nga Ying Chau	820′	40′	Boiler fuel, Marine diesel and white oil	232,900	820	12″
	North Point	150′	10′	White oil	400	7	4″
(vi) Peninsular Petroleum Co.	Tsing Yi	650′	45′	Kerosine, Marine diesel	58,000	300	10″
				LPG – Gas Oil	50,000	600/700	

(i) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available from shore and by lighter. Berthing facilities available only for small coasters, ferries and harbour craft.
(ii) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.
(iii) 2 tugs are normally required for berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.
(iv) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.
(v) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available. Shore electricity supply is not available. Fresh water available by lighter only.

Table B. TUGS.

Company	Vessel	Power	Bollard Pull	Propulsion
Hongkong Towage & Salvage Company, Ltd.	*Kwai Chung*	3,400 BHP	Over 40 tons	Diesel/Twin Screw/Kort Rudders
	Heung Kong	3,000 BHP	40 tons	Diesel/Twin Screw/Kort Rudders
	Kau Lung	2,100 BHP	39 tons	Diesel/Single Screw/Kort Rudder
	Peng Chau	2,200 BHP	30 tons	Diesel/Twin Screw/Kort Rudders
	Laimun	1,860 BHP	30 tons	Diesel/Twin Screw/Kort Rudders
	Waglan	1,700 BHP	25 tons	Diesel/Twin Screw/Kort Rudders
	Po Toi	1,700 BHP	25 tons	Diesel/Twin Screw/Kort Rudders
	Hung Hom	1,600 BHP	25 tons	Diesel/Single Screw/Kort Rudder
	Lamma	1,150 BHP	18 tons	Diesel/Single Screw/Kort Rudder
	Tai Tam	1,050 BHP	13 tons	Diesel/Single Screw/F.P.
	Shek O	1,000 BHP	10 tons	Steam/Single Screw/F.P.
	Tsing Yi	440 BHP	5 tons	Diesel/Single Screw/F.P.
	Tolo	410 BHP	2 tons	Diesel/Single Screw/F.P.
	Tathong	270 BHP	2 tons	Diesel/Single Screw/F.P.
The Far East Towage Co. Ltd.	*Howa*	3,200 BHP	45 tons	Diesel/Twin Screw/Kort Rudders
	Kowa	3,200 BHP	45 tons	Diesel/Twin Screw/Kort Rudders
	Far East No. 1	2,000 BHP	25 tons	Diesel/Twin Screw/Kort Rudders

Company	Vessel	Type	B.H.P.
H.K. & Kowloon Wharf & Godown Co. Ltd.	*Snipe*	motor tug	140
	Gannet		144
	Heron		205
	Penguin	motor tug	240
	Cormorant	motor tug	205
	Kowloon		450

Notes
All the tugs listed here are suitable for towing lighters in the harbour.

Table C. WATER BOATS.

Company	Vessel	Capacity	Delivery
Leung Tai Kee Waterboat Co. Ltd.	Taikee No. 1	150 long tons	180 tons/hr.
	Taikee No. 2	120 long tons	180 tons/hr.
	Taikee No. 3	320 long tons	180 tons/hr.
	Taikee No. 5	250 long tons	180 tons/hr.
Union Waterboat Co. Ltd.	Tai Yat No. 1	270 tons	150 tons/hr.
	Tai Yee No. 2	290 tons	150 tons/hr.
	Tai Sam No. 3	300 tons	150 tons/hr.
	New No. 4	340 tons	170 tons/hr.
	Tai Ng No. 5	295 tons	150 tons/hr.
	Pier services to ocean terminal and Kowloon wharf No. 5		1,500 tons/day

Table D. PORT OILERS.

Company	*Vessel*	*Grade of oil*	*Capacity-product long tons*	*Delivery rate per hour in water tons*
Shell Co. (H.K.) Ltd.	M.V. Fung Wong Shan	Boiler fuel or Marine diesel	280	270
	M.V. Lung Shan	White oil	350	270
	Fu Yung Shan	Boiler fuel or Marine diesel	750	450
	Shih Tou Shan	Boiler fuel or Marine diesel or White oil	750	450
	Shell Wor Fung	White oil	260	80
	Shell Shun Fung	Boiler fuel or Marine diesel	1,500	900
Caltex Oil Hong Kong Ltd.	Caltex 54	Boiler fuel or Marine diesel	400	120
	Caltex Tsuen Wan HK. 2	Boiler fuel or Marine diesel	800	280
	Caltex 111	Gas Oil	80	60
	Caltex 133	Gas Oil	250	100
Mobil Oil Hong Kong Ltd.	M.V. Mobil Meishan	Boiler fuel or Marine diesel	920	300
	M.V. Mobil Mei Ping	Light oil	100	30
	M.V. Mobil Mei An	Light oil	100	30
H.K. Oil Co.	Barge 101	Boiler fuel	750	350
	Barge 102	Marine diesel/Boiler fuel	500	150
	Barge 103	Gas oil	1,000	150
Esso Standard Oil (H.K.) Ltd.	M.V. Esso Tsuen Wan II	White oil	270	46
	M.V. Esso Tsing Yi	Boiler fuel or Marine diesel	1,600	500
	M.V. Esso Hok Un	Boiler fuel or Marine diesel	1,600	500

CONSULS: The following countries maintain consular offices in Hong Kong:

Argentina	Great Britain	Norway
Australia	Greece	Pakistan
Austria	Guatemala	Panama
Belgium	Honduras	Peru
Bolivia	India	Philippines
Brazil	Indonesia	Portugal
Burma	Irish Republic	Singapore
Canada	Israel	South Africa
Colombia	Italy	Spain
Costa Rica	Japan	Sweden
Cuba	Khmer Republic	Switzerland
Denmark	Korea	Thailand
Dominican Republic	Lebanon	United Arab Republic
Ecuador	Mexico	U.S.A.
El Salvador	Netherlands	Uruguay
Finland	New Zealand	Venezuela
France	Nicaragua	Vietnam
Germany		

REPAIRS: In addition to ship and engine maintenance and repair work, the dockyards have facilities for many miscellaneous services such as are provided by modern dockyards. These include physical tests on materials such as anchors and cables, for which test certificates can be supplied, chemical analysis, drawing office requirements, chemical cleaning of engines and boilers, shot and sand blasting, zinc spraying to name but a few.

DRY DOCKS:

Hong Kong United Drydocks Ltd. (Taikoo Yard): Dry dock at Quarry Bay; length 787 ft. min., width 88 ft. 6 in. Floating dock for vessels up to 25,000 tons.

Hong Kong United Dockyards Ltd. (Kowloon Yard): 10 dry docks of which the largest is length 700 ft., min., width 88 ft.

Island Navigation Corporation – have a 100,000 tons capacity floating dock at the S.W. side of Tsing Yi Island.

REPATRIATION: All formalities connected with engagement and discharge on board British ships, and on foreign ships whose flag is not represented by a consular officer resident in Hong Kong, are required by law to be conducted at the Mercantile Marine Office. Hong Kong continues to be one of the main recruitment centres of Asian seamen and a Seamen's Registry Office, which is an adjunct to the Mercantile Marine Office, maintains records of all Hong Kong seamen. The Seamen's Recruiting Office controls the recruitment, selection and supply of Chinese seamen to ships requiring them, and is situated at the Rumsey Street Reclamation, adjacent to the Marine Department.

Seamen's Travel Documents. The Hong Kong Government Seaman's Discharge Book is issued by the Marine Department and is a record of employment. The Hong Kong Government Seaman's Identity Book is issued by the Immigration Department and enables the holder to return to Hong Kong without a visa during the validity of the book (initially 3 years, with 3-year renewals), and also within 12 months after the expiry of the validity of the book.

A Seaman's Certificate of Nationality and Identity is issued at the Immigration Department only to seamen of British nationality, whereas the Seaman's Discharge Book and the Seaman's Identity Book may also be issued to alien seamen. It is the equivalent of a British passport and no visa is required for return to Hong Kong.

All Crew members signing-off for repatriation must first obtain permission from the Director of Immigration. All crew arriving to join vessel must produce a guarantee letter through the Agents responsible for all maintenances and other eventual expenses.

AIRPORT: Regular International flights. Airstrip capable of any size of jet planes. Transportation from port to airport terminal about 40 minutes bus drive.

TELEPHONES: Are available at all alongside berths for connection on board ship.

TIME: Standard time kept in the colony is 8 hours in advance of GMT. Summer Time, which is 1 hour in advance of Standard Time, is kept from 0330 hrs. on the first Sunday after 15th April to 0330 hrs. on the first Sunday after 15th October, each year.

HOLIDAYS: Public holidays in Hong Kong occur mainly on festivals whose date is governed by the lunar calendar.

Every Sunday; First week-day in January; Chinese New Year's Day; Second day of Chinese New Year; Third day of Chinese New Year; General holiday in lieu of that for the Ching Ming Festival; Good Friday; Day following Good Friday (Ching Ming Festival); Easter Monday; Birthday of Her Majesty the Queen; Tuen Ng Festival; First week-day in July; First Monday in August; Last Monday in August, which shall be Liberation Day; Day following Chinese Mid-Autumn Festival Day; Day following Chung Yeung Festival: Christmas Day; First week-day after Christmas Day.

POLICE/AMBULANCE/FIRE: When the services of the fire brigade, immigration, port health or police are required, appropriate signals should be made in accordance with the list of "Hong Kong Port Signals". The Marine Division of the Police is responsible for internal port security. Its fleet of launches maintain constant patrols in Hong Kong's territorial waters.

GENERAL: No waste to be disposed into harbour. A free refuse disposal service is available for domestic refuse. Ships agents can arrange this through Marine Department. Chain required for mooring to buoy. Unnecessary use of ship's sirens prohibited.

SERVICES: Services available including tank cleaning, painting, washing, compass adjusting, calibration of direction finder, radar repairs, 24 hours service laundry, supply of stores and provisions, motor-boats service between ship and shore.

SHORE LEAVE: Crew members are usually allowed ashore.

CLASSIFICATION SOCIETIES: The following Classification Societies with British technical committees are represented by their own exclusive officers in Hong Kong: Lloyds Register of Shipping, P&O Building, Hong Kong; The American Bureau of Shipping 1209, New Sincere Building, Hong Kong; Bureau Veritas, 2107, International Building, Hong Kong; Det Norske Veritas (Oslo), China Emporium Building, Hong Kong; Germanischer Lloyd, c/o Jebsen & Co., Prince's Building, Upper Ground Floor, Hong Kong.

WEATHER: 1st June to 31st October usually considered as typhoon season. No operation of cargo when typhoon signal No. 3 or upward is hoisted. Also see "Radio".

DEVELOPMENT: The central fairway is being dredged to – 36 ft. Reclamation continues in various areas within the harbour. Additional 'Public Cargo Working Areas' are near completition and others planned.

AUTHORITY: Director of Marine.

AGENT: Shipping & Transport Services Ltd., Room 7 G/F, Printing House, 6 Duddell Street, Hong Kong. Telephone: 5.232358. Cables: Mainstay HX. Telex: 83173 Mstay HX.

Iceland

ISAFJORD: 66.05 N. 23.06 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: TFZ Isafjord Radio 2182 kc/s. To call Pilot use morse lamps or whistle "G".
ANCHORAGE: In Fjord, depth of 6 fathoms.
MAX. SIZE: Dry cargo vessels up to 4,000 g.r.t. Tankers up to 30 ft. draft.
HEALTH: Inform Agent.
RADIO: TFZ 2182 kc/s.
TUGS: Not required.
MEDICAL: Inform Agent 1 hour in advance. Hospital available.
FRESH WATER: Always available through hose-pipes.
FUEL: All grades available advance notice required is 2 hours.
GANGWAY/DECK WATCHMEN: Necessary. Carried out by crew.
OPENING/CLOSING HATCHES: Performed by crew.
CERTIFICATES: All relevant certificates required.
CUSTOMS ALLOWANCE: Tobacco: 200 cigarettes each crew member, 600 for Master; Wine/Spirits; 2 bottles for each crew member, 6 bottles for Master.
IDENTIFICATION CARDS: Not required.
CONSULS: British, German, Norwegian, Swedish, Danish.
REPAIRS: All types of repairs possible.
DRY DOCKS: 1 small dry dock available.
REPATRIATION: No facilities exist.
AIRPORT: Distance from port 2 miles, regular flights.
TIME: GMT. No change.
HOLIDAYS: Work carried out every day.
POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire, tel. 3258.
TELEPHONES: None available.
SERVICES: Compass adjusting, radar, echomaster, specialists.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

KEFLAVIK-NJAROVIK: 64.00 N. 22.33 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Pilotage is compulsory for vessels over 100 tons net. Pilot is available for all vessels 24 hours per day and is reached via Reykjavik Radio. Pilot boards vessel 1 mile outside Vatnsnes.
ANCHORAGE: Outside the harbour in depths of 27 m. with good holding ground.
TUGS: Use of tug is not necessary.
BERTHING: Port has concrete pier which will be extended for a length of 110 m., and a wooden quay 45 m. in length. Depth of water in harbour and alongside wharves is 20 to 45 ft. Entrance is easy for access.
STEVEDORES: Working hours: 8 hours per day 0800 to 1700 hrs.
FRESH WATER: Available through hose connection on the quay.
FUEL: Available.
REPAIRS: 2 shipyards available.
AIRPORT: Keflavik International Airport is only 4 km. away.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: All Tel. 2222.
TELEPHONES: None available on board.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

NESKAUPSTADUR, Nordfjordur: 65.09 N. 13.41 W.

DOCUMENTS:
Crew List.
Passenger List.
Customs Documents.
Provision List.
Manifests and Ship's Papers.
PILOTAGE: No Pilots. Road clear, keep in middle of fjord.
ANCHORAGES: Depending wind. With North or N.W. winds anchor towards South coast and well in the fjord. When N.E. off town towards North coast, but keep clear of small boat moorings.
MAX. SIZE: Length/breadth no restriction. Main quay is 70 m. long and it is built right out to the steep bank at the coast. Depth close to jetty 7 m. but increases quickly.
HEALTH: Free pratique automatic from Customs Officer. Radio for doctor if illness on board.
RADIO: Neskaupstadur Radio 2182 kc/s. (TFM) 24 hour watch. VHF, Channels 16 and 26. Range approximately 40 miles.
TUGS: No tugs but large motor-boats are normally obtainable if necessary.
BERTHING: No specific requirements unless over 7 m. draft, when fendering required.
STEVEDORES: If possible 24 hours ETA. Preferably before 1600 hrs. for commencing next morning. Load or discharge rates according to goods.
MEDICAL: Always send advance notice of required medical attention. Hospital available, also 3 doctors and dentist.
TANKERS: Diameters of lines 4 in. and 6 in. Oil companies BP and Shell have their own small quays. The third company Esso uses BP jetty.
DENSITY: Normal.
FRESH WATER: Shore line on jetty. No barge.
FUEL: Diesel oil only.
DEVELOPMENTS: No expected draft increases. New berths are under construction but will take unforeseen time.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: Ship's Register.
CUSTOMS ALLOWANCE: 200 cigarettes a week while in Iceland. Only 1 allowance of spirit, i.e. on arrival 1 to 3 bottles according to occupation.
IDENTIFICATION CARDS: Not required.
CONSULS: Denmark tel. 199 or 330. France tel. 14 and 19.
REPAIRS: Limited repairs to engines, hull and deck. Good repairs to radars, sounders, tiller pilots, etc.
DRY DOCKS: None. 1 slipway, 450 tons.
REPATRIATION: Winter flights twice a week or more. Summer every day.
AIRPORT: Distance 3 km.
TIME: GMT, no alterations.
HOLIDAYS: Last Thursday April; 17th June; 1st May; 25th and 26th Dec.; New Year, etc. If work is carried out 31st Dec., 24th Dec., Saturday before Easter and Whitsun double pay is claimed.
POLICE/AMBULANCE/FIRE: Telephone office at shore end jetty.
TELEPHONES: No arrangement to place telephones on board.
SERVICES: No tank-cleaning equipment. No discharge of tank-washings. Compass adjusting available.
SHORE LEAVE: Allowed.
DELAYS: None except if berth not available.
AGENT: Gudmundur H. Sigfusson, Thiljuvellir 6, Cable address "Sigfus". Tel. 14 and 19. No Telex. Aviation, Shipping and Trawler Agent.

PATREKSFJORDUR: 65.35 N. 23.59 W.

DOCUMENTS: 8 Crew Lists, Passenger Lists, Custom Documents, Health Documents, Manifests, Bills of Lading, Ship's Papers.
PILOTAGE: Pilotage not compulsory, but if needed then contact Radio Patreksfjordur on 2182 M.F.
ANCHORAGE: Anchorage is sheltered by the peninsula.
MAX. SIZE: See "Berthing".
RADIO: Radio Patreksfjordur on 2182 M.F.
TUGS: Available.
BERTHING: The entrance has a depth of 4.7 m. to 4.9 m. (15.5 to 16 ft.) at LLWST. The harbour has a depth of 6.4 m. (21 ft.) at LW, and 10 m. (33 ft.) at HW. 320 m. of quayage with depths from 5.5 m. to 5.8 m. (18 to 19 ft.) alongside. The harbour can be entered by day and night.
STEVEDORES: Working hours 0800 to 1900 hrs.
MEDICAL: Hospital available, contact through radio.
FRESH WATER: Available. No notice required.
FUEL: Available. No advance notice required.
REPAIRS: Machine-shop. General repairs can be effected. Diver obtainable.
AIRPORT: About 26 km. distance from harbour. Regular service, by airlines.
TIME: GMT. No change.
SHORE LEAVE: Allowed.
AUTHORITY: Patrekshofn, Patreksfiroi.

REYKJAVIK: 64.09 N. 21.50 W. **(See Plan)**

DOCUMENTS:
For the Immigration Office
1 Crew List.
1 Passenger List.
For Customs Authority
Master's Report on vessel's arrival from abroad.
Master's Certificate with Manifests of all goods.
Master's Certificate with Manifests of goods to each port of discharge.
Health Declaration.
List of Provisions and other Stores in ship.
Ordinary procedure at least 5 copies of each manifest (3 for customs).
PILOTAGE: Pilotage compulsory. Telegraphic address: Harbour Master, Harbour Office, Reykjavik. Desirable advance notice of ETA 24 hours and again notice 3 hours before expected time of arrival. VHF working Channel 12 at Pilot station and pilot boats. All day round watch.
Pilot boat: Grey hull with red and white deckhouse. International signals used if necessary. Pilot boat leaves harbour on request and meets vessel up to 1 naut. mile off Grotta (East of buoy 6): Most frequent boarding place is buoy 7 Kollafjordur.
ANCHORAGE: Good anchorage at Kollafjordur in 30 to 35 m. water 1.5 miles North of Engey lighthouse. Anchorage prohibited in neighbourhood of harbour entrance.
RESTRICTIONS: All day service. Draft in old harbour restricted at MLWST to 18 ft. In Sundahofn to 26 ft. No other restriction.
MAX. SIZE: Longest straight quay 244 m. (800 ft.). Breadth unrestricted. Depth 26 ft. at MLWST (29 ft. at MLWNT). At present 3 installations for oil carriers to discharge through submerged pipe-lines. Moorings for ab. 20,000 d.w.t. ships and draft restriction to 21 ft. in the approach to one of these installations.
HEALTH: Pratique obtained through customs authorities. In case of suspected disease notify port office or Agent in advance.
RADIO: Reykjavik Radio TFA.

RADAR/VHF: No harbour radar. Pilot office can be contacted by VHF Channel 16. Working Channels 12 and 14.
TUGS: Tugs meet vessels on roadstead. Ship's lines used.
BERTHING: Bigger vessels preferably handled at high water.
STEVEDORES: Stevedoring must be arranged in advance preferably by Agent.
MEDICAL: Medical attention available without notice. For hospital stay or surgical operation advance notice desirable, either through Agent or port office.
TANKERS: Pipe-lines diameter for discharging is 8 in.
DENSITY: Salinity varies from 33.6% to 35.0% giving sea water density about 1027 in average.
FRESH WATER: Water delivered from taps at quay at rate of 20–30 t.p.h, on the roadstead delivered by tug with 50 cu. m.water-tank.
FUEL: Grade of fuel oil 200–400 per second. Supplied by oil-pipe or by barge. If supplied by barge then 1 day's notice required.
FIRE PRECAUTIONS: Ordinary precautions for handling of dangerous goods applied.
DEVELOPMENTS: In a new harbour area – Sundahofn – quay construction, dredging and reclamation just finished. Length of quay 380 m. and about 50 acre storage area under development. Discussion is taking place on new oil landing facilities to accommodate up to 70,000 t. tankers.
GANGWAY/DECK WATCHMEN: Ship's gangway to be used. Watchmen services from ashore not necessary but can be arranged if asked for.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CERTIFICATES:

1. Certificate of Nationality.
2. International Tonnage Certificate.
3. Certificate of Seaworthiness.
4. Cargo Ship Safety Construction Certificate.
5. Cargo Ship Safety Equipment Certificate.
6. Cargo Ship Safety Radiotelegraphy Certificate or Cargo Ship Safety Radiotelephony Certificate.
7. International Load Line Certificate.

Passenger ships must have certificates No. 1, 2, 3, 7 and in addition Passenger Ship Safety Certificate.
CUSTOMS ALLOWANCES: 200 cigarettes or equivalent. 0.75 litre beverage, 24 bottles beer.
IDENTIFICATION CARDS: Identification card must be carried.
CONSULS:

U.S.A.	Embassy	Tel. 24083
Belgium	Consul General	,, 20000
Brazil	Consul	,, 11500
Chile	Consul	,, 23597
Denmark	Embassy	,, 13747
Finland	Consul General	,, 24280
France	Embassy	,, 17621
Greece	Consul	,, 19621
Holland	Consul General	,, 12085
Israel	Consul General	,, 11043
Italy	Consul General	,, 11055
Japan	Consul	,, 17700
Canada	Consul General	,, 38100
Mexico	Consul	,, 18995
Norway	Embassy	,, 13065
Poland	Commercial Attache	,, 18759
Portugal	Consul	,, 11610
U.S.S.R.	Embassy	,, 15156
Spain	Vice-Consul	,, 13057
Great Britain	Embassy	,, 15884
Switzerland	Consul	,, 24209
Sweden	Embassy	,, 13216
Czechoslovakia	Commercial Attache	,, 19823
Turkey	Consul General	,, 16666
W. Germany	Embassy	,, 19535
Uruguay	Consul	,, 12720

REPAIRS: All kinds of ship repair possible.
DRY DOCKS: Only slipways available up to 2,000 metric tons weight. Dimensions: Length 85 m., breadth 13.6 m.
REPATRIATION: Can be arranged.
AIRPORTS: Reykjavik Airport within 10 minutes drive. Mostly for local routes. Keflavik Airport 50 km. distance. Served regularly by airlines both to Europe and America.
TIME: Icelandic summertime used all year round and is same as GMT.
HOLIDAYS: January 1 (New Year's Day); Maundy Thursday; Good Friday; Easter Monday; May 1; Ascension Day; Whit Monday; June 17 (National Day); First Monday in August (Bank Holiday); Christmas Day and Second Christmas Day. On Christmas Eve and New Year's Eve work stops at noon. Dock work goes on on Bank Holiday and by Labour Union permission work may be carried out on Saturday against overtime payment and exceptionally at night until 2200 hrs.
POLICE/AMBULANCE/FIRE: Police 11166; Ambulance 11100; Fire 11100.
TELEPHONES: Telephone connection can be arranged at some berths in the old harbour and in Sundahofn telephone connections will be at the quay.
GENERAL: Engines may not be run while ship is berthed.
SERVICES: Compass adjusting carried out by private firm as well as tank cleaning.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Normally no delay is to be expected beyond that caused by normal customs clearance.
AUTHORITY: Reykjavik Port Authority.

SIGULUFJORD: 66.10 N. 18.50 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Compulsory. Pilot meets vessel about 200 m. from harbour entrance.
ANCHORAGE: East of harbour in depths according to draft 25 m. to 30 m. good holding ground. Gales from North set heavy sea, vessels then seek anchorage in small bay S.W. of Siglunes.
RADIO: Siglufjordur Radio TFX.
TUGS: None available.
BERTHING: There are several piers and wharves inside the North Mole, 3 quays used by larger vessels have depths up to 23 ft. at LW.
Quays: Hafnagardur, on the South side of North Mole, has a length of about 125 m., with a depth of 6.5 m. (21.3 ft.) alongside. Londunarbryggja has a length of 100 m., with a depth of 7 m. (23 ft.) alongside. Baejarbryggjan (Town Quay) has a length of about 100 m. with a depth of 6 m. (19.7 ft.) alongside.
STEVEDORES: Available. Working hours 0700 to 1200 hrs. and 1300 to 1700 hrs; overtime can be arranged.
MEDICAL: All facilities available.
FRESH WATER: Available.
FUEL: Available in general grades only.
GANGWAY/DECK WATCHMEN: Necessary.
OPENING/CLOSING HATCHES: Stevedores normally perform this work.
CARGO GEAR: Ship's own used (no cranes).
IDENTIFICATION CARDS: Not required.
CONSULS:

Denmark Tel. 71232	Norway Tel. 71160
Finland ,, 71569	Sweden ,, 71421

REPAIRS: For moderate size vessels can be obtained. Diver available.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: All tel. 71170.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

SKAGASTROND: 65.50 N. 20.20 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Pilots are available. When approaching port, order Pilot through Agent if required.
MAX. SIZE: Draft max. 19 ft.
MEDICAL: Doctor available but located in Blonduos 20 km. away.
FRESH WATER: Available from June 15th to October 15th but other months uncertain.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
REPAIRS: Small repairs available.
AIRPORT: Nearest 100 km. away at Sauoarkrokur.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: Telephone in village police station 20 km. away.
TELEPHONES: None available.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

VESTMANNAEYJAR: 63.30 N. 20.15 W.

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Manifest.
Ship's Register.
PILOTAGE: Ship to advise over Vestmannaeyjar Radio ETA. Pilot always available but 1 hour's advance ETA is required. Pilot is taken on board at 1 of the 2 anchorages.
ANCHORAGE: There are 2 anchorages with depths from 28 m. to 51 m., good holding ground:
1. About 0.5 miles East of entrance to harbour in depth of 51 m.; this anchorage is exposed to the prevailing winds (from East and S.E.). On North side of this anchorage is an overhead power cable and submarine electrical cable and submarine water-pipe.
2. About 0.5 miles North of harbour and on North side of peninsula in depths of 28 m. to 34 m.; this anchorage is exposed to winds between West and North.

RESTRICTIONS: No restrictions except for largest vessels. They must enter at high tide.
MAX. SIZE: 5,000 g.r.t.
RADIO: Vestmannaeyjar Radio. VHF available.
TUGS: Normally join in-coming vessels at anchorage. The use of tug is optional.
STEVEDORES: Available. Ordered by Agent.
MEDICAL: Not necessary to receive advance notice. Hospital facilities exist.
TANKERS: Discharge lines, 7 in.
FRESH WATER: Shore installations on every berth.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Stevedores.
CUSTOMS ALLOWANCES: For each crew member; 100 cigarettes or 20 cigars or 100 grm. tobacco, and 1 bottle spirits.

IDENTIFICATION CARDS: Not required.
CONSULS: Denmark, Germany, Great Britain, Norway, Sweden. To be called through Vestmannaeyjar Radio.
REPAIRS: All repairs possible.
AIRPORT: Local airport. Daily connection to Reykjavik.
TIME: Local time GMT.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (1 May); Ascension Day; Whit Monday; National Festival Day (17 June); Prayer Day; Christmas Day (25 December). No work on New Year's Day, Good Friday, Easter Sunday, Whit Sunday, 17 June, Christmas Day.
POLICE/AMBULANCE/FIRE: All tel. 2121.
SERVICES: Compass adjusting, etc.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

NOTES

Please also advise Shipping Guides (Services) Ltd.

India

COURTESY FLAG: Correct flag to be flown by foreign ships visiting Indian ports is Indian Merchant Navy Ensign (a red flag with a length of one and one half times the width and with National Flag of India superimposed in top quarter next to staff) and not Indian National flag.

SHIP'S OFFICER'S REPORT: Apart from the various forms and Crew Lists, etc., the Customs Boarding Officer also requires a List of Private Property in the possession of the Master, officers and crew on Form No. IV in duplicate and the local Agents need 2 more copies of the same for clearing the vessel inward. This procedure is followed when a vessel arrives from abroad or even when she is arriving from an Indian Port. It is common in both the cases.

ALLEPPEY: 09.29 N. 76.23 E.

PORT LIMITS: On the North by a line drawn from the North boundary pillar (white masonry structure) to 7 fathoms of water. On the South by a line drawn from the South boundary pillar, S. W. to 5 fathoms of water and thereon West to 7 fathoms of water. On the West by a line running North to South joining the Northern and Southern boundary lines. On the East by the beach road from the North boundary pillar to a stone on the beach road 220 ft. East of South boundary pillar.
DOCUMENTS:
(a) For Port Office:
Last port clearance (original for verification and return). Ships' Registry (original for verification and return). Load Line Certificate (for perusal and return). Safety Radio Telegraphy Certificate (for perusal and return). Safety Equipment Certificate (for perusal and return). Passenger List (1). Crew List (1). Deck Cargo Certificate (1).
(b) For Customs:
Application for entry inwards. Last Port clearance. Port Office Entry Certificate. Arrival report. Particulars required by customs in approved form. Favour Parcel Certificate. Gift Parcel Certificate. Health Report. Opium Certificate. Arms and Ammunition Certificate. Import manifest. Passengers list. Storelist, crew list, and private property declaration. Ship's currency declaration. ILH receipt.
PILOTAGE: None. Open roadstead port.
ANCHORAGES: Approach to port free from navigational dangers. Anchorage provides good holding ground.
MAX. SIZE: Being open roadstead, vessels of any size can anchor according to draft.
HEALTH: Port Health Officer may be contacted by telegram addressed CYCLONE ALLEPPEY for issue of pratique certificate. Procedure to be followed in Indian Port Health Rules.
RADIO: Morse system of signalling by light and signalling by International Code flags alone are available. Steamers code can be used as call sign.
TUGS: 2 tugs owned by Port Department render services per requisitions from Agents. Tugs usually approach vessels after anchoring.
BERTHING: No Berths.
MEDICAL: Government hospitals available.
DENSITY: 1025.
FRESH WATER: Only available in very small quantities.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: By stevedores.
IDENTIFICATION CARDS: Necessary only when crew land ashore.
CONSULS: Nil.
REPAIRS/DRY DOCKS: None.
REPATRIATION: Crew changes are effected subject undertaking by Owners through Agents.
AIRPORT: Cochin, 62 km. North of Alleppey.
TIME: GMT plus 5.5 hours.
HOLIDAYS: For work on approved closed port holidays and national holidays labourers have to be paid extra in addition to wages.
POLICE/AMBULANCE/FIRE: Emergency (Fire and Police) 100 Alleppey Exchange.
SHORE LEAVE: Crew allowed to land. Foreigners required obtain prior permission of Police authority through Agents.
AUTHORITY: Senior Port Conservator.

BEDI BUNDER: 22.31 N. 70.02 E.

DOCUMENTS:
1 Maritime Declaration of Health.
1 Last Port Clearance.
6 Crew Lists.
6 Passengers' Lists.
4 Stores Lists.
4 Private Property List of crew and officers.
4 Certificates of Currency, Arms and Ammunition and Deck Cargo.
1 Same Bottom cargo list.
1 Hazardous Cargo List with categories.
PILOTAGE: Vessels anchor at roads as pilotage not compulsory; however, if requested in advance by Master to PORTAL BEDI, ship may be piloted from Pirotan Lighthouse to Rozi Anchorage about 7 miles from port by local Pilot Guide. Pilot boards vessel off Pirotan Island Light (Lat. 22° 36′ N. Long. 69° 57′ E.).
ANCHORAGE: Lighterage port. Steamers anchor at Rozi anchorage about 7 miles from port, where good anchorage up to 7 fathoms at low water.
HEALTH: Pratique granted on delivering Maritime Declaration of Health to Customs officer on boarding. Vessels having touched yellow fever area prior to arrival granted free pratique by Mosquito Party to be deputed from Kandla, which can only be arranged by prior notice failing which vessel has to proceed either Kandla or Bombay for Free Pratique.
RADIO: Call sign VUK5. Working hours:
0930–1130 hrs. 1730–1930 hrs.
1330–1530 hrs. 2130–2330 hrs.
Frequency 600 m. or 500 kc/s., working at 429 m. and calling at 500 m.
TUGS: Port tug available for use at anchorage.
BERTHING: No berths.
STEVEDORES: Agents and stevedores require advance ETA of 24 hours for preparing labour gangs. Daily loading is 400/500 tons for bagged cargo.
MEDICAL: 24 hours notice required for medical service. Government hospital at Jamnagar where vaccination/fever injection services available.
DENSITY: 1025.
FRESH WATER: Supplies by barge capacity 50 tons. Possible supply about 50 tons every alternate tide subject adequate supply of water in port area.
FUEL: None.
GANGWAY/DECK WATCHMEN: The services of watchmen are recommended.
OPENING/CLOSING HATCHES: By ship's crew.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat. Exemption Certificate.
Gear Certificate.
CONSULS: None.
REPAIRS: No facilities for repairs to ships.
DRY DOCKS: None.
AIRPORT: Jamnagar – 7 miles from city. Daily flight Jamnagar-Bombay.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Non-working days and work not permitted even on payment of overtime charges: Indian Republic Day; Bakri-Id; Holi; Muharram; Gokulastami; Dasehra; Diwali; Ramzan-Id.
POLICE/AMBULANCE/FIRE: District Superintendent of Police 100 and 3795; Ambulance/Casualty Department 4444; Fire 101.
GENERAL: Tidal port and barges loaded and sent out to ship during tide time only. Loading of barges carried out manually.
SHORE LEAVE: Crew members allowed ashore in emergency or for medical treatment. Necessary police permits take 48 hours.
REGULATIONS: No launch services available for crew. Only 5 ships allowed to work at time at anchorage. Further arrivals wait turn.
DELAYS: Delay expected for loading and discharging in monsoon due to limited number of barges available.
DEVELOPMENTS: The scheme of creating additional facilities, road connection, transit godowns, electrification and water supply and cranes, etc. near mouth of creek. This newly developed area is completed and connected by good all weather road with city of Jamnagar.
AUTHORITY: Port Officer.

BELEKERI: 14.43 N. 74.15 E. **(See Plan)**

PORT LIMITS: *North.* A line drawn due West from Kawada Guda peak into the sea up to 7 fathoms of water starting from a point 50 yards above high-water mark of the shore.
East. Seashore of Belekeri Bay 50 yards above high-water mark from North Boundary Mark to rocky promontory in Lat. 14° 40′ N. including the Belekeri creek and all branches thereof, as far as navigable and the shores and banks within 50 yards of high-water mark Spring tides including Islands. All patta lands and other private sites excluded.
South. A line drawn due West from a point 50 yards above high-water mark of rocky promontory in Lat. 14° 40′ N. into the sea up to 7 fathoms of water.
West. A line joining the two 7 fathoms points in the sea.
DOCUMENTS:
8 Crew Lists.
2 Manifests of Stores.
2 Private Property Declarations.
2 Currency Lists.
1 Maritime Declaration of Health.
3 Passenger Lists.
4 Import Manifests.
Last Port Clearance.
PILOTAGE: Not necessary. Vessels anchor in stream and in open sea. Ships can be manoeuvred under guidance of Port Officer.
ANCHORAGE: The anchorage for shallow draft steamers in open roadstead is with Kukra Island bearing 080° (T) distance about 1.5 miles in depth of 27 to 29 ft. Anchorage for deep drafted vessels is with Kukra Island bearing 080° (T) distance about 2.5 miles in depth 34 to 37 ft.

HEALTH: Medical Officer, Ankola acts as Port Health Officer. Free pratique to incoming vessels granted by radio. All vessels calling from foreign destination must send radio message addressed "Medical Officer, Ankola", at least 48 hours before entering, giving last port of call, number of crew, health conditions, ETA and requesting pratique; same message must be repeated to Agents also, on which pratique granted on shore. Anchoring time is pratique time. For vessels from Indian ports pratique not required. Vessels which have taken on board passengers or crew from yellow fever areas within 30 days of departure from such ports will be under quarantine. Free pratique will not be granted until Mosquito Search Party, from nearest major port (i.e. Cochin, Goa or Bombay) has inspected, disinfected and certified that ship fit for granting pratique. Master to inform Agent well in advance if arriving from yellow fever area to enable arrange Mosquito Search Party for quick pratique.
RADIO: Recommended to give ETA or pratique messages via Goa or Bombay Radio.
BERTHING: No berths.
STEVEDORES: ETA required at least 48 hours prior arrival order Agents advise Shippers and stevedores.
MEDICAL: No hospital but good medical aid given at Karwar, 20 miles distant. In case of inoculations and vaccination at least 2 days advance notice to be given for vaccines to be brought from Hubli or Belgaum distance 100 and 150 miles respectively.
DENSITY: 1025.
FRESH WATER: Can be supplied from Karwar by water barge.
FUEL: None.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Generally done by ship's crew.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derating Certificate.
Vaccination and Inoculation Certificates.
CUSTOMS ALLOWANCES: 200 cigarettes allowed per crew member. Wine and/or Spirit: 1 bottle of light spirit and 1 bottle of hard spirit per crew member.
CARGO GEAR: Valid International cargo gear certificate not more than 12 months old. Validity shall cover whole period of loading and discharging.
IDENTIFICATION CARDS: Not required.
CONSULS/REPAIRS/DRY DOCKS: None.
REPATRIATION: Arranged from Goa or Bombay.
AIRPORT: Nearest airports Goa or Belgaumi Bombay.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Port Authorities. Non-working days when work not permitted even on payment of overtime: Republic Day (26th Jan.) and Gandhi Jayanti (2nd October).
POLICE: Tel. 49.
SHORE LEAVE: Permission may be obtained (Chinese personnel not allowed to land on shore).
AUTHORITY: Port Officer, Karwar.

BHAVNAGAR: 21.47 N. 72.08 E.

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Certificate.
Manifest on prescribed form (3 copies).
Declaration of private and personal property.
Crew List.
Customs circulation copy issued by Boarding Officer of last Indian Port of call.
Place and date of deratisation certificate.
PILOTAGE: Pilotage should be arranged in advance through ship's local Agent who may be contacted via the port radio, call-sign VUJ-9. An ETA should be sent at least 48 hours in advance in order to arrange Pilot. Pilotage is compulsory. Pilot boat does not have VHF, but may be contacted by light or flag signals. Pilot station is 4.5 miles N.N.E. of Piram Island Lighthouse and Pilot boat will only be on station when the vessel is scheduled to arrive. Vessels should arrive at Pilot station about 2 hours prior to time of high-water and are advised not to anchor awaiting a Pilot but to make a reciprocal course until arrival of the pilot boat.
ANCHORAGE: Vessels up to 31 ft. draft are advised at anchorage Eastward of perigee light vessel. Maximum limit of draft for vessels working at anchorage is 32 ft. at present. If, however, at future date it becomes necessary to find suitable anchorages for vessels more than 32 ft., this area is likely to be farther Eastward (about 3 to 4 miles) from present anchorage area and this is likely to raise fresh problem of operation of lighters due to increase in distance involved. At present the issue has not arisen as the maximum limit of draft of 32 ft. is fixed for vessels at anchorage. All vessels at anchorage are loaded and discharged by means of lighters.
MAX. SIZE: Up to 500 ft. length, and up to 65 ft. breadth may berth alongside.
Permissible draft for a particular tide is arrived at by subtracting 13 ft. from predicted height of high-water for that particular tide.
HEALTH: Healthy ships are granted pratique by the Pilot. International health regulations are applicable to vessels arriving from yellow-fever areas.
RADIO: Bhavnagar Port Radio, call sign VUJ-9 should be used for routing ETA messages, and is also used by Agents in cables to shipping.
TUGS: Tug assistance is available for berthing and unberthing vessels in inner harbour. Position where tugs join the vessel is dependent upon prevailing weather conditions. Usually ship's lines are used in connections to tug.
BERTHING: Berthings are as per tides and according to permissible drafts.
STEVEDORES: The stevedoring gangs are arranged directly by Agents through approved stevedores.
MEDICAL: Medical facilities can be arranged by Master through Agent. Hospital facilities available in city of Bhavnagar which is 13 km. from port.
TANKERS: No facility for oil tankers.
DENSITY: 1025.
FRESH WATER: Fresh water supplied alongside jetty as well as at anchorage.
Shipmasters Report: Water is often in short supply, and ships may be unable to obtain any at all at the anchorage. Ships should not rely upon an evaporator to make water at the anchorage, due to the high mud content of the sea water.
FUEL: Oil bunkering available in limited quantity.
FIRE PRECAUTIONS: Alongside jetty fire-fighting facilities available. At anchorage fire-fighting facility is provided by the tug.
Usual fire precautions applicable.
DEVELOPMENTS: Intensified dredging operations are proposed to be undertaken for increase in drafts of the steamers berthing.
GANGWAY/DECK WATCHMAN: Gangway and deck watchman are recommended.
OPENING/CLOSING HATCHES: As arranged between the Master and stevedores.
SHIP'S CERTIFICATES: Registration; Safety equipment; Safety Radio and Telegraphy; International Load Line.
CUSTOMS ALLOWANCES: As per Customs regulations in force from time to time at Indian ports.
CARGO GEAR: Ships should possess valid Cargo Gear Certificate.
CREW IDENTIFICATION CARD: Valid international passport or identification card necessary.
CONSULS: No consulates at port. Nearest consulates are at Bombay.
REPAIRS: No repair facilities exist for the ship except repairs of minor nature which could be undertaken by private repair firms.
DRY DOCKS: Small dry dock available for repairs of vessel of up to 200 ft. length.
REPATRIATION: Possible.
AIRPORT: Bhavnagar city is served by an airport situated about 7 km. from the Port. Regular flights to Bombay are available daily.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Holidays in all 8 in a year declared by Port Authorities on which working of the ship can be attended at the option of the port.
POLICE/AMBULANCE/FIRE: Police force and ambulance and fire facility available from Bhavnagar city. Limited fire-fighting facility available at port.
TELEPHONES: No facility is available for providing telephones on board the ships.
GENERAL: Port equipped with 3 berths having 6 cranes with 3-ton capacity. Cranes available for loading or discharging ship's cargo.
SHORE LEAVE: Citizens of communist China and Pakistan not allowed ashore. All other nationals are allowed to go to Bhavnagar city which is 13 km. from port for which shore passes are issued by Customs Dept.
REGULATIONS: Photography in port prohibited. No crew member allowed to take liquor ashore.
DELAYS: Delays in berthing depend upon number of ships working on berth and awaiting if any. At anchorage generally not more than 2 ships are worked at a time.
AUTHORITY: Port Officer.

BOMBAY: 18.56 N. 72.49 E. **(See Plan)**

PORT LIMITS: Vessel is considered to have "arrived" when Pilot is embarked and/or when vessel is required to anchor outside pilotage area awaiting a suitable tide, as in the case of large tankers.
DOCUMENTS: See "Calcutta".
PILOTAGE: Motor pilot vessel "*Venu*" stationed 18° 51′ N. 72° 49.5′ E. White, buff-coloured funnel, "Pilot" painted black capitals, exhibiting International Signals by day/night. Call sign "ATDZ".
Minimum advance notice 24 hours to Agents and Harbour Master through Bombay Radio (VWB) and 12 hours to pilot vessel on WT. Pilot vessel contacted VHF Channels 12, 14 and 16. In case pilot vessel not on station, vessels advised anchor at Pilot station, draft permitting, and wait instructions.
ANCHORAGES: More than 60 anchorage berths radius 1,000 ft. with depths from 38 ft. to 14 ft.; of these two 38 ft.; 30 between 30 ft. and 35 ft.; 22 between 20 and 30 ft.; remainder below 20 ft. All anchorages safe.
RESTRICTIONS: According to state of tide and draft.
MAX. SIZE: For Butcher Island Marine Oil Terminal: Normally max. length 700 ft. However, tankers 800 ft. length can be berthed provided adjacent berth occupied by medium-size tanker. Draft restrictions as follows: (depth of water at low tide.)

No. 1 BI	37 ft.-09 in.	Subject variation.
No. 2 BI	36 ft.-06 in.	
No. 3 BI	38 ft.-05 in.	

Pir Pau Oil Berth: max. length 525 ft. Depth at low tide 28 ft. (subject variation). Buoy fixed for berthing 560 ft. tankers.

Docks	*Max. length*	*Max. width*	*Max. draft (subject to tide)*
Indira	666 ft.	95 ft.	34 ft.
Victoria	460 ft. by day and 400 ft. by night	77 ft.	23 ft.
Prince's	500 ft.	61 ft. 3 in.	22 ft.

PRATIQUE: The Master of every vessel calling Bombay from a foreign port must send the following particulars by cable to "Quarantine Bombay" 24 hours prior to arrival and request for radio pratique:

AAA ports of loading BBB last port of call CCC date of departure DDD ETA discharging port EEE vessel's maritime Declaration of Health is negative and total number of crew on board all healthy FFF vessel has not called at any port in East Africa between northernmost point of Eritrea and southernmost point of Tanganyika including Zanzibar or any other yellow fever infected area within last 30 days GGG no unusual mortality of rats on board HHH no monkeys III no persons embarked at Aden or Djibouti.

If the vessel is coming from a yellow fever area, then the Port Health Officer boards the vessel for inspection before granting free pratique.

RADIO: Bombay Coastal Station, call sign VWB.

Information regarding weather will be broadcast at 0630 and 1030 hrs. local time on 2000 m.

RADAR/VHF: No port radar service. Shipmaster contacts pilot vessel by ship's radio or VHF on international frequencies. Channels No. 12 and 14 also available on VHF.

TUGS: Tugs join vessel when close dock entrance and assist undocking. Ship's and tug's lines used.

BERTHING: *Indira Dock:* 21 berths, able to handle cargo vessels up to 20,000 d.w.t. Average length of berth 150 m. Most berths are equipped with one 6-ton crane and four 3-ton cranes.

Victoria Dock: 15 berths, able to handle vessels up to 5,000 d.w.t. Average length of berth 110 m. Most berths are equipped with 1.75 ton and 1.5 ton cranes.

Prince's Dock: Length 1,560 m. of which 1,200 m. is available for handling cargo. There are 8 berths able to handle vessels up to 5,000 d.w.t.

Ballard Pier: Length 244 m., width 110 m., when converted will handle passenger vessels up to 30,000 g.r.t. and cargo vessels up to 22,000 d.w.t.

The extension at Ballard Pier will be the new passenger terminal and will receive passenger vessels up to 30,000 g.r.t. at any stage of the tide.

CRANES: *Quay side:* Electric and Hydraulic cranes available at Indira, Prince's and Victoria Docks.

Mobile Cranes: 56 mobile cranes with capacities up to 43 tons available.

Heavy lift: Electric crane of 60 tons and steam crane of 20 ton capacity.

Floating cranes: 2 available, 60 ton and 125 ton capacity.

STEVEDORES: Supplied by Dock Labour Board. Port Trust supplies shore labour for handling cargo including stacking in sheds.

MEDICAL: Hospital facilities available. Notice in sufficient time, depending on seriousness of case, to arrange for transport, hospitalisation, etc.

TANKERS: Reducing pipe connections available at jetty. Dirty ballast tank available at Marine Oil Terminal. 3 berths at Butcher Island and 1 berth at Pir Pau exclusive to tankers. For draft details see "Max. size".

Pir Pau can handle tankers up to 16,000 d.w.t. and the Marine Oil Terminal at Butcher Island can handle tankers up to 54,000 d.w.t. at 2 berths and 36,000 d.w.t. at the other berth.

DENSITY: The Port of Bombay is essentially a salt water port and major fluctuations in the density occur on account of tide. Density varies mostly in monsoon period June to September.

FRESH WATER: Available all berths. By water-boat in stream, by water-mains in docks.

Ship Officer's Report: Vessel berthed at Ballard Pier, east side. Fresh water availability on pier dependent on capacity of storage tank at the time of call. The water was not available continuously and we had to wait for the tank to be refilled.

FUEL: Arranged by oil companies through Agents. Facilities at berths in docks and Butcher Island berths. No bunker facilities for vessels at anchor.

FIRE PRECAUTIONS: All regulations of Petroleum Rules (chapter 1/50 of BPT Port Rules). Port maintains fire stations, 24 hours per day, both at docks and at Butcher Island Oil Terminal. Special precautions taken for tankers at Marine Oil Terminal at Butcher Island.

DEVELOPMENTS: Satellite port in Nhava/Shewa area proposed also new harbour near Sassoon dock for trawlers drawing 5.5 m.

GANGWAY/DECK WATCHMEN: No deck watchman supplied. BPT gangways generally available all berths except Butcher Island and Pir Pau.

CERTIFICATES:

International Safety Equipment Certificate.
International Safety Radio Telegraphy Certificate.
International Safety Radio Telephony Certificate.
International Exemption Certificate (Deratisation).
International Load Line Certificate.

CARGO GEAR: Compliance BPT Port Rules and Docks By-laws essential. Hydraulic Quay Cranes, Electric and Heavy Lift Cranes, Floating, Mobile and Crawler Cranes all available.

IDENTIFICATION CARDS: Necessary for Police/Customs authorities.

REPAIRS: All repairs possible.

DRY DOCKS: Two: "Merewether" 525 ft. long, 65 ft. 6 in. wide. "Hughes" 1,000 ft. long, 100 ft. wide.

REPATRIATION: Can be arranged, also crew changes.

AIRPORT: International Airport Santacruz, 15 miles from Bombay Harbour.

TIME: Indian standard time ahead of GMT by 5 hours and 30 minutes. No alterations to clocks are made any time.

HOLIDAYS: Holidays for the docks (when cargo handling is closed) are fixed every year. Republic Day (January); Bakri-Id (February); Holi (2nd day) (March); Muharram (March); Maharashtra Day (May Day); Buddha Jayanti (follows May Day); Independence Day (August); Ganesh Chaturthi (September); Mahatma Gandhi Jayanti (October); Dasara (October); Diwali (November); Ramzan-Id (December); Christmas Day.

POLICE/AMBULANCE/FIRE: Police 100; Ambulance 102; Fire 101.

TELEPHONES: Arrangements for placing a telephone on board ship exist at all transit sheds in Docks.

SERVICES: Tank cleaning equipment is not available. Dirty ballast accepted in tank at jetty at Marine Oil Terminal.

REGULATIONS: Stringent Port Rules and Docks By-laws detailed in "Bombay Port Rules".

AUTHORITY: The Chairman, Bombay Port Trust.

CALCUTTA: 22.32 N. 88.22 E.

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Deratisation Certificate.
Port Clearance from Last Port.
Indian Coast Light Dues Receipt (if any).
4 copies of Crew List.
4 copies of Passenger List.
1 copy of Through Cargo Manifest.
4 copies of Stores List.
1 copy of Cargo Manifest with B/Lading for the same.
4 copies of Opium and Dangerous Drugs Certificate.
Cargo Plan.
Cargo on Deck declaration.
4 copies of Certificate of Foreign Currency.
4 copies of Certificate of Arms and Ammunition.
Letter to Assistant Collector of Customs regarding Local Agency.
Letter to Assistant Collector of Customs regarding duty on ships stores.
Application to the Inspector of Police.
3 copies of Arrival Report.
4 copies of Watches and Clock List possessed by each member of the crew.

PILOTAGE: Telegraphic address of Pilot station: VWST "Pilots Sandshead". Radio message should be sent 48 hours prior arrival giving (a) ETA Eastern Channel Lt. Vs.; (b) from . . . to . . . (either Haldia, Budge Budge, or Calcutta); (c) deepest *fresh* water draft; (d) length overall; (e) g.r.t.; (f) whether VHF is or is not on board.

Pilot boards vessel Sandheads from pilot vessel fitted with W/T, DF, radar, echo sounder and other navigational equipment, maintains continuous watch on 500 kc/s. (600 m.) and receives ETA messages of incoming vessels.

As an aid to navigation, navigable channel in river is marked with lights and channel buoys. There is a lighthouse at Saugor and downstream from this point, 3 attended Light vessels are stationed at the Western Channel and 2 unattended Light Vessels at Gabtola and Lower Long Sand at Sandheads. Navigable channel leading to port from sea is about 126 miles long. 14 bars are in different reaches of river, 11 of these are upstream of Diamond Harbour and remaining 3 in estuary below Diamond Harbour. Since these bars are subject to fluctuations and there are sharp bends in river, the navigation of ships between port and sea requires services of trained Pilots employed by Port Commissioners. River Pilots take charge of vessels at Sandheads, navigate to Garden Reach and then make over to harbour Pilots who manoeuvre vessels to riverside jetties, moorings or dock berths. Movement of ships inside docks guided by Berthing Masters.

ANCHORAGES: Anchorage in river Hooghly at Saugor Roads, Halida, Kalpi, Diamond Harbour, Royapur, Ulubaria and Garden Reach of which Royapur, Ulubaria and Garden Reach utilised only by ships on passage to and from the port in emergency. Depths of anchorages vary on day to day basis according to River Draft Forecast but on average 30 ft. deep.

RESTRICTIONS: Navigation on River Hooghly is carried out only with Pilot on board and according to tide. Speed of vessel important factor and must be declared to Pilot on board, preferably telegraphed 48 hours in advance to Pilot vessel.

MAX. SIZE: Maximum LOA 530 ft. with beam of 70 ft. for Nataji Subhas Docks and 515 ft. LOA with beam of 66 ft. 6 in. for Kidderpore Docks. Maximum LOA of tankers for tanker terminal at Budge Budge is 600 ft. No restriction of beam for vessels berthed in Budge Budge only, as no lock entrance. Deepest draft alongside dock berths in Nataji Subhas and Kidderpore Docks 30 ft. At Budge Budge deepest draft at any berth also 30 ft. Berthing of vessels, depends on prevailing draft of day published in Draft Forecast for month.

PRATIQUE: Procedure for obtaining pratique: To obtain Radio

Pratique incoming vessels communicate by wireless to Port Health Officer, Calcutta, Cable address: "Quarantine Calcutta":

(a) No sickness or death from sickness on board within last 15 days.
(b) No sand, earth, pig, poultry, crew or passenger taken aboard from E. Coast of Africa between Port Sudan and Durban, both ports included.
(c) Ship not touched within last 30 days any port in E. Africa between Northernmost point of Eritrea and Southernmost point of Tanganyika, including Island of Zanzibar or any other yellow fever infected area.
(d) No abnormal mortality of rats or mice on board.
(e) No monkey on board.

(Item (a) to be sent in code under usual standard quarantine messages required by ships; rest in plain language through local wireless station.)

In case of any suspected disease or fever on board, local agents may be contacted by cable who arrange for doctor to be sent or for removal of a patient if necessary. Vessels calling at another port in same country are exempted from obtaining pratique.

RADIO: Calcutta Radio, call sign VWC. R/T. and VHF.

Information regarding weather distributed at 1030 and 0630 hrs. local time on 2000 m.

TUGS: Tugs used for vessels after passing lock entrances at Nataji Subhas and Kidderpore Docks. Tugs used for deep draft vessels to turn (if tide strong). Vessels own lines.

BERTHING: Vessels brought in for berthing according to tide. Movements from one berth to another inside dock not dependent on tide, but according to convenience of port. Vessels berthed at riverside jetties or river moorings required to have starboard anchor unshackled in order that stbd chain could be tied to buoy. Vessels at river jetties and river moorings if left during Bore Tide are to comply with following:

Half an hour before low water:

(a) Gangway to be hoisted up.
(b) Pipe-lines disconnected and triced up (for vessels at Budge Budge Jetty).
(c) Heave tight on forward chains to keep vessel about 6 ft. off pontoon. Make sure weight is on bore springs and not on chains aft.
(d) Tighten all buoy ropes.
(e) When bores expected, all vessels in stream shall have steam on main engines, windlasses and winches and a sufficient number of officers and crew on board to tend vessel in case of emergency.

After bore made, and vessel stopped ranging, slack forward chains to old mark. Bore springs could be had through Agents from local suppliers.

Budge Budge (oil terminal) on banks of River Hooghly has river jetties, hence above instructions also apply to vessels berthed at Budge Budge Jetties.

BULK HANDLING FACILITIES: There is 1 semi-mechanical berth in Nataji Subhas Docks for handling iron-ore suitable for vessels up to 18,000 d.w.t. and up to 24 ft. 6 in. draft. See "Haldia".

BRIDGES: 2 bridges, 1 collapsible, 1 swing, situated inside Kidderpore Dock are open for navigation to suit convenience of port.

STEVEDORES: 48 hours notice of arrival at Pilot station required by Agent.

MEDICAL: Masters in need of medical services required cable agents. Hospital facilities. Ships leaving for foreign port or minor Indian port (where no Port Health Officer) required to ensure officers and crew have valid health certificates (for cholera, smallpox and yellow fever if proceeding to a yellow fever area).

TANKERS: Not permitted discharge residue into dock (at C berth Nataji Subhas Dock).

S.G.	A.P.I. of local types of oil
0.91 and 0.94	0.9430 varying to 0.9550.

Tanker terminal at Budge Budge 15 miles from Calcutta Port.

BB Jetty	No. 1	for accommodating vessels of	OAL	610 ft.
,,	No. 2	,,	,,	510 ft.
,,	No. 3	,,	,,	230 ft.
,,	No. 4	,,	,,	555 ft.
,,	No. 5	,,	,,	610 ft.
,,	No. 6	,,	,,	476 ft.
,,	No. 7	,,	,,	595 ft.
,,	No. 8	,,	,,	705 ft.

Deepest draft alongside jetty berths 30 ft., but vessels brought up according to prevailing draft as per forecast.

DENSITY: Average density in port is about 1000.

FRESH WATER: Fresh water on application from Masters or Agents and preferable if at least 48 hours notice given. Supplies through barges and direct from quayline.

FUEL: Redwood 600/700 sec. supplied at Calcutta and require at least week's notice for supplying vessels lying inside dock. Fuel also supplied at Budge Budge terminal, 3 days notice to suppliers and Port Authorities.

FIRE PRECAUTIONS: Usual non-smoking precautions and Master, Owners, Charterers or their Agents of vessels carrying import cargo or intending to load export cargo of hazardous or inflammable nature, furnish 6 copies of list of cargo involved to Traffic Manager in prescribed form, at least 10 days before vessels intend to land or ship cargo. Traffic Manager on receipt of list, categorise items enumerated in list and landing delivery and storage of such cargo be done strictly in accordance with instructions.

DEVELOPMENTS: Refer to "Haldia".

GANGWAY/DECK WATCHMEN: Necessary and recommended by Agents at rate of 3 watchmen per shift of 8 hours.

OPENING/CLOSING HATCHES: Normally undertaken by stevedores, unless specifically mentioned that same will be attended to by crew.

CUSTOMS ALLOWANCES: 0.25 lb. tobacco and 200 cigarettes. Wine and/or Spirit: 1 bottle of wine or spirit per head for consumption on board.

CONTRABAND: Regulations provide that a vessel shall be liable to confiscation which is or has been in Indian Customs' waters where constructed, adapted, altered or fitted in any manner for the purpose of concealing goods.

The act also provides for a fine in lieu of confiscation which could in theory be up to the value of the vessel.

Indian Customs Authorities regard vessels as subject to the regulations if they have any alterations to the normal structure of the vessel or its fittings which is not of operational value, e.g. holes cut in panelling (over bulkheads) which are frequently found concealed from view behind cabin furniture such as settees, bunks desks, wardrobes, etc. Customs invariably impose fines for such cavities even though empty of about Rs. 5,000/-for 1 or 2 cavities and increasing if more cavities are found. Fines would be substantially higher if cavities in fact contained contraband.

To minimise fines it is essential that Shipowners should instruct their Masters to organise periodic anti-smuggling searches of all accommodation and other places in the vessel by ship's officers with a view to locating any cavities or contraband and such searches, and results thereof, should be logged. Furthermore, the Customs Authorities invariably obtain a statement from the occupant of the cabin whether instructions had been issued by the Owners or Master for each officer crew member to search his own cabin for cavities or hiding places or other unusual or irregular tampering with the normal structure of the cabin and to report to the Master any such cavities, hiding-places or such other unusual tampering found at any time whilst serving on the vessel.

If no such instructions have been issued, the Customs generally regard the Owners/Master as failing to take proper anti-smuggling precautions and the risk of increased Customs fines arises.

It is suggested that appropriate instructions should accordingly be issued without delay by all Masters to their officers and crews and that each officer or crew member should acknowledge receipt in writing of such instructions. It is also emphasised that such instructions should also be notified to any officer or crew member who joins the vessel after first issue of the instructions to the existing officers and crew.

CARGO GEAR: Proof of cargo gear tested by a competent authority required.

IDENTIFICATION CARDS: Not necessary if holding seamen's books or passport.

CONSULS:

America	44–3611	Liberia	46–1164
Australia	22–1554	Nepal	45–2024
Belgium	44–3886	Netherlands	23–4442
Brazil	45–2120	Norway	22–4094
Bolivia	23–5615	Nicaragua	44–1329
Burma	22–7071	Pakistan	44–5208
Denmark	23–4069	Peru	23–2331
Dominican Republic	55–5067	Panama	47–6765
UAR	45–4168	Spain	23–5539
and	45–2507	Sweden	23–2243
El Salvador	55–7392	Switzerland	44–8039
Finland	22–4602	Thailand	46–0837
France	23–2958	Turkey	34–2770
Czechoslovakia	46–4542	UK	44–5171
Greece	23–5615	USSR	44–2006
Haiti	34–2673	Venezuela	23–5615
Italy	45–1411	Poland	44–7144
Japan	44–5455	Yugoslavia	44–6881
		Philippines	22–0514

REPAIRS: All types of deck and engine repairs undertaken.

DRY DOCKS: 5 dry docks owned by Port Commissioners available. 3 in Kidderpore Docks and 2 in Nataji Subhas Docks, dimensions as follows:

Dry Dock (Kidderpore) (1) 547 ft.×69 ft.×25 ft. (2) 497 ft.×69 ft.×27 ft. (3) 350 ft.×60 ft.×23 ft. (max. length of vessel 500 ft.).

Dry Dock (Nataji Subhas) (1) 581 ft.×80 ft.×32 ft. (2) 596 ft.×80 ft.×22 ft. (max. length of vessel 550 ft.).

Nataji Subhas Dry Docks arranged in tandem and used as one dock. Power supply, compressed air and fresh and unfiltered water supply, hydraulic capstans for propeller work and cranage service including heavy-lift available all dry docks. Each dock provided with automatic telephones for use on board ships.

REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORT: 12 miles; served by regular international airlines with minimum 1 flight per day.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Closed Holidays (when no work is permissible): Independence Day, Republic Day, Gandhi's Birthday, Vijaya Dashami and Kali Puja.

Holidays when double wages payable: Saraswathi Puja, Netaji's Birthday; Idul Fitr, Dholjatra, Muharram, Bengali New Year, May Day, Fateh Duaz Dahan, Durgapuja, Guru Nanak's Birthday, Id and Christmas Day.

POLICE/AMBULANCE/FIRE: Police (port) tel. 45–1701 and ask Port Police or dial 100; Ambulance dial 102 or 45–4163; Fire dial 101 or 45–1701 and ask Fire Fighting Service.

TELEPHONES: No arrangements for installing telephones on board, but use of telephones from Port Commissioner's/ Superintendent's Office on each dock.

GENERAL: *Important:* Masters of vessels in port should ensure that vessel's engines are not immobilised without prior permission of the Harbour Master.
SERVICES: Tank-cleaning equipment with minimum notice of at least 7 days. Discharge of tank-washings not permitted while vessels lying in dock. Compass and radar technicians available.
SHORE LEAVE: Seamen permitted to go ashore after cleared by Immigration Officer boarding vessel on arrival. In case of Chinese, special permission to be obtained from Immigration Authorities, through vessel's Agents.
REGULATIONS: Booklet "Dock and Jetty Handbook" supplied free by Port Commissioners to incoming vessels.
DELAYS: Delays occur during monsoon.
AUTHORITY: Commissioners for the port of Calcutta.

CALICUT: 11.15 N. 75.46 E.

DOCUMENTS:
Register.
Articles of agreement in the case of foreign-going vessels staying in port for more than 48 hours.
Nominal list of crew and passengers and the A & B Certificates.
Bill of Health in the case of a vessel arriving from an infected port.
Clearance from last port.
Port and Light dues receipts.
Vessel's manifest and any other document, which may be necessary.
PILOTAGE: No pilotage available.
ANCHORAGE: With Lighthouse bearing 074° in 5 to 5.5 fathoms. Mud – good holding ground. Small coasting steamers anchor close to lighted anchorage buoy.
HEALTH: In the case of all infected vessels Health Officer proceeds aboard, and in the case of all other vessels Health Officer may proceed on board and examine vessel. Master shall give every facility for examination of passengers, crew, personal effects, cargo, provisions, water-supply and any part of vessel Health Officer considers necessary to examine. Health Officer may require written declaration from medical officer (if any) of vessel or from Master (or from both) stating whether any death or sickness from an unknown or suspicious cause or any case of any disease occurred on board either during voyage or before departure, and whether any unusual mortality has been observed among rats on vessel. If Health Officer satisfied that such deaths or cases of sickness as may have occurred were not due to any of diseases specified he shall permit vessel to proceed to usual place of anchorage or berth in harbour and to discharge passengers and cargo without further restriction. Inspection by Health Officer not between sunset and sunrise except in unusual circumstances.
RADIO: Messages through Cochin Radio or Mangalore Radio.
SIGNALLING: The signal station is situated close North of the lighthouse. The station is manned 24 hours a day.
VHF is likely to be installed 1974.
TUGS: 2 motor tugs for towing lighters.
BERTHING: No berths.
STEVEDORES: Arranged through Agents and stevedore contractors.
MEDICAL: General Hospital and Medical College Hospital situated about 1 mile and 5 miles away respectively.
DENSITY: Sea water – 1025.
FRESH WATER: Available, water barge capacity 200 tons. 12 hours notice required.
FUEL: Available. Small quantity of 30 tons can be provided, 48 hours notice required.
DEVELOPMENTS: Dredging commenced at Beypore and expected to be completed within a year or two and then ships of 18 ft. draft can be berthed alongside.
CERTIFICATES:
Registry.
Radio Telegraphy.
Safety Equipment.
Load Line Certificate.
Certificates of Competency of Captain and other officers.
IDENTIFICATION CARDS: Necessary.
CONSULS: Nil.
REPAIRS: Minor repairs possible.
DRY DOCKS: Small slipway at Beypore.
AIRPORT: Construction of airport at Calicut is under consideration by the Government.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Holidays declared by the State Government are holidays for the port. Cargo work can be arranged on holidays.
FIRE/AMBULANCE/POLICE: Police 100; Ambulance 100; Fire 100.
GENERAL: Ship-to-shore signalling is normally by morse light.
SHORE LEAVE: Permitted.
AUTHORITY: Port Officer.

COCHIN: 09.58 N. 76.15 E.

DOCUMENTS:
7 Crew Lists.
7 Passenger Lists.
1 Last Port Clearance.
4 Store Lists, including List of arms and ammunition.
5 Passengers' and Crew Personal Effects Declarations.
4 Cargo Manifests.
3 Cargo Certificates.
3 Deck Cargo Certificates.
3 Opium Certificates.
3 Currency Declarations.
PILOTAGE: Berthing arrangements, booking of Pilot, etc., normally done by Agent. Advisable send ETA messages at least 48 hours in advance to Agent. Amendments to ETA messages must be sent at least 12 hours in advance. ETA messages may also be sent to Harbour Master, Cochin Port Trust. Messages should contain time and date of arrival at outer roads in IST and also draft fore and aft (in fresh water). On arrival, information must be sent to Signal Station by aldis and sharp watch maintained for further instructions.
No Pilot vessel on station in outer roads. A Pilot boat with red hull and white superstructure exhibiting the normal international Pilot signal comes out to outer roads for embarking and disembarking Pilots. No special light or sound signal need be made for Pilots. All ships awaiting Pilot in outer roads must have engines ready at all times to enter harbour (unless instructed otherwise). Masters should ensure that a good pilot ladder with 2 manropes is lowered about 2 ft. above water for embarking Pilots. Also while embarking Pilot, lifebuoy must be kept handy, and a good lee given. Pilots must be escorted from and to the bridge, to the embarkation deck. Also see "Restrictions".
ANCHORAGE: Cochin roads is open anchorage with good holding ground of oily mud. Masters are required to anchor vessels in Westerly area from North to South of fairway buoy within radius of 0.5 mile. Deep-drafted vessels may anchor in a Westerly direction from fairway buoy within a distance of 0.5 to 1 mile. To facilitate entry and departure of deep-drafted ships, Masters not to anchor in line with direction of main channel, Westward of fairway buoy.
RESTRICTIONS: Unless otherwise *specifically* instructed, vessels not to enter main channel at any time without Pilot on board. Pilotage compulsory for all vessels over 100 tons gross. No night entry for crude oil tankers.
MAX. SIZE: Maximum size of general cargo ships presently handled is 700 ft. length OA with max. draft 30 ft. *salt water.* Such ships taken in only during slack ebb. Tidal Conditions: In Cochin Port ebb and flood run 2 to 2.5 hours before, to 2 to 2.5 hours after high and low water times. During monsoons, freshets are encountered and there may not be any flood for several days.
PRATIQUE: If a vessel requires radio pratique the Master is to send a message to the Port Health Authorities, Cochin (telegraphic address "Quarantine Cochin") which should contain all items of information set out in the Standard Quarantine message of the International Code of Signals. In addition to the above, he should send the following information in plain language:

1. My Maritime Declaration of Health has negative answers to health questions or my Maritime Declaration of Health has positive answers to health questions (indicated by details) as the case may be.
2. Called at or not called at any port in Ethiopia, Somalia, Kenya and Tanzania and any port from Northernmost point of Senegal to Southernmost point of Angola in West Coast of Africa within 30 days.
3. Have or have not monkeys on board.
4. Have or have not taken any person embarking at Aden or Djibouti.

The message to be sent not more than 12 hours and not less than 4 hours out from port. Masters must send the complete message without omitting any item, and should request specifically for radio pratique.
Ships arriving from yellow fever area within last 30 days, pratique is granted by the Port Health Officer only after inspection. Pilot officer boarding is authorised to grant free pratique on satisfactory completion of Maritime Declaration of Health by the Master of healthy ships only.
Port Health Officer usually inspects crew before vessel sails.
RADIO: Cochin Radio, VWN, operating 24 hours daily. VHF Station at Harbour Master's Office, contact Channel 16.
TUGS: Presently 3 tugs; 2 of 1,000 h.p. and one of 1,400 h.p. Normally, tugs join off Vypeen and tug's wire used as necessary.
BERTHING: If particular ship required arrive at certain time, Agent informed in advance.
CARGO HANDLING: Modern systems of cargo handling such as pre-slinging and palletisation are commonly used. The numbers of fork lift trucks, mobile cranes and tractor trailers have been augmented for the purpose. International containers are also handled at the conventional berths using ship's own gear for export of shrimps and import of machinery.
There are 8 general cargo wharf berths, 2 coal berths, 1 boat-train pier jetty, 2 tanker berths, 2 low wharves and 1 open berth. The open berth (555 ft. 6 in.) is being extended to 808 ft. and the work is nearing completion. It is proposed in the fifth plan (1974-79) to convert the open berth into a container berth in a flexible way. It is also proposed to have a mechanised fertiliser berth for bulk handling fertilisers, sulphur, rock phosphate, etc. Cargo is also handled at the 12 stream moorings. At present, containers also handled at the general cargo wharf berths using ship's derricks. No facility exists for roll-on/roll-off traffic. Liquid chemicals can be handled at the wharf berths.
STEVEDORES: Booking of gangs undertaken by Agent on receipt of ETA message.
MEDICAL: Medical attention easily available in Cochin. If medical attention required immediately on arrival, Agent to be informed when sending ETA. Valid inoculation and vaccination certificates against cholera, yellow fever and smallpox are essential.
TANKERS: Only 2 tanker berths at Cochin at present. Maximum permissible draft 30 ft. *salt water.*
Length limited to 700 ft. OA at North tanker berth and 560 ft. OA at South tanker berth.

Deep draft tankers berth only on ebb tide and during daylight hours. Ballasted or loaded tankers can sail any time.
DENSITY: Varies from 1000 to 1020 depending on tidal and weather conditions.
FRESH WATER: Available from alongside jetties and from barges at moorings. Advance notice to be given Agent regarding amount of water required. Cost Rs. 3.50 per 1,000 litres for supply through water barges and Rs. 3/-per 1,000 litres for supply at docks, quay and jetties.
FUEL: All grades fuel oils normally available. Essential give advance notice to Agent to make necessary arrangements.
FIRE PRECAUTIONS: Fire wire to be fast and ready on quarter facing channel.
DEVELOPMENTS: The revised Fourth Five-Year Plan (1969-70 to 1973-74) for port development includes the construction of an inshore oil dock for tankers of 80,000 d.w.t. and 1 fertiliser berth, both having a draft of 40 ft. While preliminary steps have been taken on the former, the latter scheme has been postponed to the Fifth Plan. The extension of the existing Open Berth Quay 9 from 505' 6" to 808 ft. has almost been completed. The plan also aims at the procurement of 3 new dredgers, 1 high-power tug, various cargo-handling equipments, etc., besides the improvement of the port's infra-structural facilities. A Fisheries Harbour Complex is being developed near the port to provide modern landing facilities for fish catches by deep-sea trawlers.

The Fifth Five-Year Plan for port development (1974-75 to 1978-79) aims at the completion of all the spill-over schemes of the Fourth Five-Year Plan, viz., inshore oil dock, procurement of dredgers, cargo-handling equipment and improvement of infra-structural facilities. Among the most important new schemes of the Fifth Plan, mention may be made of the provision for the purchase of a grab dredger, reclamation in the channels, construction of a new medium-sized dry dock, a fertiliser berth, etc. During the Fifth Plan, container-handling facilities will be provided at the extended Quay 9 berth.
GANGWAY/DECK WATCHMEN: Watchmen available at nominal cost. Recommended employ watchmen at gangway, on deck and in holds.
OPENING/CLOSING HATCHES: Opening hatches normally done by stevedores. Topping derricks and removing locking arrangements on hatches must be done by ship's personnel.
CARGO GEAR: All cargo gear must have valid test certificates and all other factory act requirements must be complied with.
IDENTIFICATION CARDS: Issued by Port Authorities.
CONSULS: Danish, Norwegian, Italian, French and consular agent of Switzerland.
REPAIRS: Minor repair facilities available.
DRY DOCKS: Port dry dock can handle ships of up to 217 ft. in length OA. However, not normally available for foreign craft.
REPATRIATION: Facilities for changing crew and repatriation available and can be arranged.
AIRPORT: Airport about 2 miles from harbour area. Cochin airport handles internal flights only.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Closed holidays: Republic Day (26th January); Independence Day (15th August); Gandhi Jayanti (2nd October); 1st May and 25th December.
FIRE/AMBULANCE/POLICE: 6555 Willingdon Island Fire Station; 6005 Willingdon Island Police.
TELEPHONES: Arrangements can be made for telephone connections on board ships on wharf berths only.
GENERAL: Floating crane 120 tons, fire float.
SHORE LEAVE: All nationalities except Chinese, Pakistanis and Portuguese allowed ashore.
AUTHORITY: Cochin Port Trust.

CUDDALORE: 11.43 N. 79.46 E.

DOCUMENTS:
8 Crew Lists.
8 Passengers Lists.
3 Forms of Import Manifest of Stores.
3 Lists of articles in slop chest.
3 Private Property declaration of Crew.
3 Manifests.
3 Bills of Lading.
PILOTAGE: No pilotage. Open roadstead port.
ANCHORAGE: Vessels anchor in 5 to 7 fathoms with Cuddalore Lighthouse bearing 295° to 315°, which is most convenient anchorage for communicating with shore at all seasons of year. Nature of bottom, sand.
RESTRICTIONS: No restrictions regarding entry of vessels during day or night.
MAX. SIZE: Any size of vessel handled.
HEALTH: On arrival, Master to signal Port Health Officer stating all crew well and requesting free pratique. In event of any crew member suffering from suspected infectious disease, Master to advise Agents sufficiently in advance to enable Port Health Officer to board vessel on arrrival. No free pratique necessary whenever vessels call from another Indian port.
RADIO: No radio station. Cables routed through Madras Radio (call sign VWM).
TUGS: None.
BERTHING: No berths.
STEVEDORES: ETA advice required 72 hours in advance to enable stevedores to make adequate arrangements for handling cargo. Average rate of discharging bagged fertiliser 750 tons, and for loading iron ore 2,000 tons per day, expected to increase to 3,000 tons per day.
MEDICAL: No advance notice required unless vessel arrives with crew member requiring immediate medical attention. Seamen can be treated at Municipal Dispensary at Old Town near port and also at Government headquarters hospital in charge of District Medical Officer at New Town about 6.5 km. from port.
DENSITY: Density of water 1024. State of tide does not affect density.
FRESH WATER: Boat with 16.5 tons capacity which goes alongside steamer and this quantity of water supplied. If one steamer at anchorage boat makes 2 trips a day and about 33 tons of water supplied.
FUEL: None.
GANGWAY/DECK WATCHMEN: Services of watchmen recommended in interest of ship to avoid pilferage. 3 watchmen night and day per shift of 8 hours.
OPENING/CLOSING HATCHES: By stevedores.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Deratisation Certificate.
Last Port Bill of Health Authority.
Last Port Clearance.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes permitted for each crew member to be held out of bond. Wine/Spirit, 1 open quart bottle per crew member permitted to be held out of bond.
CARGO GEAR: Register of cargo gear and machinery to be maintained up to date and to be attested by competent authority.
IDENTIFICATION CARDS: Needed.
CONSULS: None.
REPAIRS: Minor repair facilities available.
REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.
AIRPORT: Nearest airport at Madras, distant 118 miles.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Cargo work arranged on all holidays except Republic Day, Gandhi's Birthday, Pongal Karinal, Masimagam, Pennayar Festival, Independence Day and Deepavali, on payment of overtime.
POLICE/AMBULANCE/FIRE: Tel. Police 24; Fire and Ambulance 99.
GENERAL: Private launches arranged for purposes of crew going ashore. Such launches ply between 0600 and 1700 hrs. Laundry, provisions, etc., can be arranged.
SERVICES: Cleaning of hatches after discharging cargo available.
SHORE LEAVE: Crew members permitted to go ashore within municipal limits.
DELAYS: No delay of anchoring of vessels. Cargo work carried out during day. No night work.
AUTHORITY: Port Officer, Cuddalore.

HALDIA: 22.00 N. 88.05 E.

Subsidiary port of Calcutta, situated on West bank of Hooghly River and 56 miles downstream of Calcutta.
DOCUMENTS, PRATIQUE: All general information; refer to "Calcutta".
MAX. SIZE: Possible for vessels with 40 ft. draft for about 70 days in year as dredging and other corrective works progress in estuary. Expected by 1974, vessels with 40 ft. draft to use Haldia almost through year, with 42 ft. for 209 days and drawing 44 ft. for about 70 days in year.
BERTHING: Project in its first phase is expected to be completed by 1973, envisages following.

1. An Oil Jetty – to provide berthing accommodation for super-tankers with LOA of approximately 875 ft. and draft up to 42 ft.
2. A Finger Jetty – equipped with grab-bridge cranes capable of transferring salt, rock phosphate and other bulk cargo from ship to barge, or vice versa at an average rate 5,000 tons per day.
3. A Coal Berth – capable of loading bulk carriers of the 60,000 d.w.t. class at rate 3,000 t.p.h.
4. An Ore Berth – rate of loading 6,000 t.p.h. and with provision for increasing to 8,000 t.p.h. Accommodation for carriers up to 80,000 d.w.t.
5. A Fertiliser Berth – for handling rock phosphate and sulphur from ships up to 50,000 d.w.t. class at a rate of 6,000–8,000 tons per day.
6. Two general Cargo Berths – each with a quay of 720 ft. and 120 ft. wide and back-up area of 18 acres. Both will have adequate cranage, latest in cargo handling machinery and direct rail-road facilities. One berth will have a modern 100,000 sq. ft. transit shed and a 30-ton payload Portainer Crane for handling containers.
7. Container Marshalling Yard – area 180,000 sq. ft. served by 2 rail–mounted Transtainer Cranes of 30-ton payload, capable of storing 1,500 containers at a time.

AUTHORITY: Calcutta Port Commissioners.

HONAVAR: 14.16 N. 74.27 E.

DOCUMENTS:
Crew Lists.
Passenger Lists.
Customs Documents.
Health Documents.
Manifests.
Bills of Lading.
Ship's Papers.

PILOTAGE: Open roadstead port. No system of pilotage. Pilot is, however available, on requisition by Master or Agent.
ANCHORAGE: Distance off 3 miles, depth of 5.5 fathoms.
MAX. SIZE: No restrictions on length and breadth. Generally up to 34 ft. draft vessels can anchor within 2 to 3 miles from entrance.
HEALTH: Port Health Officer grants pratique as and when necessary, on requisition.
RADIO: Wireless station at Karwar.
BERTHING: No berthing facilities. Ships anchor on open roadstead.
MEDICAL: Proper hospital facilities available only at Karwar about 60 miles North. At least 24 hours advance notice ETA to be communicated to Agents.
DENSITY: Varies 1020/1025.
FRESH WATER: Very small quantities available. No arrangements for delivery to ships.
FUEL: None.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: All ship's papers such as Certificate of Registry, WT Certificate, Safety Equipment Load Line, etc., to be on board for verification.
CARGO GEAR: Cargo gear Test Certificates, etc., to be produced.
IDENTIFICATION CARDS: Needed, if going ashore.
CONSULS: Nil.
REPAIRS: Nearest workshops undertaking major repairs available at Mormugao. Minor repairs may be carried out at Karwar.
DRY DOCKS: None.
REPATRIATION: Facilities available.
AIRPORT: Belgaum, about 178 miles.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Charter Party Holidays observed. Cargo work can be arranged on holidays. Dates of holidays vary from year to year.
POLICE/AMBULANCE/FIRE: Police 48; Ambulance 32; Fire Kumta 20.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Generally no delays are expected.
AUTHORITY: Port Officer.

JAKHAU: 23.15 N. 68.37 E.

LOCATION: In Gulf of Kutch, on Godia Creek about 5 miles inside Aratian Sea. Port is about 7 miles West of Jakhau. Small sub-port exporting salt utilised by foreign-going and coastal traffic. Vessels calling Jakhau anchor in open roadstead about 6 miles off shore. Highest tidal range 14 ft. Current parallel to coast running about 4 knots.
AUTHORITY: Assistant Conservator Jakhau–Kutch.

KAKINADA: 16.56 N. 82.15 E.

DOCUMENTS: *(a)* To be supplied by Master on arrival:
Ship's Register.
Safety Equipment Certificate.
Safety Radiotelegraphy Certificate.
International Load Line Certificate.
Bill of Health, if coming from a foreign port direct.
Deratisation Certificate.
Last Port clearance.
ILH Dues Receipt, if coming from an Indian Port.
Crew List: 6 copies to Agents, 2 copies to Emigration Dept., 2 copies to Customs.
Customs Circulating Copy, if coming from another Indian Port.
Import Manifest of Stores (Store List).
Private Property Statement of crew and officers.
(b) Master to sign following certificates, in prescribed forms, presented by Agents, on arrival:
Port Entry.
Port Clearance.
Customs Entry.
Customs Clearance.
Departure.
Health.

PILOTAGE: No pilotage.
ANCHORAGE: *Allotment of Anchor Berths:*
Masters of vessels calling at the Port of Kakinada should cable the following information to the Port Officer directly, 24 hours before their arrival off the Port:—
(a) ETA (Indian Standard Time)
(b) Total cargo for loading/discharging at Kakinada and nature of cargo.
(c) Hatchwise distribution.
(d) Declaration of hazardous, inflammable and explosive cargo.
(e) Declaration of vessels winches in good working condition.
(f) Draft Fore and Aft.

A specimen cable covering the above is quoted below:
"Port Officer Kakinada STOP Vessel XXX ETA Kakinada 22/10 0900 Local Time quantity loading 9,500 tonnes rice bran extractions hatch one 1,000 hatch two 2,000 hatch three 3,000 hatch four 3,000 hatch five 500 no hazardous inflammable explosives STOP All winches derricks good working condition draft fore 8 m. aft 9 m."

The above cable sent to the Port Officer (in addition to the cable sent to their Agents as per normal practice) will facilitate proper anchoring instructions from Port authorities to the Masters and avoid difficulties in Port operations.

Masters should also keep watch on VHF Channel 16 to receive instructions from Port control and contact Port control on arrival at the approaches to the Port.

Specific instructions will be given by the Port Officer through Port control in respect of anchorage positions. When once anchored as above, Masters should not shift their position without specific reanchorage position given by the Port Officer, unless in case of emergency in regard to the safety of the vessel.

Masters of vessels calling at this port are advised to be in possession of the latest navigation chart corrected up to-date. The Indian edition available is 3009 "Approaches to Kakinada Port" with an inset of Kakinada Bay.

Main engines should not be immobilised without specific permission from Port authorities.

The Goadvari point (sand spit) is extending Northwestwards at a rate of about 170 ft. per annum and a port hand buoy (flashing red) 5 secs. is installed at the tip.

The holding ground anywhere in the anchorage is considered excellent (soft mud and sand).

MAX. SIZE: No restriction. Vessels any size can anchor.
HEALTH: Whether vessel coming from foreign port or port in same country, pratique is automatic, unless vessel is in quarantine. Master has to send message to Agents "All Well" by wireless or any other means. If vessel is in quarantine, Master to send advance cable to Agents to arrange health inspection, vaccination, etc., and then pratique.
RADIO: Radio stations are Visakhapatnam and Madras.
VHF: VHF radio station is in the Port Office (Port Control) on International frequency, Channels 16 and 12, communication from ship/Port control and vice versa. If ship requires communication on channel 12, it should be advised in advance to prepare machine accordingly.

The Port control VHF functions round the clock at the following specified times:–
0045 to 0100 hrs.
0345 to 0415 hrs.
0545 to 0615 hrs.
0745 to 0815 hrs.
1045 to 1115 hrs.
1245 to 1315 hrs.
1445 to 1515 hrs.
1745 to 1815 hrs.
1945 to 2015 hrs.
2245 to 2315 hrs.
all times Indian Standard Time.

TUGS: There are 5 small tugs for towing cargo lighters.
CARGO LIGHTERS: There are 77 sailing cargo boats with total capacity of 5300 d.w.t. tons. In addition 5 self-propelled mechanised barges each of 250 d.w.t. owned by the Port authorities will be ready by March 1977.
STEVEDORES: Gangs engaged by party doing stevedoring work. In case of liners, Agents attend. In case of chartered vessels, consignees/shippers attend. Master to give ETA with no. of hatches to be worked on arrival. Revised ETA to be sent whenever there is change.
MEDICAL: Government hospital available with specialists. Private nursing homes also available with efficient physicians and surgeons. Agents arrange medical aid on advance intimation. Being roadstead port, launches have to be arranged, hence advance intimation of 6 hours necessary through signal station while in port.
DENSITY: Ranging from 1010 to 1025.
FRESH WATER: Privately owned self propelled barge available for supply up to 100 tons. Prior arrangements to be made through Agents of vessels.
FUEL: No fuel suppliers. When essential small quantities of 10/15 tons can be arranged from Visakhapatnam, duty paid.
DEVELOPMENTS: Development programmes include: Dredging approach channel, canal protection, transport facilities, port equipment, navigational aids, water supply to the ships, power supply at loading/discharging points and stacking yards at shore, mechanisation of barges, transit sheds, etc.
GANGWAY/DECK WATCHMEN: Arranged by stevedores.
OPENING/CLOSING HATCHES: By ship's crew only.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and Spirits: 16 oz. per head per week for those who are eligible for supply by ship.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: No facilities. Only minor repairs to winches, welding work, casting and repairing spare parts.
REPATRIATION: Can be arranged.
AIRPORT: Visakhapatnam 105 miles, Madras 350 miles.
TIME: GMT plus 5.5 hours = IST.
HOLIDAYS: Charter Party holidays are observed. Work is done day and night. Port and Customs also work on holidays and out of office hours on payment of overtime. No work even on overtime payment

on following days: Bhogi, Pongal, Kanumu. Optional holidays to labour on Chollangi Amavasya, in January.
POLICE/AMBULANCE/FIRE: Police 3052; Fire 101; Ambulance 3311.
SHORE LEAVE: Shore permits given by Port Registration Officer (Immigration).
SERVICES: Fresh and dry provisions available.
NOTARY: Available for noting protest.
AUTHORITY: Port Officer.

KANDLA: 23.00 N. 70.12 E.

DOCUMENTS: To be submitted by Masters on arrival:
Customs: Crew List (3 copies).
Crew Private Property List – this should indicate all items they possess (3 copies).
Ship's Stores List (3 copies).
All valid documents of ship in English for verification of customs boarding officer.
Port: Maritime declaration in duplicate.
Health: Valid crew health cards and Deratisation Certificate.
Agents: Stowage Plan, Cargo Manifest and Bills of Lading.
PILOTAGE: Pilot station situated 22° 49.5′ N.; 70° 07′ E. Loaded vessels can cross bar only during high water. Vessel to report at Pilot station 2.5 hours before high water. Masters to keep Agents closely advised of ETA and anchoring time. 12 hours advance notice to be given by Agents for Pilot. No pilot ship or telegraphic address for Pilot station (Outer Tuna buoy). Vessels can contact Kandla Tower through VHF Channel 16. Pilot station 16 miles away from port. During all weathers vessels have to anchor at above position and await Pilot.

Shipmaster's Report: On calling at Kandla, the Pilot advised that anchorage outside a 2-mile range from the Outer Tuna buoy and the Pilot having to board there, increases the pilotage dues by 100 per cent.
ANCHORAGE: Vessels can anchor 1 mile S.W. of above anchoring position. Inside harbour, anchorages allotted by Port Authorities, and Pilots anchor vessels at suitable positions.
RESTRICTIONS: Being a tidal port, entering and leaving of loading vessels depends on tide, and loaded vessels can cross bar at entrance of channel only during high water.

During hours of darkness max. length for tankers is 575 ft.

Ships having speed of less than 9 knots through the water will not be moved in and out of the port of Kandla during hours of darkness.

Berthing and unberthing of ships at the moorings will be restricted to daylight only. Daily draft forecast for crossing Kandla Bar published at intervals by the Kandla Port Trust.
MAX. SIZE: Max. overall length 740 ft. No breadth restrictions.

For oil tankers max. permissible overall length is 700 ft.

Draft according to water on the bar varies between 28 and 34 ft.

Shipmaster's Report: Max. draft, chart datum (=14 ft.)+rise of tide.
PRATIQUE: The Masters of all ships arriving at Kandla are required to send the Port Health Officer, Kandla (cable address "Sandgrodh") a wireless message embodying all applicable terms of information set out in the Standard Quarantine message of the International Code of Signals. In addition to the International Code message, Masters are also required to give the following information in plain language:

(a) Whether there is any abnormal mortality of rats or mice.
(b) Whether there is any monkey on board.
(c) Whether touched or embarked at Aden or Djibouti any person.
(d) Names of all ports touched en-route within preceding 30 days, with dates of departure.
(e) Request for radio pratique.

Upon anchoring Pilot station, cable again Sandgrodh stating time anchored and requesting radio pratique.

In cases where the vessels have touched any yellow fever area within preceding 30 days it is necessary for Master, for good order sake, to certify that all officers and crew/passengers on board possess valid yellow-fever certificates.

The Pilot Officer boarding is authorised to grant free pratique on completion of the Maritime Declaration of Health signed by the Master in cases where vessels have failed to obtain radio pratique for any reason. If the Maritime Declaration is not in order, the Pilot refers the Master to the Port Health Officer who then boards the vessel and grants free pratique after his inspection of the vessel.
RADIO: Within a range of 35 hours off Kandla, vessels can contact Kandla Radio on call sign VWK. Before 35 hours off, Kandla can be contacted through Bombay Radio only.
TUGS: Port tugs join ships inside harbour off berth. Ship's wires used.
BERTHING: The cargo jetty provides 5 alongside-berths with total quayage of 3,825 ft. which can accommodate ships drawing up to 30 ft. loaded draft. The cargo jetty is served with 21 electric level luffing cranes, 16 of 3 tonnes, 4 of 6 tonnes and 1 of 10 tonnes capacity for handling cargo from ships.

3 mooring berths are available near the cargo jetty. In addition, there are separate moorings for *(a)* ships loading salt, *(b)* deep draft mooring for ships up to 37 ft. draft.

The Bunder basin has 3 wharves, two wharves with transit sheds. The South wharf is served with 4 quay electric level-luffing cranes of 3 to 10 tons capacity for handling cargo from lighters. The North Wharf is for country craft. The West wharf is provided with a 60 tons capacity electric gantry crane.
STEVEDORES: Minimum 24 hours notice required for arranging stevedoring labour and gangs. Bulk fertiliser and grain average 1,000 tons and 1,500 tons respectively. General cargo 250 tons per hook, subject congestion prevailing in sheds, wharves, warehouses and clearance, and on number of vessels working at particular period.
MEDICAL: Private Doctors' services available for vessels at berth. For vessels at Pilot station or inner anchorages minimum advance notice of 12 hours and 6 hours respectively required. Very limited facilities of private practitioners. No hospital facilities. Inoculation and vaccination carried out by Port Health Officer (a Government body) – minimum 48 hours notice required.
TANKERS: Tankers with max. over-all length of 700 ft., 35,000 tons displacement and 34 ft. draft permitted to berth. 3 main pipe-lines connected to tanks situated about 10 km. from berth, 2 generally used for white oils and one for black oil. White-oil pipe-lines diameter 12 in. and black-oil pipe-line diameter of 16 in. In addition, one 8 in. diameter pipe-line for soyabean oil, one 3 in. diameter pipe-line for acetone and one 4 in. diameter pipe-line for formaldehyde and one 12 in. diameter pipe-line for Phosphoric Acid imported by Indian Farmers Fertiliser Co-operative Ltd.

Shipmaster's Report: Tankers will sometimes be brought in to the port even though a berth may not be available at that time. Such vessel will then be moored to a mooring buoy close to the jetty, awaiting her berth at the tanker pier. Mooring to this buoy is effected by use of the vessel's starboard anchor chain, so that the anchor has to be disconnected from the chain before entering.

In securing alongside the oil-pier, tankers are required to utilise 1 insurance wire fore and aft as supplied from shore. In addition vessel is required to use all her available ropes and wires owing to strong currents – 4 head-ropes, 2 breast-ropes, 2 springs.
DENSITY: Varies from 1020–1030.
FRESH WATER: Can be supplied through shore pipe connection and barges.

Shipmaster's Report: Water is very scarce and should be ordered at least 3 days prior arrival.
FUEL: Furnace oil (heavy oil) and light diesel oil can be supplied. Usually 12 hours advance notice required for bunkering. In event of oil tanker discharging at berth, bunker supply can only be commenced 18 hours after completion of discharge by tanker. Quantities up to 500 tons supplied by tank trucks, above 500 supplied through pipe-lines if berth vacant. However, any quantity can be supplied by tank trucks.
FIRE PRECAUTIONS: 3 sea water fire fighting pumps installed at oil jetty. These pumps are under charge of fire brigade officers and have adequate fire fighting equipment. A tug fully manned with fire fighting arrangements also available at short notice.
DEVELOPMENTS: Berths and bar continuously under dredging and drafts will increase in future.

Ministry of Agriculture is installing a Marine Unloader with rated capacity of 500 tonnes per hour for discharging bulk fertiliser and its raw materials. Expected to be completed by end of 1976.
GANGWAY/DECK WATCHMEN: All ships engage 2 watchmen round the clock at gangway. To look after mooring lines, 8 mooring men (4 each at fore and aft) are engaged round the clock.
OPENING/CLOSING HATCHES: Unless specified in relative Charter Party to contrary, ship's crew to accomplish this work.
SHIP CERTIFICATES:
Registration.
Safety Equipment.
Safety Radio and Telegraphy.
International Load Line.
CUSTOMS ALLOWANCES: 200 cigarettes per week per person. Wine and/or Spirit: 2 pegs of spirit per person per day or 4 pints beer.

Shipmaster's Report: Very strict Customs supervision, particularly in regard to declaration of foreign currency.
CARGO GEAR: Ships should possess valid Cargo Gear Certificates.
IDENTIFICATION CARDS: Required. See "Shore Leave"
CONSULS: Nil.
REPAIRS: Minor repairs carried out. Chipping and painting work also carried out.
DRY DOCKS: A floating dry dock to accommodate small craft up to 70 m. (230 ft.) in length, 10.7 m. (35 ft.) beam and 3.1 m. (10 ft.) draft of max. weight 500 m./tons for repairs, available.
REPATRIATION: Though adequate facilities not available, this can be done in case of necessity.
AIRPORT: Situated about 15 km. from port.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Holidays for each year declared by Port Authorities, are Republic Day, Idu'l Zuha, Muharram, Holi (2nd day), Chetichand, Ramnavami, Good Friday, May Day, Independence Day, Janmashtami, Mahatma Gandhi's Birthday, Dussehra, Diwali (New Year Day), Idu'l Fitr, Guru Nank's Birthday, and Christmas.
TELEPHONES: Available on board, only for oil tankers.
GENERAL: Port equipped with 21 electric level luffing shore cranes of 3 to 10 ton capacity used for discharging all ships alongside cargo jetty. For discharging tankers with bulk grain port's vacuvators belonging to Food Corporation of India used.

Kandla port is a prohibited area where entry and exit are restricted to those persons having bona fide work only. Masters are requested to exercise a strict check at the gangway in order to ensure that only those persons with bona fide business to transact are allowed aboard. In the event that any unauthorised person is found to be aboard the vessel, the matter should be reported to port officials and the police on duty.

Masters are requested to advise their crew in advance of arrival at Kandla that photography within the port area is strictly prohibited, and it is suggested that all cameras should be left in the safe

custody of the Master in order that crew members may not violate this regulation inadvertently and become involved in legal proceedings.
SERVICES: Tank cleaning by shore labourers. Tank washings and residue not allowed to be discharged in port area.
REGULATIONS: Photography in port area prohibited. No Crew members allowed to take with them liquor of any kind ashore and not permitted to drink liquor outside port limit.
AUTHORITY: Kandla Port Trust.

KARWAR: 14.48 N. 74.06 E. (See Plan)

PORT LIMITS: *North.* A line drawn from Dayamada Point to Parker Rock.
East. Seashore of Karwar bay from Dayamada Point to Badchidar Point 50 yards above high-water mark including Baithkiol Cove, Kalinady and all branches thereof as far as navigable and the shores and banks within 50 yards of high-water mark Spring tides including all islands and thence to Mogera Guda Island (including Mogera Guda Island). All patta lands and other private sites excluded.
South West. A line drawn from Mogera Guda Island through Gudsav Sunv, Westernmost point of Mandal Island to Parker Rock.
DOCUMENTS:
8 Crew Lists.
2 Manifests of Stores.
2 Private Property Declarations.
2 Currency Lists.
1 Maritime Declaration of Health.
3 Passenger Lists (if any).
4 Import Manifests.
1 Last Port Clearance.
PILOTAGE: The approach from Northward is between Oyster Rock Lighthouse and 2 front and rear leading lights on Simshigudda and Kurmagad Islands, respectively, in positions Lat. 14° 50′ 11″ N. Long. 74° 05′ 43″ E. and Lat. 14° 50′ 33″ N. Long. 74° 05′ 59″ E. Vessels approaching from Southward may enter between Oyster Rock Light and Karwar Head. Currents in bay are negligible. Ocean-going steamers are piloted by Departmental Port Officer who is a licensed Pilot. No pilotage charges at present.
ANCHORAGE: Anchorage for shallow draft steamers is with the Port Signal Station, bearing 120° (T), distance 1 to 2 miles, or Oyster Rock Lighthouse, bearing 278° (T), distance 2.5 miles in about 24 to 28 ft. of water. Anchorage for deep drafted ships is with the signal station, bearing 099° (T), distance 3 to 3.5 miles in depths of 38 to 42 ft.
RESTRICTIONS: No entry restrictions. Karwar Bay may be entered on either side of Sunghiri Island, according to draft and anchorage taken as required. A vessel can enter Karwar either by day or night after having made lighthouse on Devghad Island.
MAX. SIZE: Any size of vessel can be worked as loading and unloading operation done in open sea. Depth at Outer Roads over 7 fathoms increasing accordance distance from land.
HEALTH: District Civil Surgeon acts as Port Health Officer. Free pratique to incoming vessels from foreign ports granted by radio. All vessels calling from foreign destination must give radio message addressed "Civil Surgeon Karwar" at least 48 hours prior entering port giving last port of call, number of crew, health conditions, approximate time of arrival and requesting pratique, same message must be repeated to Agents who obtain pratique on shore. Anchoring time is pratique time. For vessels calling from an Indian port, pratique not required.
Vessels which have taken on board passengers or crew from yellow fever areas, within 30 days of departure from such ports will be under quarantine. Free pratique will not be granted until such time as a mosquito search party, from nearest major port (e.g. Cochin, Goa or Bombay) has inspected, disinfected and certified that ship is fit for granting pratique.
Necessary for Owners or Masters to inform Agents well in advance in case of vessel arriving from yellow fever area to enable arrange mosquito search party and quick pratique.
RADIO: ETA and pratique messages should be sent via Goa or Bombay Radio as Karwar Radio has been shut down.
TUGS: No tugs necessary as vessels work in stream.
BERTHING: No berth, vessels work in open sea. Baithkol Cove is safe berthing place for lighters. Alongside wharves 10 to 12 smaller vessels can obtain safe berth with depth of 6 to 8 ft.
STEVEDORES: 48 hours notice ETA required order enable Agents advise shippers and stevedores to keep cargo and labourers ready. Main commodity export of ore. Mechanised barge loading operations in port. Ore loading rate up to 4,000 tons per day. General cargo 1,000/1,300 tons per day.
MEDICAL: Good hospital facilities exist. 2 hospitals about 1.5 miles from port. In case of inoculations and vaccination at least 2 days advance notice to be given enabling bring vaccine from nearby town (Hubli or Belgaum) distance 100 and 150 miles respectively.
TANKERS: No facilities for tankers.
DENSITY: 1025.
FRESH WATER: Dumb Water Barge for supply to steamers anchored in open Roadstead.
FUEL: No bunkering facilities for ocean-going vessels. Diesel and petrol storage depots within port for supply to small vessels.
DEVELOPMENTS: Proposed to develop port of Karwar into all-weather intermediate port, with 2 berths and 1 mechanical berth, an approach channel and turning basin. Intended arrangements include ability accommodate up to 60,000 d.w.t. ore carriers, loading up to 8 million tons ore and 1.25 million tons other cargo per year. Also intended develop fishing harbour with facilities accommodate large-scale deep-sea fishing industry for 1 million tons fish per year.
Provision of Channel Marks:
1 Fairway buoy.
10 channel marking buoys.
Provision of a mooring boat with equipment for maintenance of buoys.
Experimental dredging.
Dredging approach channel and turning basin.
Land acquisition for future expansion.
Diversion of present main road alongside port wharf.
Improvement of Binga/Karwar Road.
Provision of 2 berths and 1 mechanical berth for ocean-going steamers.
OPENING/CLOSING HATCHES: Generally carried out by ship's crew.
CERTIFICATES:
Ship's Register.
Cargo Gear Certificates.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derating Certificate.
Vaccination and Inoculation Certificates.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits.
CARGO GEAR: Before commencement of loading, Master to present shippers or their Agents with valid international cargo gear certificate, which shall not be more than 12 months old. Validity of said certificate to cover whole period for loading and discharging. Fourth five-year plan includes proposals for mechanical front-end loaders, tipping trucks, mobile cranes and forklift trucks.
A 10 ton mobile crane is available.
CONSULS: None.
REPAIRS: Moderate-sized workshop in town able carry out minor deck and engine repairs.
REPATRIATION: Shipping Master arranges crew changes and necessary repatriation. Crew signing off repatriated via Goa or Bombay.
AIRPORT: No airport, or rail connections. Nearest airports Goa or Belgaum, 60 and 150 miles distant respectively. 2 flights per day to Bombay from Goa.
TIME: GMT plus 5.5 hours. Permanent.
HOLIDAYS: Charter party holidays declared and published every year by Honorary Secretary of the Karnatak Chamber of Commerce and Industry, Jaya Chamaraj Nagar, Hubli-20.
Non-working days when work not permitted even on payment of overtime: Republic Day (26th January) and Gandhi Jayanti (2nd October).
POLICE/AMBULANCE/FIRE: Circle Police Inspector 116; City Police Station 33; District Superintendent of Police 7; Reserve Police Headquarters 18; Ambulance 19.
GENERAL: Port functions normally from 16th September to 15th May. Port closed from 16th May to 15th September due S.W. monsoon.
SHORE LEAVE: Crew members are allowed ashore provided not of Chinese nationality.
AUTHORITY: Office of the Port Officer.

MADRAS: 13.06 N. 80.18 E. (See Plan)

PORT LIMITS: The seaward boundaries of the Port:
To the North: A line "NP" running from a point in position "N" Lat. 13° 7.2′ N. Long. 80° 17.95′ E. to a position "P" in Lat. 13° 12′ N. Long. 80° 25′E.
To the South: A line "SQ" running from a point in position "S" Lat. 13° 4.1′ N. Long. 80° 17.25′ E. to a position "Q" in Lat. 13° 2′ N. Long. 80° 25′ E.
To the East: A line "PQ" connecting the Eastern extremities of the above described North and South boundaries, that is from point "P" in Lat. 13° 12′ N. Long. 80° 25′ E. to point "Q" Lat. 13° 2′ N. Long. 80° 25′ E.
DOCUMENTS:
3 Private Property Lists.
3 Stores Lists (Bonded Stores).
3 Crew Lists.
1 Last Port Clearance.
1 Valid Derat Exemption Certificate.
1 Bill of Health (only if vessel has touched yellow fever areas).
3 Slop Chest Declarations.
3 Currency Declaration.
Passenger List (if applicable).
Ship's Papers.
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Ship's articles (if vessel is Indian or Commonwealth flag).
Ship's papers to be handed over to Agent's Representative for final entry of vessel in Customs House. Same returned to Master.
PILOTAGE: Pilotage compulsory, both inward and outward, also for purpose of shifting inside harbour. Master required to advise ETA at least 48 hours before arrival, when local Agents contact Harbour Authorities for arranging berthing. If any berthing delay vessel has to anchor at Outer Anchorage – anchoring point below 10 fathoms line from breakwater light. Vessels requiring Pilot fly

"G" flag by day and 1 white light exhibited on a conspicuous point on ship by night.

ANCHORAGE: Good anchorage found with breakwater light bearing between 240° and 300° – distance 1 to 3 miles.

RESTRICTIONS: No restrictions of entry. Both day and night navigation. In "Jawahar docks" restriction of movement (sailing/shifting) during night time from 2200 hrs. to 0600 hrs. Tankers of 50,000 d.w.t. and over are berthed during daylight only. Tankers of 30,000 d.w.t. are berthed and unberthed at Bharathi Dock from 0600 hrs.–2200 hrs.

MAX. SIZE: Max. length South Quay III is 519 ft. Max. length Jawahar Dock is 750 ft. and breadth 100 ft. Max. length of 850 ft. for oil tankers using the "Bharathi Dock" is in force for the outer oil dock jetty during the fair weather season from January to October. During the period from October to January in the North-East monsoon period maximum size of vessel is restricted to 750 ft. with suitable draft restrictions.

Draft in the enclosed harbour varies from 26 ft. to 35 ft. Draft at the outer oil berth during fair weather season is 46 ft.

Details may be obtained from the Deputy Port Conservator, Madras Port Trust, Madras – 600001.

Outer Harbour: Vessels up to 42 ft. draft.

HEALTH: All vessels arriving from foreign ports have to apply for pratique through their radio – not earlier than 12 hours and not later than 4 hours before arrival. Pratique message to be addressed "Quarantine Madras" and worded as required by Port Authorities on receipt of which Port Health Officer cables ship granting pratique. In case of any infectious disease on board, Port Health Officer boards vessel and after due inspection grants pratique.

Telegram should take the following form: Name of vessel. ETA, in hours and date. No abnormal mortality of rats. No monkeys on board. Ship has not touched at any port on East Coast of Africa, Southernmost Tanzania or any yellow-fever infected area for last 30 days. Request radio pratique.

Port health require to sight derat and vaccination certificates when vessel due to leave before issuing clearance for Pilot and Customs who then issue port clearance.

RADIO: Coast Station Madras Radio, call sign VWM. Information regarding weather distributed twice daily. VHF communication available on Channel 16. Pilot station on Channels 10, 12 and 14, open round the clock to transmit and receive berthing and other operational messages.

Radar is likely to be installed at the signal station.

RADAR/VHF: VHF communication available, see "Radio".

TUGS: Join vessel just inside breakwater. Vessels use own lines and no tugs' lines used/supplied. Tugs' lines are also used if required by Pilot.

BERTHING: Vessels berth at all times except in "Jawahar Docks" where there is no night navigation between 2200 hrs. to 0600 hrs.

There are in all 18 general cargo/bulk cargo berths and 3 moorings. Drafts of these berths/moorings vary from 26 ft. to 35 ft.

There is an exclusive oil berth in the Outer Harbour with a draft of 42 ft. capable of being deepened up to 49 ft.

An iron ore berth with modern mechanical loading facilities is under construction and is expected to be completed by early 1975.

The Outer Harbour has the potential for accommodating 3 more berths 1 of which can be converted into a container berth.

Outer Harbour present draft is 42 ft. and it is likely to be increased to 49 ft. at a later stage.

BRIDGES: There are 2 bridges for pedestrian traffic only. 1 swing bridge at the entrance of Jawahar Dock and another Bascule bridge at the entrance of boat basin.

CRANES: Heavy duty floating crane capacity 120 tons available.

STEVEDORES: A copy of Manifest for stevedores' on board required.

Working hours: 1st shift, 0630–1530 (Recess 1130–1230); 2nd shift, 1530–2230 (Recess 1930–2000); 3rd shift, 2230–0530 (Recess 0200–0230).

MEDICAL: Advance notice for medical aid useful if vessel anchored/anchoring outside and not coming alongside, as it takes time to arrange for launch, etc. Medical assistance arranged easily if vessel alongside. Various hospitals and private nursing homes with modern equipment available. All crew members to be in possession of valid health cards in respect of inoculations/vaccinations against smallpox, cholera, etc. Facilities for renewal available.

TANKERS: There is an oil berth with 42 ft. draft at the Outer Harbour with 5 unloading/loading arms, 3 for unloading crude and 2 for handling refined products at a rated capacity of 1,500 tonnes per hour per arm. There are 2 moorings with 30 ft. draft in the inner harbour for non-dangerous petroleum products.

Manifold is equipped with 300 mm. Quick fixing cam lock coupling.

Facilities for deballasting the oil tanker are provided.

BULK HANDLING FACILITIES: There are 4 berths, 3 in the Jawahar Dock and 1 in South Quay, which can handle iron-ore semi-mechanical means. Loading capacity 3,000 tons/day at South Quay III and 12,000 tons/day at Jawahar Dock East.

RATE OF DISCHARGE/LOADING: Grains, by hooks/derricks:

Bulk: 300 tons per day per hook.
Bagged: 300 tons per day per hook.
By Vacs: 250 tons per Vac. per day.

Fertiliser. By hooks/derricks.

Bulk: 200 tons per day per hook.
Bagged: 300 tons per day per hook.
General Cargo: 150 tons per day per hook.
Liquid Cargo: About 150 t.p.h.

CRANES: Four 13-tonne cranes in use, 2 similar will be available shortly.

DENSITY: Varies from 1019 to 1025 according to season. No variation due to state of tide.

FRESH WATER: Available and can be supplied to vessels either through shore connections or by water barges. During Summer months due to scarcity of water, full requirements of vessel may not be possible.

FUEL: Bunkers available, but supply dependent on stock position. At least 48 hours advance notice required. Suppliers should receive nomination from their Head Office. Companies supplying bunkers are:

The Indian Oil Corporation Limited.
Caltex (India) Limited.
Esso Standard Eastern Inc.
Burmah-Shell Oil Storage and Distributing Company of India Ltd.

Usual rate of bunkering is about 40 to 80 t.p.h. Grades of fuel available:

Fuel oil, 700 Secs. Redwood No. 1 at 100° F.
L.D.O., 70 Secs. Redwood No. 1 at 100° F.
Gas oil, 30/30 Secs. Redwood No. 1 at 100° F.

GANGWAY/DECK WATCHMEN: Services of watchmen are compulsory and they can be engaged from Dock Labour Board.

OPENING/CLOSING OF HATCHES: Work of opening/closing of hatches usually depends on what Charter Party says and also type of hatches of vessel. Liner Term Vessels:-"McGregor Type" – These types of hatches are opened/closed by the crew; but, if Owners/Master desires, rigging gangs may be hired for this work at Owner's expense. Ordinary – Beams & Hatch Boards or Pontoon Type-Opening/closing of this type of hatches is done by stevedores.

CUSTOMS ALLOWANCES: Tobacco. 200 cigarettes and half-ounce tobacco per week can be held by each crew member. Wine/Spirit. 1 open bottle of spirit or wine per week can be held by each crew member.

CARGO GEAR: Vessel should be in possession of valid cargo gear certificate issued by competent authority. Port Dock Safety Inspector may inspect cargo gear before or during loading/discharging in spite of vessel being in possession of a valid certificate.

IDENTIFICATION CARDS: All crew members should be in possession of their respective CDC's/Z. Cards/Passports.

CONSULS:

U.S.A.	Tel.	83041	Japan	Tel.	88677
Australia	,,	811393	Netherlands	,,	86411
Britain	,,	86311	France	,,	444203
	and	811376	Belgium	,,	645495
Denmark	,,	22088	U.S.S.R.	,,	73077
Germany	,,	82125	Ceylon	,,	85316

REPAIRS: All types of deck/engine repairs possible. Experienced and established marine workshops available.

DRY DOCKS: None.

REPATRIATION: All facilities for effecting crew changes and arranging repatriation exist.

AIRPORT: The Madras Airport (Meenambakkam) about 15 miles from harbour and served by regular airlines.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Declared by authorities are observed, but work completely closed on: Pongul, Republic Day, May Day, Independence Day, Mahatma Gandhi's Birthday and Deepavli.

POLICE/AMBULANCE/FIRE: Police 100; Ambulance 101; Fire 101.

TELEPHONES: Can be placed on board, but only on vessels at certain berths. All berths on West Quay, i.e. WQ 1, WQ 2, Centre Berth, WQ 3 and WQ 4, North Quay berth and berths on Jawahar docks (West) only, i.e. JD 1, JD 3 and JD 5.

SERVICES: All special services available.

SHORE LEAVE: Crew members allowed ashore after securing shore passes issued by port security officer. However, they must restrict themselves to city limits.

PORT REGULATIONS: Normal Port Regulations. No photography allowed in harbour except with Chairman of Port Trust's permission.

DELAYS: When there is heavy arrival of bulk grain and fertiliser, vessels may expect a delay of about a week or so. General cargo vessels may expect a delay of about 2/3 days during congestion.

AUTHORITY: Madras Port Trust.

MANDVI: 22.49 N. 69.21 E.

DOCUMENTS: Arrival: Arrival Report with ship's details, Voyage Memorandum, Crew Lists, Stores Lists.

Departure: Departure Report with ship's details, Export General Manifest, Certificate of Cargo Tonnage Loaded.

PILOTAGE: None. All vessels anchor in stream.

RESTRICTIONS: Vessels anchor in open roadstead in 3–5 fathoms, 2–2.5 miles from shore. Vessels of 9 ft. draft can reach wharves at high water and vessels drawing 12 ft. can reach Albert Edward breakwater. Vessels having 60–70 tons cargo only can enter port during high tide. Highest tidal range 14 ft., average range 10 ft. Current 2 knots during fair season.

HEALTH: Government Medical Officer attends as health officer.

RADIO: No radio. All messages delivered through Kandla.

TUGS: Services optional 3 tugs and 1 launch. Charges basis time and BHP.

STEVEDORING: Arranged by Agent with Port Authority.

MEDICAL: 24 hours notice required of any medical requirements.

FIRE PRECAUTIONS: Fire extinguishers are available at the port. Fire fighter is available at the Port workshops. Smoking strictly prohibited in port area.
WATCHMEN: Arranged through Agents.
HATCHES: Opened and closed by crew.
CERTIFICATES: Non-carriage of dangerous cargo, Cargo Gear Certificates, Statement that no passengers carried.
CUSTOMS ALLOWANCES: No restrictions for crew of coastal vessels. Stocks of tobacco, wine and spirits to be declared to Customs. Wines and spirits prohibited in Gujarat States but Master permitted daily quota by Customs Authorities.
REPATRIATION: No facilities.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Usually possible to arrange work on holidays.
POLICE/AMBULANCE/FIRE: Police 8; Ambulance 32; Fire 10.
GENERAL: Gulf of Kutch Ports, viz. Mandvi, Mundra, Jakhau and Koteswar administered by Director of Ports, Gujarat States, Ahmedabad. Mandvi located on Southern coast Gulf of Kutch at mouth of river Bukmavati, seasonable, tidal and intermediate ports.
SHORE LEAVE: Crew of coastal vessels only allowed ashore subject prior permission from Captain of the Port.
DELAYS: Delays to be expected in supply of cargo at times of lowest water.
AUTHORITY: Deputy Engineer & Port Officer.

MANGALORE (Minor Port): 12.55 N. 74.52 E.

PORT LIMITS:
North: A line drawn due West from the Northern boundary pillar on the seashore about 740 yards from Sultan's Battery to 9 fathoms of water.
South: The line drawn due West from the Southern boundary pillar to the seashore, about 1,000 yards below the marine yard to 9 fathoms of water.
West: The 9 fathom line between its intersections with the lines above defined as the Northern and Southern limits.

DOCUMENTS:
Crew Lists (6 copies).
Crew's declarations for Customs (4 copies).
Store Lists (4 copies).
Currency declaration (2 copies).
Import Manifest inclusive of Deck Cargo and bottom cargo (3 copies).
Bill of Lading (1 copy).
Ships particulars inclusive of service stand (2 copies).
Declaration of opium, dangerous drugs, gold, arms, ammunitions and explosives, monkeys on board, last and next port of call (2 copies).
Arrival report and Port and Light dues receipts (2 copies).

PILOTAGE: No pilotage. Open anchorage port. When shifting to nearest safe anchorage, free pilotage assistance rendered by Port Officer.
ANCHORAGES: Vessels anchor in depths of 4.5 to 6 fathoms with Mangalore Lighthouse (12° 50.8′ N., 74° 50.3′ E.) bearing between 250° and 270° (T).
HEALTH: Vessel arriving from foreign country sends radio message in code or otherwise to respective Agents who contact Port Health Officer accordingly. If vessel from yellow fever area Master should give prior notice to Agent to arrange for Mosquito Party from Cochin to come to Mangalore and board ship on arrival. If suspected or infected, vessel should anchor not less than half a mile from all other vessels and notify Port Authorities of situation either by radio or through signal station.
RADIO: Call sign VWL on 500 kc/s and 438 kc/s working frequency.
STEVEDORES: Stevedores available. Average loading/ discharging rates per day:
(a) Iron ore 400 tons per hook (weather permitting).
(b) Fertiliser or wheat bags 200 tons per hook (weather permitting).
(c) General cargo bagged 200 tons per hook (weather permitting).

TUGS: 1 Port Trust tug and two launches and 2 private tugs capable of towing over 600 tons each are available.
MEDICAL: 24 hours notice necessary to arrange for a doctor on board. Goverment Hospital and Nursing Homes available.
DENSITY: Density of 1022/3 throughout year except in September (immediately after Monsoon at beginning of shipping season) when density about 1016.
FRESH WATER: Supplied by water barge at rate of 110 tons per trip with 48 hours prior notice. Cost of supply inclusive of all charges except crew overtime on holidays. Minimum order 35 tons.
FUEL: Small quantities not exceeding 40 tons of diesel oil can be supplied by oil barge.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: As per terms and conditions of Charter-Party.
CERTIFICATES:
Ship's Registry.
Deratisation Certificate.
Articles of Agreement.
Dock Safety Register (cargo gear).
Radio Telegraphy Certificate.
Load Line Certificate.
Port Clearance from last port.
Bill of Health.
Safety Equipment Certificate.

CUSTOMS ALLOWANCES: Tobacco. 200 cigarettes per week. Wine and spirits, 1 open bottle of spirits per week.
CARGO GEAR: Derricks and boat devices to be hoisted in when not required to prevent contact with masts and sailyards of lighters alongside. Advisable that lifeboats be lowered only on non-working side.
IDENTIFICATION CARDS: Passport or identification cards to be carried by crew plus letter of permission from Master for shore leave.
CONSULS: None.
REPAIRS: Minor repairs to engines and gear carried out by auto-workshops.
DRY DOCKS: Small dry dock, maximum capacity 450 d.w.t. Dimensions, 110 ft.×30 ft. Depth on sill 8 ft. at MHWS. For repairs only.
REPATRIATION: Can be arranged by ship's agents or at shipping office.
AIRPORT: Airport situated 12 miles away. Daily flights to Bombay. Tuesday, Thursday, Saturday to Bangalore. Services by Indian Airlines Corporation.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Port Authorities. Work can be arranged on all holidays except principal Muslim festival days.
POLICE/AMBULANCE/FIRE: Port Police Station 5196. Fire service on lighter wharf only (no fire-floats available), tel. 3333.
TELEPHONE: No arrangement for placing telephone on board.
GENERAL: Port open only in fair season from 15th September to 15th May. However, ships may call at port and work between 15th May and 15th September (weather permitting) with prior permission of Port Officer.
SHORE LEAVE: Permitted, except for Pakistan and Communist-Chinese crew.
DELAYS: Adverse bar conditions necessitate stopping work for bad weather.
AUTHORITY: Mangalore Port Trust Board.

MORMUGAO: 15.25 N. 73.47 E. **(See Plan)**

PORT LIMITS: Roughly up to 10 fathom line running North and South from Cabo to Grand Island. Vessel is considered "arrived vessel" when she comes under direction of Signal Station.
DOCUMENTS:
10 Crew Lists.
10 Passenger Lists.
3 Copies of Manifest.
1 Last Port Clearance.
1 Bill of Lading in case of imports.
3 Stores Lists.
3 Personal Property Lists.
1 Letter of Authority to Agents addressed to Asst. Collector of Customs (prepared on arrival).
1 Arrival Report to Immigration Officer.
1 Customs Declaration.
1 Inward Clearance Certificate.
1 List of Particulars.
1 Deck Cargo Certificate.
1 Arrival Report.
Last 7 items to be signed by Master in port after arrival.
Ship's papers: Documents placed at disposal of port:
Ship's Registry.
Deratisation Classification.
Safety Equipment.
Load Line.
Radio Telegraphy.
Indian Light Dues.

PILOTAGE: Compulsory. ETA required at least 24 hours before arrival to order Pilot. Call Pilot by international code signals on arrival at signal station or contact by VHF Channel 16.
Pilot launch is white launch showing Pilot flag. In fair weather Pilots board West of fairway buoys. In bad weather, Pilots guide vessel from launch until boarding possible. Pilot launch leaves from inner harbour with Pilot and is not stationed at any particular position. International regulations for Pilots' ladders applicable. Vessels awaiting Pilot may anchor 2 miles West of fairway buoy 6.
RESTRICTIONS: Pilotage only during daylight hours. Draft restricted. Deep-laden vessels await high tide. Max. draft permissible 28 ft. to 30 ft. Draft particulars for incoming ships berth No. 3, 4, 5 and 6 – 27 ft., 28 ft., 28 ft. and 28 ft. Max. draft outgoing ships: berth No. 3, 4, 5, 6 and Anchor Buoys 1 and 2: 27 ft., 28 ft., 28 ft., 28 ft., 28 ft., and 28 ft. respectively. Masters of outgoing vessels wishing to load beyond allocated drafts required to obtain permission 24 hours before sailing/shifting and must sail at fixed time.
MAX. SIZE: Length 650 ft., also see "Entry Restrictions". Vessels loading West of breakwater in fair weather: no restrictions on size or draft. Tankers max. length 650 ft. Also see "Developments".
HEALTH: International Regulations apply. Pratique automatic when calling from another Indian port. Pratique granted by Pilot Officer who boards vessel on arrival. Telegraphic pratique can also be obtained from Port Health Officer cable address "Quarantine Mormugao".
Master should send quarantine message not less than 4 and not more than 12 hours prior arrival indicating:
(1) Name of ship.
(2) Expected date and time of arrival.

(3) My Maritime Declaration of Health has negative answers to all 6 Health Questions or ZT or My Maritime Declaration of Health has a positive answer to question (indicated by complements) or ZU (indicated by complements 1–6).
(4) List of ports of call with dates of departure during last 30 days.
(5) Have or have not monkey on board.
(6) Have or have not any person on board embarking at Aden or Djibouti.

Request radio pratique.

RADIO: Goa Radio, call sign VWG. Operating continuously on 500 kHz, 417 kHz, and 2182 kHz. Communication range 500 miles.

VHF radio telephone station at signal station headland, call sign Goa Port, calling Channel 16, working Channel 12.

Ships desiring to contact port on VHF should establish contact by means of *(a)* light signals, *(b)* hoisting "Z" flag, *(c)* blowing "Z" on whistle or siren.

Port VHF station attracts attention of desired ship by hoisting "Z" flag with call letters of ship or by light signalling.

VHF service restricted for port operation, ship's emergencies and movements. All messages to be addressed to Harbour Master. Third party communication not allowed.

TUGS: Tugs usually used inside breakwater. Normally push, but when towing, use ship's lines.

BERTHING: Deep loaded incoming vessels berthed 2 hours before high water. Vessel also use anchor and quarter line to mooring buoy to keep off berth.

BULK HANDLING FACILITIES: One berth equipped for mechanical handling of iron ore. Loading rate about 750 t.p.h. At present vessels of 30,000 d.w.t. and draft of 28 ft. can be accommodated.

The current development project includes provision of iron-ore berth capable of handling vessels of up to 60,000 d.w.t. initially, and 100,000 d.w.t. ultimately with ore-loading plant capacity 8,000 t.p.h.

STEVEDORES: Original ETA of 48 hours and a definite ETA of 24 hours required and Master should indicate stowage and gangs required before arrival, also how derrick booms must be arranged so as to enable stevedores to arrange same on arrival.

MEDICAL: No hospital facilities for any serious sickness but facilities available for first aid, which should be informed 24 hours in advance. Port Ambulance can be obtained during day-time only.

TANKERS: Discharge line 14 in. No loading facility. Berths No. 4 and 5, white oil, and berth No. 6 for black oil. Permissible draft 28 ft.

DENSITY: Salt water 1025 – slightly fresh during monsoon season.

FRESH WATER: Available alongside berths also from 180 tons capacity barge. Pumped by hose at 20 t.p.h. at berth, and 30 t.p.h. from barge. Sometimes restricted to 50 tons maximum if supply is limited.

FUEL:

Grades	*Viscosities*
High speed diesel oil	Less than 45 Redwood
Light diesel oil	41 ,,
Furnace oil (also known as light fuel oil)	of 623 ,,

48 hours advance notice required.

FIRE PRECAUTIONS: During discharge of oil tanker, great care taken that no naked lights are visible nearby. Movements of unauthorised persons at point of discharge strictly restricted. Ships alongside or up to a distance of 100 ft. are advised not to emit smoke through funnel. Round the clock standby duty carried out by Fire Service, around tanker, till completion of cargo.

DEVELOPMENTS: Under the port development scheme the following points are included:

Dredging harbour to 45 ft. with an alongside depth of 48 ft. at new berths to be provided.

Construction of new ore-handling complex for up to 100,000 d.w.t. vessels.

Construction of new oil berth.

GANGWAY/DECK WATCHMEN: Necessary to have watchmen in case of loading general cargo to protect goods. In case of loading iron ore no watchman required.

OPENING/CLOSING HATCHES: Usually by crew, unless contrary to Charter Party.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per crew member per week. Wine and/or Spirit: 4/5ths of bottle per week for each member of European crew. 2/5ths of bottle per week for each member of Asian crew.

CARGO GEAR: Certificates to be valid.

IDENTIFICATION CARDS: Not essential but according to Immigration Rule Police landing pass issued to each crew member going on shore.

REPAIRS: No major repairs. Minor repairs only and no underwater welding facilities.

DRY DOCKS: None.

REPATRIATION: Facilities exist for changing and repatriating crew.

AIRPORT: Approx. 7 kms. from harbour. One local flight daily to Bombay. No international flights from Goa and all outgoing foreign passengers have to be repatriated via Bombay.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Republic Day; Mahashivratri; Holi; Gudi Padva Muharam; Good Friday; Independence Day; Ganesh Chaturthi; Mahatma Gandhi's Birthday; Dussehra; Feast of St. Francis Xaviour; Idu'l Fitr; Goa Liberation Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 234 through Postal Exchange; Ambulance (Health Centre) 215 through Postal Exchange; Fire 105 through Port Exchange.

TELEPHONES: No arrangements for installation of telephones on board.

SHORE LEAVE: Crew members allowed to go on shore with Police landing pass.

AUTHORITY: Mormugao Port Trust.

MUNDRA: 22.54 N. 69.42 E.

LOCATION: In Gulf of Kutch near Navimal Lighthouse, about 2 miles inside Bocha Creek. Port is about 6 miles West of Mundra town. Salt exporting port open for deep sea and coastal traffic. Vessels calling Mundra anchor in open roadstead 2 miles from shore. Vessels of 8 ft. draft can berth alongside jetty. Highest tidal range 17 ft. Current parallel to coastline running about 3 knots.

AUTHORITY: Assistant Conservator.

NAGAPATTINAM: 10.45 N. 79.50 E.

DOCUMENTS: To be completed by Masters of vessels on arrival:
8 Crew Lists.
8 Passenger Lists.
3 Form of Import Manifests of Stores.
3 Lists of articles in slop chest.
3 Private Property. Declaration of the Crew.
3 Manifests.
3 Bills of Lading.

To be handed to Agents:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Bill of Health.
Last Port Clearance.

PILOTAGE: No Pilot station, being open roadstead port. Vessels not piloted to anchorage.

ANCHORAGE: Vessels anchor according draft and prevailing weather conditions. In fine weather, good anchorage in depths of 3.75 to 6 fathoms with lighthouse bearing 281° to 255°. Holding ground, sand and mud, good. Agents, in consultation with Port Authorities, signal Master on arrival of vessel, anchorage position for guidance.

MAX. SIZE: No restrictions. Vessels choose anchorage according to draft.

HEALTH: On arrival Master to signal local signal station, addressed Port Health Officer stating vessel arrived and no sick person on board. Agents then obtain free pratique from Port Health Authorities. In event any person having chicken-pox or smallpox on board, advisable that Master informs Agents sufficiently in advance to enable them make necessary arrangements for Port Health Officer to board vessel on arrival and obtain free pratique after Port Health Officer is satisfied that isolation arrangement on board adequate.

RADIO: Madras Radio or Colombo Radio. No radio station locally.

TUGS: Two tugs will be available in the near future.

BERTHING: Open roadstead port. No berths.

STEVEDORES: Port usually handles fertiliser imported on Government of India account and rate of discharge per day about 750 to 1,200 tons. Advisable that ETA of vessel is passed to Agents at least 2 days in advance to enable them to advise receivers to arrange necessary gangs.

MEDICAL: No advance notice required unless sickness of serious nature when Medical Officer boards vessel on arrival. In case of sickness to officers or crew, Medical Officer boards vessel or if in condition to go ashore, necessary arrangements made to take sick crew to Doctor. District Headquarters Hospital with all medical facilities available. Special wards available for sick members of crew. Vaccination, inoculation against yellow fever, cholera, plague, etc., can be arranged.

DENSITY: 1025.

FRESH WATER: Available in limited quantities and dependent upon port getting continuous supply from municipality. 2 tanks of 14.5 tons capacity placed in lighter are sent alongside vessel and a petrol-driven pump is used to pump up water from tanks into vessel.

FUEL: Diesel oil available in a limited quantity.

GANGWAY/DECK WATCHMEN: In the interest of vessel, 2 gangway and deck watchmen daytime and at night to be employed to avoid pilferage.

OPENING/CLOSING HATCHES: Opening and closing of hatches on arrival of vessel before commencement of discharge and on completion carried out by stevedores. Time used for opening and closing of hatches not counted.

CUSTOMS ALLOWANCES: Tobacco, 1 carton per week per crew member. Wine and Spirit, Whisky or brandy 1 quart each member for a week. No restriction for beer as the issue is based on weather, etc. This rule relaxed if necessary.

IDENTIFICATION CARDS: Needed.

CONSULS: None.

REPAIRS: Minor repairs in engine room and on deck can be effected. Chipping and painting can also be arranged.

DRY DOCKS: None.

REPATRIATION: Facilities available for effecting crew changes and arrangements can be made for repatriation.

AIRPORT: Nearest airport Madras, served by regular airlines.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Observed as declared by Authorities. Vessels work on Charter Party and Government holidays but time not counted. No

closed holidays but overtime charged for any work done on Government holidays and on Sundays.
POLICE/AMBULANCE/FIRE: Police 267; Ambulance 299; Fire 299.
GENERAL: No regular launch service between ship and shore. Agents hire out private launch and obtain permission from port office to ply launch between ship and shore, to facilitate officers and crew to go ashore and for Doctor, Agent and Port Health Officer. Port Authorities do not permit plying of launch after 1800 hrs. 3 trips arranged for launch to go to vessel and back from 0600 to 1800 hrs. every day weather permitting.
SERVICES: Hatch cleaning after discharge of cargo can be carried out.
SHORE LEAVE: Officers and members of crew allowed to go ashore and necessary passes obtained by Agents.
DELAYS: Usually no delay in anchoring vessels and generally all formalities including survey carried out on vessel's arrival. If vessel arrives between 0600 and 1400 hrs., she commences discharge same day.
AUTHORITY: Port Officer.

NAVLAKHI: 22.57 N. 70.27 E.

DOCUMENTS: Arrival:
Last Port Clearance.
Bill of Health/Maritime Declaration of Health.
Customs Arrival Report.
Port Arrival Report.
Agent's Arrival Report.
List of Same Bottom Cargo.
Crew List (6 copies).
Import General Manifest.
Lighthouse Dues Receipt (in case the last port of call being Indian port).
Store List & Private Property List (8 copies each).
Misc. Declaration.
Departure:
Port Clearance (handed over by Customs).
Bill of Health.
Port Departure Report.
Agent's Departure Report.
Income Tax Clearance Certificate (in case of export cargo).
PILOTAGE: Not compulsory. If required an experienced local guide provided by Port Authorities. In such cases Pilot meets vessel at Tuna Buoy Pilot station about 19.5 miles from port.
ANCHORAGE: Open roadstead port. Vessels work in stream. 2 vessels can be brought to inner anchorage and work conveniently. In case a third vessel arrives, it has to anchor at Buoy No. 5 until 1 of the vessels sails from inner anchorage. During non-monsoon times vessels can be moored at Buoy (Navlakhi) No. 5. Chart of the approaches is No. 2017.
RESTRICTIONS: Night navigation risky. Generally vessels' movements during daytime high water period. Vessels should arrive Tuna Buoy 3 hours before high water in daytime.
HEALTH: No Port Health Officer available. Customary for Port Health Officer Kandla to board vessel at Tuna buoy and grant free pratique (in case vessel within 30 days called any other restricted ports). Otherwise Customs Officer grants free pratique after vessel's arrival in port limits.
RADIO: Radio messages intended for this port should be addressed either through Kandla or Bombay Radio Stations.
TUGS: Two tugs available, 191 h.p. and 370 h.p.
CARGO HANDLING: Ships lie at anchor in the stream about 2.5 km. from shore and cargo is shipped/landed through lighters. There are 12 barges of 100 tons capacity and a further addition of 2 more of 100 tons are expected soon. There are godowns of 234,000 sq. ft. floor area to store the cargo passing through ports. There are four 3 tonnes capacity cranes and two of 5 tonnes capacity.
STEVEDORES: At least 24 hours notice to arrange gangs. Rate of loading and discharging for grain and fertiliser about 900 tons a day if 1 ship working; in case 2 vessels working simultaneously, average of about 600 tons can be maintained in fair weather days.
MEDICAL: No facilities available. Small dispensary under control of Medical Practitioner who undertakes emergency cases. Good medical facilities available at Morvi which is 30 miles away, or Rajkot about 60 miles. Generally doctor called from Morvi to attend vessels.
DENSITY: 1025.
FRESH WATER: Supplied only in small quantities. 1 barge with carrying capacity of about 50 tons a trip. Due to very low pressure pipe-lines, minimum 12 hours to fill barge.
FUEL: None available.
DEVELOPMENTS: A new lighter-wharf in Sui-Side creek is under consideration so as to work lighters all round the clock.
GANGWAY/DECK WATCHMEN: Necessary to appoint watchmen on board to avoid possible thefts.
OPENING/CLOSING HATCHES: Depends upon terms of working. Local stevedores generally attend to this operation but charge to vessel (Owners) in case these operations are vessel's account.
CERTIFICATES:
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Ship's Register.
Derating Certificate.
IDENTIFICATION CARDS: Customs examine and issue pass to land. But if crew go to suburbs (beyond Morvi which is 30 miles away), identity cards should be carried.
CONSULS: None.
REPAIRS: Workshop for repairs to port equipment and urgent repairs of minor nature can be carried out.
DRY DOCKS: None.
REPATRIATION: Crew being repatriated from this port would be sent to Kandla (after Customs examination) where facilities are available.
AIRPORT: Navlakhi not connected by air. In case of emergency, Kandla or Rajkot nearest airports.
TIME: GMT plus 5.5 hours.
HOLIDAYS: The port holidays are taken as Charter Party Holidays. Except for some restricted holidays, work will be carried out on payment of overtime.
POLICE/AMBULANCE/FIRE: Checkpost Police Station without telephone.
TELEPHONES: Few important offices are connected with telephones, and no telephone service can be provided on board vessel.
SHORE LEAVE: The crew members are allowed ashore. See "Identification Cards".
AUTHORITY: Port Officer.

NEW MANGALORE: (Panambur) **(See Plan)**

Situated at Panambur. 9 kms. North of Mangalore.

Facilities will consist of 3 alongside berths, 1 for general cargo, 1 for iron and manganese ore exports and 1 for import of raw materials required by the Mangalore chemical and fertiliser factory.

A shallow draft berth for the export of finished fertilisers will be provided. The port will also have a mooring berth for general cargo and an oil jetty for handling naphtha and petroleum products.

In the second stage of development the harbour will be expanded to cater for 60,000 d.w.t. bulk carriers of 12.20 m. draft. An additional alongside mechanised berth able to handle 4,000 tonnes of iron ore per hour is expected to be provided.

The port has been created by carving out of the mainland a 260-acre lagoon 10.1 m. deep. The lagoon is connected to the sea by an approach channel, 3,200 m. long protected by 2 breakwaters each 340 m. long, constructed one on either side of the channel.

The oil jetty has been located in the S.W. portion of the lagoon very near to the approach channel. The dredged depth at the oil jetty site during the first phase of construction will be R.L.-9.75 m. During high tide, the depth will be R.L.-10.65 m. affording berthing facilities for 30,000 d.w.t. tankers.

When opened ships of 30 ft. draft will be able to berth alongside the 3 new berths. Pilotage will be compulsory. Masters are to anchor in the vicinity of the fairway buoy (yet to be laid). Maximum tide range 5 ft. No locks or gates. No cranes available at present. Ship's gear to be used. Fresh water available at berths and in the stream. Bunkers not available except very small quantity of LDO or HSD from private trade. Minor repair facility available.

Vessels are advised to anchor in a depth of 10 m. (33 ft.) in a position with Surathkal lighthouse, flashing 10 seconds, bearing 011° (T) distance from lighthouse 4.3 miles. Entry into the channel with Pilot is made with 2 transit towers.

OKHA: 22.27 N. 69.05 E.

DOCUMENTS: 5 copies each of Import Manifest, Crew List. Passenger List, Ship's Stores Manifest, Crew Property List.
PILOTAGE: Compulsory. Pilot station Lat. 22° 30.5' N.; Long. 69° 04.36' E.; 1.35 miles N.W. of Samiani Light Tower.
ANCHORAGE: Roadstead anchorage near Pilot station.
MAX. SIZE: 525 ft. LOA during N.E. monsoon and 540 ft. LOA during S.W. monsoon with comparable breadth. Max. draft 26 ft.
PRATIQUE: The Master should cable the Port Health Officer (Quarantine Okha) in International Health Code, requesting free pratique. If radio pratique is not effected, then Masters should present Maritime Declaration to the Customs Boarding Officer who is authorised to grant free pratique. If the vessel is arriving from yellow-fever area, the mosquito control team is arranged from Kandla, where the cable address of the Port Health Officer is "Sangrodh Kandla".
RADIO: Post and Telegraph Department Wireless station call sign VWO can be contacted from 0800 to 2000 hrs. I.S.T. for communication to and from Local Agents.
TUGS: Port-owned tugs join vessel while entering port channel and/or vacating it at time of berthing and/or unberthing.
BERTHING: Only daylight hours. Vessels should be ready in all respects to move to berth 1.5 hours before high water at Pilot station.
Sayaji Pier – East side 26/25 ft. draft; West side 20 ft. draft.
Dry cargo berth – 23 ft. draft.
BRIDGES: None.
STEVEDORES: Firm ETA including requirements order avoid delay.
(a) Exports: Mainly cement, bauxite and chemicals and general

merchandise, rate 100/125 tons per shift per hook. *(b) Imports:* Mineral oils average rate about 200 to 300 t.p.h. according to ship's pumping capacity; general cargo same rate as export.
MEDICAL: Port Health Officer always available. Well-equipped hospital at Mithapur under Tata Chemicals at a distance of about 7 miles from port. Medical aid available throughout day and night.
TANKERS: All dry cargo vessels regulations apply for tankers, particularly size, etc. 1 berth, draft 26 ft. No slop facilities.
DENSITY: 1025.
FRESH WATER: Limited. Port supplying water by barge and shore pipe-line. In normal cases 25 tons water supplied per day. In cases of emergency 40 tons water can be supplied per day.
FUEL: Available but arrangement should be made through oil companies head offices at Bombay.
FIRE PRECAUTIONS: Port Department maintains a small fire station.
DEVELOPMENTS: In addition to existing concrete jetty a new concrete jetty has been constructed, presently accepting vessels up to 350 ft. length, 23 ft. draft.
GANGWAY/DECK WATCHMEN: Vessel to provide own gangway watchmen. Shore-watchman available for employment on shift basis (8 hour shifts).
OPENING/CLOSING HATCHES: To be attended to by ship's crew if not contracted with stevedores which may cost extra.
CERTIFICATES: Ship's Register, Load Line Certificate, Safety Equipment, Safety Gear, Radio.
CUSTOMS ALLOWANCES: At Customs Preventive Squad's discretion.
CARGO GEAR: Normal gear supplied by stevedores for hire.
IDENTIFICATION CARDS: Necessary.
CONSULS: None.
REPAIRS: Only minor repairs.
DRY DOCKS: None.
REPATRIATION: Necessary formalities to be completed at District Headquarters situated at Jamnagar, a distance of about 110 miles: such as Police, Health, (whereas Customs formality can be completed locally).
AIRPORT: Nearest airport Jamnagar about 110 miles connected with Okha by rail and road. Only local service to Bombay daily operated.
TIME: GMT plus 5.5 hours.
HOLIDAYS: As declared by Port Authorities, cargo work can be arranged by paying usual scheduled overtime but labour's observed holidays (about 5 to 6 days in a year) completely closed.
TELEPHONES: Only for tankers by respective oil installation.
GENERAL: Port governed by Gujarat State and all rules and regulations laid down by them in addition to Central Government rules applicable to this port. Port connected with hinterland by rail, motor transport, 300 miles by sea from Bombay, 2 tides in 24 hours, mean high water spring rise about 11.5 ft. and mean low water neap rise 9.5 ft.; current in neap tide is 2 to 3.5 knots. Wind force/direction during April/September S.W. 3/5 and in October/March N.W. to N.E. from 2/4.
SERVICE: Tank cleaning by manual labour.
SHORE LEAVE: Crew allowed ashore after vessel cleared by immigration officer who boards vessel on arrival.
DELAYS: Delay only encountered if berth or moorings are occupied.
AUTHORITY: Port Officer, and Superintendent of Customs, Okha (Ahmedabad Collectorate).

PARADIP: 20.14 N. 86.42 E.

DOCUMENTS:
"No opium" Certificate.
Deck Cargo Certificate.
Arrival and departure reports.
Anchorage Certificate.
6 copies of Crew Lists.
Required certificates to be produced for signature of Master by Agents on arrival.
PILOTAGE: Pilotage during daytime only. Last pilotage 1630 hrs. Give ETA to Agents at least 24 hours in advance. Agents book Pilot and arrange for inward pilotage after arrival. Vessel can anchor depending on draft, 4 cables from Fairway Buoy, positioned Lat. 20° 14.51′ N. and Long. 86° 42.19′ E. After vessel anchored, Pilot boards during daytime with help of Pilot launch. For safety, Masters to arrive with maximum ballast on board for entering.
ANCHORAGE: See "Pilotage". Anchorage particulars given in chart published as "Paradip Anchorage".
RESTRICTIONS: Vessels not berthed/sailed during night-time after 1630 hrs. Vessels to have maximum ballast for entering.
MAX. SIZE: LOA 850 ft. and max. draft 39 ft.
Subject to weather conditions larger vessels may be berthed. A vessel of 772 ft. has been berthed, also vessels with 39 ft. draft.
HEALTH: Send usual quarantine message to "Quarantine Paradipport" 24 hours before arrival for radio pratique. Pilot gives free pratique on boarding vessel subject to no sick person on board. In case of suspected disease or fever on board, Port Medical Officer visits ship at anchorage/berth and cases of contagious disease are isolated and sent to nursing home.
RADIO: VHF radio installed at signal station in the Harbour Office. Calling Channel 16. Working Channel 9.
Working Hours: every even hour for 10 minutes from 0600 hrs. to 2200 hrs. and when ships are making or leaving the port.
Vessels are requested to establish contact with the control station when within VHF range (approx. 40 to 60 miles) and before entering, moving in or sailing from the port.
When within VHF range, ships are requested to give the following information:
(1) Name of ship.
(2) Ports of departure, call and destination.
(3) ETA.
(4) Vessels gross tonnage, length, breadth, draft and speed.
(5) Number of cases of dangerous contagious diseases on board.
(6) Type and quantity of cargo.
(7) Name of Agents and requirements.
TUGS: Tugs join vessel just inside approach channel. Ship's lines only used.
BERTHING: 1 iron ore berth, 1 general cargo berth and 1 mooring berth.
BULK HANDLING FACILITIES: 1 iron ore berth with mechanical loading plants of capacity 2,500 t.p.h. Suitable for vessels up to 60,000 d.w.t. with max. draft up to 39 ft.
STEVEDORES: On account of mechanical loading, stevedores not required for iron ore loading. Stevedores, required for loading/unloading at general cargo berth and mooring berth.
MEDICAL: After arrival Doctor can board vessel to attend to any urgent case. No hospital facilities. Sick crew sent to Cuttack/Bhubaneshwar about 90/120 km. from Paradip.
DENSITY: Varies from 1018 to 1024 with average of 1021.
FRESH WATER: Water supplied both at iron ore berth, Quay berth and also at moorings but not at roads. There is only 1 barge with total capacity of 50 tons and another barge of 150 tons. Water supplied at an average of 100 tons per day.
FUEL: HSD and furnace oil can only be procured from Cuttack on duty paid oils only. Arrangements will have to be made well in advance and the port will only provide the oil barge for taking the supplies from the tankers into the barge for subsequent supply on board.
FIRE PRECAUTIONS: No special precautions.
DEVELOPMENTS: Turning basin enlarged to 520 m.
GANGWAY/DECK WATCHMEN: Necessary.
OPENING/CLOSING HATCHES: Undertaken by crew only.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Last Port of Clearance.
Deratisation Certificate.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and/or Spirit: 1 bottle of 24 ounces per head per week.
CARGO GEAR: Valid cargo gear certificate required.
IDENTIFICATION CARDS: Authorities issue landing pass.
CONSULS: None.
REPAIRS: None.
DRY DOCKS: None. A slipway under construction.
REPATRIATION: Repatriation of foreign personnel is strictly not allowed as Paradip has not been declared a port of embarkation and disembarkation. Only emergency cases provided sufficient time is given, special permission can be obtained from the Home Secretary of local Government from Bhubaneshwar and other immigration authorities.
AIRPORT: Nearest airport Bhubaneshwar 120 km. Only local flights available. Flight timings to Visakhapatnam 1100 hrs. and Calcutta at 1500 hrs. and 1925 hrs. daily.
TIME: Local time GMT plus 5.5 hours.
HOLIDAYS: Charter Party holidays. Normally work carried out on all days.
POLICE/AMBULANCE/FIRE: Police 227; Ambulance 241. No fire service station.
TELEPHONE: No facilities for telephones on board.
GENERAL: Masters to arrive with maximum ballast during monsoon period.
SERVICES: None available.
SHORE LEAVE: Port Immigration issue shore passes to all foreign nationals excepting Chinese and Pakistanis and with shore passes crew allowed ashore.
DELAYS: Vessels generally get berth on "First Come First Served" basis.
SHIPMASTERS REPORT No. 1: (August 1975). Suggest vessels follow the normal procedure for Calcutta re-arrival documents.
Customs officials require the personal attention of the Purser to a greater extent than in any other Indian port.
Stores: Fresh stores about average quality for Indian ports. One is not advised to try to buy meat or fish as these commodites come from Cuttack, a good distance away, and frozen imported meat is not available.
SHIPMASTERS REPORT No. 2: (March 1976).
Berths: Apart from 1 iron ore berth and 1 mooring berth there is now a general cargo berth in commission. The long arm has a length of 290.65 m. and a short arm 118.40 m. The depth alongside is 36 ft. 2 ships are normally berthed at the long arm but the ship at the Southern end normally has part of her jutting out (when 2 average size ships are berthed). This makes it difficult to send sternlines especially when port side to. When starboard side alongside 2 anchors are used to hold the bow as well as springs.
Stevedores: There are a number of stevedores available at the port. No notice is required.
Services: Fresh provisions are available but 24 hours notice is required for most items. Laundry can also be arranged by Agent.
AUTHORITY: Chairman, Paradip Port Trust.

PONDICHERRY: 11.56 N. 79.50 E.

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Bill of Health.
Last Port Clearance.
Store List with Private Property Declaration in Triplicate.
Crew List (8 copies).
Light Dues Receipt.
Manifest (Import or Export).
Bill of Lading.

PILOTAGE: Not necessary as open roadstead anchorage.
ANCHORAGES: Proper anchorage in line with New Pier. 2 chimneys in line (276°) will provide good transit in day time and at night green/red light in transit with red pier light can be taken.
MAX. SIZE: Anchorage is 7 fathoms within 1 mile from New Pier.
HEALTH: Free pratique obtained on arrival and Master expected to address message to Port Health Officer, advising that all are well on board. Free pratique automatic for vessels calling from any Indian ports.
RADIO: Cables routed through Madras Radio (call sign VWM).
TUGS: Tug kept ready at New Pier for towing barges.
BERTHING: No berths.
STEVEDORES: 48 hours notice prior to arrival. Rate of discharge of bagged cargo 800 to 1,000 tons per day.
MEDICAL: No advance notice necessary. General Hospital and Jipmer Hospital available.
TANKERS: Transfer operations are carried out at anchorage 1.5–2.5 miles off shore.
DENSITY: 1025.
FRESH WATER: Available.
FUEL: Not available.
DEVELOPMENT: Proposals finalised for construction of new lighthouse near New Pier.
GANGWAY/DECK WATCHMEN: Services not compulsory, but recommended to avoid pilferage. 3 watchmen day/night.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes permitted for each Crew member to be held out of bond. Wine and/or Spirit, 1 open quart bottle per Crew member permitted to be held out of bond.
IDENTIFICATION CARDS: Not needed if furnished with Crew List.
CONSULS: only French Consulate General. Tel. 58.
REPAIRS: Deck and Engine repairs not attended. Special arrangements can be made from Madras. Minor repairs carried out privately.
DRY DOCKS: None.
REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriation.
AIRPORT: Nearest airport is Meenambakam Airport, Madras, distant 160 km.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Authorities but cargo work arranged on all holidays on payment of overtime, except on Republic day, Gandhi's Birthday, May Day and Independence Day.
POLICE/AMBULANCE/FIRE: Police 110; Fire 101; Ambulance arranged through hospital doctor on duty, tel. 198.
TELEPHONES: No facilities to place on board.
GENERAL: For purposes of crew going ashore, launches arranged between 0600 hrs. and 1800 hrs. weather permitting, hired from private parties. Laundry facilities, supply of fresh vegetables and provisions arranged.
SERVICES: None.
SHORE LEAVE: Crew members permitted ashore but have to remain within town limit.
DELAYS: Delays occur only under unavoidable circumstances such as Surf Declaration, Cyclone, etc. Vessels arriving at night, commence discharge operations next morning.
AUTHORITY: Port Officer.

PORBANDAR: 21.38 N. 69.36 E.

DOCUMENTS:
Crew Lists (6 copies).
Passenger Lists (6 copies).
Customs Documents to be prepared by Agents and signed by Master (4 copies).
Arms and Ammunition Certificate 4 copies duly signed by Master.
Health Documents; all yellow fever, cholera and smallpox books should be valid on arrival as well as on departure, if they are not valid on departure Port Health Officer should visit ship and give required injection to persons for completing health books before obtaining Bill of Health.
Same Bottom Cargo List (4 copies).
Port Clearance: Port Clearance of last port to be submitted to Boarding Officer of Customs.
Private Property List (6 copies duly signed by Master).
Store List (4 copies duly prepared by ship's officer).
Currency Declaration (4 copies).
Bills of Lading: Bills of Lading for export cargo generally to be prepared and signed by Agents.

PILOTAGE: Not necessary as anchorage is in stream in open sea.
ANCHORAGE: Anchor in stream about 1.5 miles off shore. 6 fathoms at low water, with good holding ground.

Outer anchorage is with Rajah's Old Palace, about 1.5 miles South-eastward of lighthouse, bearing 85° and lighthouse bearing 26°, 4.5 to 5 fathoms sand and rock (or further out as required).
MAX. SIZE: Any size vessel.
HEALTH: If arriving from yellow fever area within 30 days a grant of free pratique is necessary. Mosquito Party to be deputed from Kandla, which can only be arranged by prior intimation, failing which vessel would have to proceed to either Kandla or Bombay for free pratique.
RADIO: Via Bombay Radio.
TUGS: Not necessary as vessel anchors without Pilot in stream.
BERTHING: No berths.
STEVEDORES: 24 hours notice of ETA to Agents order arrange gangs.

Rate of loading and discharging: 3 ships work simultaneously. During 1 ship's stay average rate about 800/900 tons per day, during 2 ships' stay average rate about 600/700 tons, during 3 ships' stay average rate about 500/550 tons.
MEDICAL: Hospital facilities available.
TANKERS: No facility for discharging oil.
FRESH WATER: As the water barge is not in commission it is not possible to supply fresh water at this port.
FUEL: Nil.
DEVELOPMENTS: Work started to convert port into all-weather port. Breakwater wall under construction, expected completed 5-6 years.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Charter Party terms.
CERTIFICATES: *(a)* Load Line Certificate. *(b)* Safety Equipment Certificate. *(c)* Safety Radio Certificate, all certificates must be valid before departure of vessel.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes permitted for use of each crew from bonded stores of ship. Wine and/or Spirit: Customs Officer remains on board from arrival till departure and issues required quantity of wine and spirit from bonded stores.
CARGO GEAR: Tested cargo gear should be used for loading and discharging operations.
IDENTIFICATION CARDS: Necessary.
CONSULS/REPAIRS/DRY DOCKS: None.
REPATRIATION: Can be arranged.
AIRPORT: 3 miles from town, daily flight to Bombay.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Government of Gujarat and can be worked on payment of overtime charges, but work on Indian Republic Day, Holi (2nd Day), Ramnavami, Muhurram, Gokulashthami, Dussera, Diwali (New Year) and Ramzan-Id not possible.
POLICE/AMBULANCE/FIRE: Police Station 114; Ambulance/Fire Brigade 101.
SHORE LEAVE: Police, port and Customs permission required before landing.
AUTHORITY: Port Officer.

PORT REDI: 15.44 N. 73.39 E.

DOCUMENTS: Arrival:
Maritime Declaration of Health Form (in duplicate).
Port Clearance from last port of call.
Ship's Stores List (in triplicate).
Crew Private Property List (in triplicate), containing full details of every article such as: cameras, radios/transistors, record players, records, watches, all types of currency, other valuable articles, souvenirs, spirits, etc.
Crew Lists (6 copies).
Ship's Currency List (in triplicate).
Arms and Ammunition Declaration.
Passenger List – if any.
Through Cargo Manifests.
Departure:
Medical Inspection or Examination Certificate (Bill of Health).
Port Clearance.
Consumed stores list in duplicate (a list of stores consumed during the stay of the vessel at port).

PILOTAGE: Compulsory. Port Officer acts as Pilot. Cable via Bombay Radio to Port Officer, Redi, Cable Address: Port Officer Venguria, ETA of vessel 48 hours prior arrival (cable should reach Port Officer before 24 hours prior arrival). Anchor off Rairi Point – West of Rairi Point – about 1 to 1.5 miles where Port Officer boards ship to pilot to proper loading anchorage. Pilotage restricted to daylight hours only. Shifting without Pilot not permitted.

On arrival keep gangway or complete pilot ladder with manropes and step-down, ready for Pilot.

No fixed anchorage marked at Pilot station; however, vessel should not proceed beyond 1 mile from Rairi Point (for safety of vessel). Keep engine ready till Pilot boards. If vessel arrives during night hours be ready for shifting next morning.
ANCHORAGE: Anchorage Rairi Point or Redi Point (Lat. 15° 44′ N. Long. 73° 39′ E.) is a flat rocky projection, Western extremity of which is 50 ft. (15.2 m.) high. Foul ground and shoal water extend about three-quarters of a mile S.S.W. and about half a mile Westward of this point; at Southern side of foul area is Rairi (Redi) Rock which is 36 ft. (11 m.) high and steep. Vessel should not

proceed into depths of less than 6 fathoms or within 1 mile Westward in vicinity of this point without Pilot.

Loading anchorages are on both sides of Rairi Point (known as Jetty One anchorage and Jetty Two anchorage).

MAX. SIZE: No restrictions on size. This is a minor port exporting only iron ore, and vessels up to 34 ft. draft load at safe anchorage.

HEALTH: On arrival, Customs Authorities board and grant free pratique to ships arriving under normal conditions and on completion of Maritime Declaration of Health Form. Medical Officer, Candy Dispensary, Vengurla, acts as Port Health Officer (Quarantine Officer) for this port, and boards vessel at his convenience before sailing to conduct Medical Examination and grants Medical Examination Certificate (Bill of Health) on day of sailing. Certificate to be collected from Vengurla Office. No facilities for radio pratique.

If coming from yellow fever or jigger infected regions within 30 days Port Health Officer grants pratique after boarding vessel with mosquito party deputed from Bombay at Owners' cost. Mosquito Party can only be arranged on advance information failing which, vessel would have to proceed either Bombay and/or Mormugao for free pratique. Master and/or Owners to give Agents prior notice to avoid delay in arranging pratique. Vessels transitting through above infected areas for bunkers or water only do not require mosquito party for obtaining pratique.

Advisable inform Agents prior to arrival of last port of call, crew, and nationality, and if arriving from yellow fever and/or jigger infected regions, whether called only for bunkers or water, or purpose of call and vessel's health condition.

RADIO: Bombay Radio.

BERTHING: No berths. Open roadstead port.

LOADING: Port only exporting iron ore in bulk and suppliers. The Minerals & Metals Trading Corporation of India Ltd., make own arrangements to load cargo on FOBT terms. Rate between 3,000 to 4,500 tons per day per vessel if 3 vessels are working and 4,000 to 6,000 tons per day if 1 vessel is working. This rate is being achieved due to increase fleet and improvement of shore loading facilities.

MEDICAL: Preliminary medical aid available at Port Redi/Shiroda. Well-equipped hospitals situated at Savantwadi and Vengurla about 25 and 45 miles away respectively by road. Cholera inoculations and smallpox vaccination done through Port Health Officer and if required this information may be passed on to Agents for arranging with Port Health Officer.

DENSITY: Average 1025.

FRESH WATER/FUEL: None.

GANGWAY/DECK WATCHMAN: Not necessary.

OPENING/CLOSING HATCHES: As per Charter Party. However, opening done by stevedores to save their time and commence loading earliest during free time.

CERTIFICATES: All certificates, particularly Cargo-gear Certificate to be in order and valid.

CUSTOMS ALLOWANCES: 200 cigarettes per week of 7 day per crew. Wine and/or Spirit, 1 bottle each per crew of spirit or beer as required.

IDENTIFICATION CARDS: Necessary.

CONSULS: None.

REPAIRS/DRY DOCKS: None.

REPATRIATION: Facilities for crew changes. 4 days advance notice required with full particulars of crew.

AIRPORT: Belgaum and/or Vascodagama 90 miles distant.

TIME: Indian Standard Time GMT plus 5.5 hours.

HOLIDAYS: Cargo work can be arranged on overtime on all holidays except 26th January, Republic Day; 2nd October, Mahatma Gandhi Birthday; 15th August, Independence Day. On these holidays work not permitted even on overtime.

GENERAL: Regular Post and Telegraph Office about 2.5 miles from jetty.

Vessels on arrival and at departure thoroughly examined by Customs, and Masters therefore requested to ensure that crew private property list is correctly presented to Customs Authorities and its accuracy maintained throughout stay of vessel.

Ship's wireless station not to be used for despatching cables during the vessel's stay.

Discharge of bilge water and/or dirty waste oil or cargo prohibited.

Fresh vegetables, etc., supplied in limited quantity from 90 miles distance.

SHORE LEAVE: Crew of Chinese and Pakistani nationality not allowed land on shore. Other crew permitted land only after obtaining requisite permission from Police Authorities from Ratnagiri, distant about 160 miles and thereafter from Customs Authorities. On arrival, crew list and guarantee duly signed by Master, are furnished to Police Authorities at port and telegram sent to Ratnagiri requesting landing permission from District Superintendent of Police.

Obtaining landing permission takes 3 days; and therefore, Masters requested not to allow crew members to land on shore unless written landing permission sent on board. Crew members not allowed beyond Port Redi limits, without permission obtained from Police Authorities, Ratnagiri.

REGULATIONS: Port Officer conducts Final Draft Survey on completion of loading in consultation with Master. Master's refusal to allow shifting creates complications. Master should not shift vessel without Pilot on board or permission from Port Officer; this does not apply in case of emergency.

DELAYS: Only 3 vessels (i.e. 1 at each jetty) can work at a time on a first come first served basis. Overlapping vessels have to wait turn. Waiting time about 4/5 days.

AUTHORITY: Port Officer.

TUTICORIN: 08.48 N. 78.10 E.

DOCUMENTS: Required on arrival:
- 4 Manifests.
- 2 Bills of Lading.
- 5 Crew Lists.
- 5 Passenger Lists.
- 4 Crew Personal Property Declaration.
- 4 Crew Currency Declaration.
- 4 Import Manifest of Store List.
- 2 Health Report Form.

PILOTAGE: Pilotage compulsory within Port Limits. However, there is no night pilotage.

ANCHORAGE: Anchorage in roadstead with Pandyan Tivu Lighthouse, bearing between 260° and 292°, distant 2 to 2.5 miles, in depths 27 to 33 ft. (8.2 m. to 10 m.); holding ground good, mainly sand, mud and shingle.

In N.E. monsoon, vessels should have a good length of cable and second anchor always ready, as sea breeze blows on reef Eastward of Pandyan Tivu. In S.W. monsoon, middle May to middle August, wind though violent, is invariably off shore, West to S.W., and water fairly smooth.

HEALTH: Free pratique granted to vessels carrying food grains or fertilisers on Government of India a/c. Master required wireless Port Health Officer, Tuticorin, requesting grant of free pratique. On receipt of message Port Health Officer grants pratique and message passed by radio to steamer. This applicable only in cases where steamers have no infection, epidemic or disease. Otherwise Port Health Officer boards vessel on arrival and grants pratique after inspection.

RADIO: When vessels within 24 hours distance Tuticorin Radio could be used and call sign VWT. Otherwise according to route followed, steamers use Madras or Bombay Radio.

VHF service available between ship and shore.

TUGS: Tugs available but if services required special arrangements have to be made. Ships usually anchor in open roads and enter and sail without tug assistance.

BERTHING: See "Developments".

STEVEDORES: Agents require 48 hours notice of ETA for arranging gangs, and receivers for lighters. General cargo, average rate load or discharge about 1,000/1,200 tons per weather working day.

MEDICAL: For doctor's visit on board early advice helps to arrange for tug or launch to take doctor from shore. In cases of emergency, medical attention can be arranged but there may be some delay. Hospital facilities available. Personnel should have valid inoculation and vaccination certificates. If certificates expired arrangements made for re-vaccination/re-inoculation and renewal of certificates.

TANKERS: No facilities.

FRESH WATER: Available. Barge-capacity 100 tons. Delivery in units of 100 tons only. During summer, usually shortage of water. In other seasons water available but as only 1 barge, delivery of water arranged by turn depending upon number of steamers in port. Fresh water also available at Berth No. 1.

FUEL: None.

DEVELOPMENTS: The New Major Port has been declared a Major Port under Indian Ports Act with effect from 1974. All four berths are open for traffic. The 4 berths have a draft of 27 ft. at all stages and approximately 30 ft. on high tides. Two cranes of 3 tons and one crane of 5 tons are available for cargo handling at all times.

GANGWAY/DECK WATCHMEN: Engaging watchmen always done at the discretion of Masters. In case required could be engaged.

OPENING/CLOSING OF HATCHES: By ship's crew. If done by stevedores charges extra.

CERTIFICATES:
- Ship's Register.
- Safety Construction Certificate.
- Load Line Certificate.
- Safety Equipment Certificate.
- Safety Radio & Telegraphy Certificate.
- Deratisation Certificate.
- Cargo-gear Stability Certificate.

IDENTIFICATION CARDS: Identification cards or seamen's passbook required to be presented to Police and immigration authorities while coming on shore.

CONSUL: None.

REPAIRS: No maritime workshops. Only minor repairs.

DRY DOCKS: A dry dock with workshop facilities has been constructed at the Port for docking and attending to repairs of departmental vessels. It is spared to other Departments and Owners of sailing vessels for docking their vessels whenever required.

REPATRIATION: Could be arranged via Madras.

AIRPORT: Nearest airport is Madurai, distant 100 miles, which could connect Madras.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Observed as declared by authorities but boatmen do not work on following holidays as these are days of obligation and festivals: New Year's Day, Republic Day, Maundy Thursday, Good Friday, Tamil New Year Day, May Day, Ascension Day, Corpus Christi, Our Lady of Snows Feast, Assumption Day and Christmas.

POLICE/AMBULANCE/FIRE: As steamers are in open roads about 5/6 miles from shore all emergency to be passed to Port Authorities through signal station and to respective Agents.

SHORE LEAVE: Crew allowed shore leave but movements limited to municipal limits. Must obtain shore permits from police.

REGULATIONS: Usual regulations. All crew members coming into shore and returning to ship must report to Customs and Port Police on every trip.

AUTHORITY: Port Conservator, Tuticorin Port Authority.

VERAVAL: 20.54 N. 70.22 E.

DOCUMENTS:
Last Port Clearance.
Ship's Stores Manifest (3 copies).
Crew List (5 copies).
Private Property List of Crew (3 copies).
Same Bottom Cargo (3 copies).
Ship and Crew Currency List (3 copies).
Indian Coast Light Dues Receipt (if vessel arriving from Indian port).
Maritime Declaration of Health.
Customs Arrival Report.
Customs Declaration for arms ammunition, etc.
Port Arrival Report.

PILOTAGE: Not required. Vessels anchor midstream.

ANCHORAGES: Veraval light exhibited on coast near Political Residency (occ. 15 sec. 110 ft.). Known as New Lighthouse. Breakwater near harbour under 3 fathoms (5.5 metres). No perceptible tide streams in roadstead. During night/neap tide with low water ships suffer cargo feeding for about 5 hours, 4 to 5 days in month.

Anchorage depth 48 to 60 ft. opposite Phiriya Temple. Good anchorage obtained with Veraval Lighthouse Bearing 317°, breakwater end. True Bearing 336.5°, Bhiria Beacon 27°.

RESTRICTIONS: None, day or night anchorage possible.

MAX. SIZE: No restriction.

HEALTH: Vessels having called yellow fever area and taken on board passengers or crew (other than bunkers or water) granted free pratique by mosquito party deputed from Kandla Port which only arranged by prior notice, failing which vessel would have to proceed either Kandla or Bombay for free pratique. Vessels other than above are granted pratique by Boarding Officer of Customs upon presenting Maritime Declaration of Health. Radio pratique not available.

RADIO: Messages via Bombay Radio. No VHF.

TUGS: Not required.

BERTHING: No berths.

STEVEDORING: Particulars of ETA and labour gangs required well in advance. Average loading/discharging:

Loading bagged cargo oilcake, etc.	225/250 Ts. per hook per day
Loading GN oil in drums	150/175 Ts. per hook per day
Discharging fertiliser (bagged)	150/200 Ts. per hook per day
General cargo loading/discharging	150/200 Ts. per hook per day

MEDICAL: Qualified doctors and hospital facilities.

TANKERS: No tanker berths.

FRESH WATER: No guarantee of supply as this is a scarcity area.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Not necessary unless required. Can be arranged through Agents.

OPENING/CLOSING HATCHES: Carried out by stevedores. Ships' derricks worked by crew.

CERTIFICATES:
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-Telegraphy Certificate.
Deratisation Certificate.
Ship's Registration Certificate.

CONSULS/REPAIRS: None.

REPATRIATION: Can be arranged.

AIRPORT: Nearest airport Keshod, 30 miles from Veraval, but motor transport not easily available and advance arrangements have to be made.

TIME: Local Time GMT plus 5.5 hours.

HOLIDAYS: On which work not allowed for loading/discharging: Indian Republic Day, Holi (Second Day), Ramnavami. Mohurram (Ashura or 10th day), Gokulashtami, Dussera, Diwali (New Year's Day), Ramzan-Id (Id-ul-Fitr).

POLICE/AMBULANCE/FIRE: Police 3; Ambulance 5; Fire 5.

TELEPHONES: No arrangements for placing telephones on board the ship.

GENERAL: Closed for traffic between 15th May to 15th September every year due to monsoon season.

SHORE LEAVE: Crews permitted ashore with permission from Customs and Port Authorities. While coming ashore and returning to ship crew should pass through Customs.

DELAYS: 3 ships can work and fourth vessel arriving waits turn. Therefore some delays possible.

AUTHORITY: Port Officer.

VISAKHAPATNAM: 17.41 N. 83.20 E. **(See Plan)**

PORT LIMITS: 10 fathoms line of soundings may be taken as the seaward boundary of the port within which a vessel is considered to be an "arrived vessel". It is proposed that 3 nautical miles East of and parallel to 10 fathoms line of soundings may be taken as the seaward boundary.

DOCUMENTS:
12 copies of Crew List.
3 copies of Store List.
3 copies of Private Property List.
3 copies of Currency Declaration.
3 copies of watch lists, giving details of make and value, etc.
The vessel must possess following valid certificates:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio Telegraphy Certificate.
Cargo Gear Test Certificate.
Deratisation Certificate.
Last Port Clearance.

Pilot on boarding vessel before bringing her in gives a copy of Maritime Declaration form which should be filled in and signed by Master.

PILOTAGE: Vessels generally anchor at roadstead where Pilots board. Signal station contacts all vessels arriving and advises all information about Pilot's arrival, etc. A minimum notice of 48 hours of vessel's ETA required. Pilot ladder to be rigged on the Starboard side.

ANCHORAGE: Anchorage position to be marked with Dolphin's Nose Lighthouse bearing 270° (T) at a distance of 1.5 miles.

RESTRICTIONS: *Inner Harbour:* Round-the-clock pilotage, subject to following restrictions.

Ore carriers of 640 ft. length overall and 100 ft. beam can enter the port between 0600 and 1800 hrs. Ore carriers of 640 ft. length, 100 ft. beam, and 33 ft. 6 in. draft can sail on high water on a minimum rising tide of 3 ft. 6 in.

Vessels of 630 ft. overall length, 33 ft. draft and 100 ft. beam can enter the port between 0600 and 1800 hrs. on high water on a minimum rising tide of 3 ft. Such vessel can sail from the port at any time, draft being less than 31 ft., between 31 ft. and 33 ft. subject to height of tide of 3 ft. for 33 ft. draft.

Vessels of 575 ft. length overall or less and draft 30 ft. or less can enter and sail from the port at all hours.

Outer Harbour: No tidal restrictions.

MAX. SIZE: *Inner Harbour:* Max. permissible length 640 ft. overall. Max. permissible breadth 100 ft. Max. permissible draft 33 ft.
Outer Harbour: L.O.A. 885 ft. 10 in. (270 m.)
Beam 137 ft. 10 in. (42 m.)
Draft 50 ft. 03 in. (15.3 m.)

PRATIQUE: A separate radio free pratique message addressed "Quarantine Visakhapatnam" must be transmitted by all vessels arriving from foreign port not less than 4 hours and not more than 12 hours prior ETA. On information furnished therein Port Health Officer grants free pratique. Pilot boarding ship for taking her in has superseding power to cancel radio free pratique already granted. However, based on information contained in maritime declaration Pilot also grants free pratique. In case of doubt or in case of inspection if necessary quarantine officer boards ship for granting clearance. No necessity for any vessel to obtain free pratique when she arrives directly from any Indian port.

RADIO: Radio station call sign VWV. Working round clock. Range about 600 miles during daytime and 1,000 miles during night. Better to use Madras Radio Station for all communications in respect of vessels arriving from Madras side. Vessels coming from Calcutta side, use Calcutta Radio. Generally Visakhapatnam Radio station used for vessels anchored at roadstead. VHF Channel 16.

TUGS: For ships entering the port, the tugs wait in the lee of the breakwater. Ship's lines and/or tug's lines are used, depending upon the mode of making fast.

SPECIALISED CARGO HANDLING FACILITIES: Inner Harbour: *WOB-1 and WOB-2 Berths:* For the export of iron ore through a mechanical ore-handling plant capable of loading at the rate of 3,200 t.p.h.

Fertiliser Berth: For the import of fertiliser raw materials, viz., sulphur and rock phosphate, by grab unloading on to a conveyor belt.

OR-1 and OR-2 Berths: For the import and export of P.O.L.

Q-1 and Q-2 Berths: For the export of manganese ore and other ores by semi-mechanical means. Portable flat belt conveyor system for handling bulk cargoes.

Use of grabs for unloading bulk cargoes.

Poclain hydraulic excavator for handling bulk cargoes.

A large number of electric cranes, mobile cranes, forklifts, dumpers, trailers etc.

Outer Harbour: *OB-1 and OB-2 Berths:* For the export of iron ore through a mechanical ore handling plant capable of loading at the rate of 8,000 t.p.h.

Also see "Tankers" and "Developments".

BERTHING: No specific requirements of arrival times for berthing.

STEVEDORES: Agents must give proper notice of vessel's arrival to the stevedores not less than 48 hours to make necessary arrangements for working vessel and also to order sufficient gangs, etc.

MEDICAL: All crew and officers must possess individual international vaccination certificates against smallpox and cholera before leaving this port for any foreign port. Smallpox vaccination and cholera inoculation facilities available within 24 hours notice. Well-equipped hospital facilities available round the clock.

TANKERS: There are two berths OR-1 and OR-2 for discharging and loading oil. The max. permissible draft at these berths is 33 ft. at High Water. The depth alongside OR-1 and OR-2 is 32 ft. In the Outer Harbour, an oil mooring berth is available to accommodate tankers of up to 100,000 d.w.t. with a draft of not exceeding 47 ft.

DENSITY: Fluctuates from day to day between 1020 and 1023.

FRESH WATER: Normal quantities available and delivery made by Port Trust both from shore and barges.

FUEL: Esso, Indian Oil Corporation and Caltex, Bombay, to be contacted for particulars of stocks, etc., as local offices controlled by them.

DEVELOPMENTS:

Outer Harbour Project:

1 The Outer Harbour will have a set of breakwaters to form a protected basin. The Southern part of the basin will permit entry and berthing of 100,000 d.w.t. ships fully loaded, initially. This would ultimately be developed to take 200,000 d.w.t. vessels or even more. The Northern part of the basin will be suitable for use as a large fishing harbour.

2 It will have a finger-type berth for iron-ore loading, designed to handle 200,000 d.w.t. vessels ultimately, providing facility for berthing of 2 vessels on either side of the jetty at the same time. There will also be room for 3 additional general cargo/container berths for 60,000 d.w.t. ships which could be brought into commission in future by reclaiming the area between the fishing harbour basin and outer harbour basins.

3 The ore loaded at the outer harbour berth will be conveyed through a conveyor system and necessary steps will be taken to eliminate the dust nuisance to the utmost extent.

4 The outer harbour project has been designed to load 100,000 d.w.t. vessels at 8,000 tonnes per hour initially. This can be increased to 12,000 tonnes per hour and 16,000 tonnes per hour to load 150,000 and 200,000 d.w.t. vessels respectively when such a demand builds up. A stockpile capacity of 30 days supply on the basis of the levels of shipment will be provided. The receiving system including the 2 existing dumpers and additional railways and shunting locos can handle about 10 million tonnes of iron ore per year from the mines. With a third dumper, the capacity could be increased to 15 million tonnes.

5 Provision will be made to the installation of a screening and/or calibrating plant and pallet plant, in future.

6 The project includes navigation aids, harbour craft, as well as other ancillary facilities required for operation of the outer harbour.

The construction of outer harbour project is almost complete. The trial loading of iron ore in the outer harbour is on and formal commissioning is expected during the third quarter of 1976. The outer harbour project will be the deepest harbour in the country with a depth of 16.5 m. (54 ft.), alongside the berth. An oil mooring berth in the outer harbour was constructed and commissioned to accommodate tankers of 100,000 d.w.t for transhipment of oil from mother tankers to daughter tankers. Max. draft allowed at the oil mooring is 47 ft.

Break-waters under construction:

In connection with the Outer Harbour Project, the 3 breakwaters under construction are in the following positions:

	Latitude	*Longitude*
(1) South Breakwater:		
Western end:	17° 40′ 41.10″ N.	83° 18′ 00.30″ E.
Eastern end:	17° 41′ 01.43″ N.	83° 18′ 49.12″ E.
(2) East Breakwater:		
Southern end:	17° 41′ 14.93″ N.	83° 18′ 29.30″ E.
Northern end:	17° 41′ 47.29″ N.	83° 18′ 34.72″ E.
(3) North Breakwater:		
Northern end:	17° 42′ 02.00″ N.	83° 18′ 24.00″ E.
Southern end:	17° 41′ 47.77″ N.	83° 18′ 27.23″ E.

Spoil ground: A new spoil ground has been established in the following position:

Latitude	*Longitude*
17° 39′ 35″ N.	83° 19′ 19″ E.
17° 40′ 01″ N.	83° 19′ 40″ E.
17° 40′ 40″ N.	83° 20′ 37″ E.
17° 38′ 59″ N.	83° 19′ 45″ E.
17° 39′ 26″ N.	83° 20′ 04″ E.
17° 40′ 06″ N.	83° 21′ 01″ E.

GANGWAY/DECK WATCHMEN: Necessary according to demands of local labour unions.

OPENING/CLOSING HATCHES: Stevedores.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and/or spirit: Asian Crew 2/5 units per 3 days. Non-Asian crew 4/5 units per 3 days. Bottle of liquor equals unit.

CARGO GEAR: Valid cargo gear test certificate must be on board all vessels using ships' gear for loading or discharging.

IDENTIFICATION CARDS: Not needed if have valid seaman's books.

CONSULS: None.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: 2. 1 owned by Hindustan Shipyard Limited, 800 ft.×125 ft.×26.5 ft. (maximum length of vessel 780 ft.). Second owned by Port Trust – 450 ft.×60 ft.×18.5 ft. (maximum length of vessel 400 ft.).

REPATRIATION: Facilities exist to foreign countries via Madras, Calcutta or Bombay. About 3 days delay to obtain travel permit.

AIRPORT: Distant 6.5 miles. Regular daily flights to Calcutta and Hyderabad by Indian Airlines Corporation.

TIME: Indian Standard Time is local time, and no alterations made to clocks during the year. GMT plus 5.5 hours.

HOLIDAYS: Observed as declared by authorities but port's closed holidays are: Pongal, Kanumu, Mukkanumu, Republic Day, Kotha-Amavasya, May Day, Independence Day, Gandhi's Birthday and Nagulachaviti, when work not possible even on payment of overtime.

POLICE/AMBULANCE/FIRE: Police Station 2140; Fire Station 4841 – Ext 239; Ambulance 4841 – Ext 213 (Port Hospital).

TELEPHONES: No arrangements exist for placing telephone on board.

SERVICES: Tank cleaning facilities available at Caltex berths.

SHORE LEAVE: Crew members allowed ashore after receiving immigration permits.

GENERAL: *Priority:* Vessels arriving at this port for berthing at various berths on priority if they so desire can register their priority at "Roads" and move to other ports. But the vessel should be back within Visakhapatnam Port limits when the barth (for which registration was made) falls vacant. If the vessel is not ready at Roads, the vessel would lose its priority and take its turn along with other waiting vessels including vessels which have registered with the port for the priority berthing.

DELAYS: Normal delays such as waiting for Pilot, waiting for tugs, etc., since this port can handle only one movement at a time. Other delays such as no power to shore cranes, bad weather, shed congestion, etc., expected.

SHIPMASTERS REPORT:

Port Limits: Appear to be accepted upon the basis of VHF information to local port control that one has in fact anchored, rather than being in a particular area.

Anchorage: Harbour Master and Pilots prefer that ships anchor South of a line running East/West from the entrance, depth chosen to suit individual requirements.

Special Cargo Handling Facilities: The "Q" berths are now No. 1 for manganese, Nos. 2 and 3 for grain and the remainder for general cargo. All are in difficulties with Customs over shed and wharf clearances and this has created long delays both in getting alongside and working. The grain is bagged in the holds and discharged via snotters on ship's gear. Total rate roughly 1,000 tons per day per ship.

Fresh Water: There have been no useful rains for several years and water is at a premium. When a ship advises the local authorities that she is out of water, a layup berth or buoys is allocated and a minimum amount is supplied by barge. This is repeated throughout the ship's stay. No question of filling tanks, and supply may be 30 tons every 2 or 3 days.

Fuel: Diesel oil here is not suitable by choice for most merchant ships. 2 grades, heavy diesel of some 225° Redwood at 100° and light diesel which is 57° Redwood at 100°.

Repatriation: Allow 5 days for travel permits.

Delays: Tankers berth more or less on arrival. Ore loaders wait 1 or 2 days as the terminal becomes vacant – 2 loading arms at around 1,000 t.p.h. Grain and cargo boats can expect to wait up to a month for a berth and will be 2 or 3 weeks alongside.

AUTHORITY: Visakhapatnam Port Trust.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Indonesia

AMBON: 03.41 S. 128.10 E.

DOCUMENTS:
14 Passenger Lists.
7 Crew Lists.
2 Customs Documents.
2 Health Documents.
7 Cargo Manifests.
7 Bills of Lading.
5 Ship's Papers.
Sailing Permit.

PILOTAGE: No Pilot station. Apply for pilot boat by calling Ambon Coast Station (Ambon Radio) or fly "G" Flag. Pilot boat located at Ambon Bay. Entrance in all seasons and weathers. All parts of Ambon Bay suitable for anchorage to await Pilot.
ANCHORAGE: Areas of anchorage can take all sizes of vessel.
RESTRICTIONS: Open 24 hours. Tides do not affect entry. But when entering at night ship must anchor and await orders.
MAX. SIZE: Joos Soedarso Pier: length 187 m., breadth 35 m., draft 12 m. Wainitu Pier: length 100 m., breadth 20 m., draft 8 m.
HEALTH: Port Health officer boards vessel together with Pilot.
RADIO: Ambon Coast Radio, call sign PKE. Operating 24 hours. Frequencies 500–470 kc/s., 8472 and 8799 kc/s. VHF all Channels used.
TUGS: Normally tugs do not join vessel but when necessary to use tugs call PT "Dock Waijame".
STEVEDORES: Agent arranges. 3 stevedore companies: PT. "Gotong Rojong", PT. "Mastra" and PN. "Varuna Tirta Prakarsa".
MEDICAL: Hospital facilities available. No advance notice required.
TANKERS: Berth at Wainitu Pier. Type of pipe, 6 in. and 8 in. Discharging capacity, 125 t.p.h.
FRESH WATER: Available only at Joos Soedarso Pier. Loaded by pipe-line with 25 tons/hour capacity.
FUEL: Only diesel and marine fuel.
DEVELOPMENTS: Plans for future developments dependent on Government expenditure.
GANGWAY/DECK WATCHMEN: Deck watchmen needed, particularly for tankers.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: Cannot be held out of bond.
IDENTIFICATION CARDS: Needed by Immigration (landing permit).
CONSULS: No consuls available locally.
REPAIRS: Deck and engine repairs available. Floating dock, lifting capacity for 2,000 d.w.t.
REPATRIATION: Possible. Dealt with by Immigration through Djakarta.
AIRPORT: Distance from airport about 7 miles. Regular airline "Garuda Indonesian Airways" (GIA). 4 flights per week from Ambon to Djakarta.
TIME: Local time GMT plus 10 hours.
HOLIDAYS: Port open for 24 hours even in holidays.
POLICE/AMBULANCE/FIRE: Police and Port Health at Port. But when necessary to use fire brigade call by connecting to "Burgomaster".
SHORE LEAVE: All crew members allowed ashore with permission of Immigration.
AUTHORITY: Ambon Port Administration.

ARDJUNA: 05.54 S. 107.57 E. **(See Plan)**

LOCATION: Ardjuna Marine Terminal is an open, unsheltered mooring in the Java Sea, about 18.5 miles from the nearest point on the North Coast of Java.

The Terminal is approximately North 72° East distant 59 nautical miles from Jakarta.

There are 4 Single Buoy Moorings situated as follows:

1. Storage Barge "Wampum" SBM (Buoy No. 1)
   Latitude 5° 54′ 15″ South.
   Longitude 107° 44′ 22″ East.
2. Export SBM for loading from "Wampum" (Buoy No. 2)
   Latitude 5° 53′ 19″ South.
   Longitude 107° 45′ 18″ East.
3. Storage Barge "Arco Ardjuna" SBM (Buoy No. 3)
   Latitude 5° 54′ 11″ South.
   Longitude 107° 43′ 45″ East.
4. Export SBM for loading from "Arco Ardjuna" (Buoy No. 4)
   Latitude 5° 53′ 29″ South.
   Longitude 107° 43′ 20″ East.

DOCUMENTS: The Harbour Master submits a Harbour Report Form for the Master to complete. The Agent prepares the ship's documents check list form to check the validity of each document. These documents are: Certificate of Registry, Ship's Construction Certificate, Load Line Certificate, Life Safety Equipment Certificate, Safety Radio/Telephone/Telegraph Certificate or Cargo Gear Certificate, Derating Certificate or Exemption Certificate. This list is then delivered to the Harbour Master with the following documents attached: Last Port Clearance, Crew List approved by the Immigration Officer and light dues receipt if arriving from another Indonesian port. The Harbour Master issues a port clearance at departure provided clearance is also granted by the other governmental authorities. A Panamanian port clearance for Panamanian flag vessels is not required at Ardjuna.

The Immigration Officer requires 2 copies of the Crew List and will check the Ship's Article and the passports of the crew. When these documents are found to be in order, and arrival clearance will be marked on the Crew List.

If arriving from another Indonesian port the Agent will sign a guarantee if the vessel cannot prove that light dues have been paid.

Prior to the vessel's departure the Immigration Official requires 6 copies of the Crew List to be marked for "Departure Immigration Clearance" and duly signed, it will be distributed as follows: 1 copy each for Master, Harbour Master, Customs and Agent. 2 copies for immigration.

Crude Oil loading documents such as Bills of Lading, Quality Certificate, Quantity Certificate, Dry Certificate/Ullage Report, Time Loading Report, Certificate of Origin, Cargo Manifest and Master's Receipt for Documents/Samples are prepared at Ardjuna Marine Terminal. When the tanker has been loaded, the documents shall be completed and be taken aboard the tanker for the Master's signature.

Signing of these Documents by the Master will take place at the same time final departure clearance formalities are being carried out.

Notes of Protest if any should be handed to the Mooring Master for further delivery to Atlantic Richfield Indonesia Inc., Jakarta. Please note that the Mooring Master will acknowledge receipt of the Note of Protest only and is not authorized to accept such letters.

Customs will issue the 5-B form which serves as Customs departure clearance.

PILOTAGE: Under normal weather conditions, if a tanker is scheduled to berth upon arrival, the Mooring Master will board such tanker in the close vicinity of the mooring area.

Tankers waiting to load shall wait their turn in the recommended anchorage area, and shall maintain radio-telephone contact with the Terminal using the International Marine Calling & Safety Channel 16, Freq. 156.800 mHz for Terminal instructions.

The Mooring Master will act on behalf of the company to sign acknowledgement of tankers' Notice Of Readiness. Such notice will not be accepted for a time earlier than:

(a) the Master has received the Mooring Master onboard or
(b) the tanker shall have dropped anchor within the recommended anchorage area, and advised the Terminal the time of anchoring.

Exception to (a) and (b) will be if the tanker is within the anchorage area awaiting arrival of the Mooring Master and has been requested by the Terminal not to anchor.

In this case N.O.R. will be accepted from the time the Terminal requested the ship not to anchor.

The company reserves the right to decline to berth a specific tanker if its condition or facilities are unsafe for berthing or loading, even though the berth may be open to other tankers.

The Mooring Master will advise the ship's Master on approaches to the berth, mooring, unmooring, and all operations within the anchorage or mooring area. All such manoeuvring of ships shall be done only in accordance with the advice of the Mooring Master, subject to the understanding that in all cases and circumstances the Master of the ship being manoeuvred shall remain solely responsible on behalf of his vessel's owners for the safety and proper manoeuvring of his vessel. The ship's Master, or one of his designated and qualified deck officers, must be on the navigating bridge at all times while the vessel is being manoeuvred. Ships are requested to have a pilot ladder safely and securely rigged for immediate use, and long enough to reach the mooring launch. A combination of pilot ladder and ship's accommodation ladder, so arranged that personnel can first use pilot ladder until part way up the vessel's side, and then transfer to the accommodation ladder is recommended, especially on very large ships. A light line should be ready to take aboard the Mooring Master's equipment. There should be adequate lighting at night. Vessels will provide a lee for the Mooring Master both when boarding and leaving. During the vessel's stay at the Export SBM, emergency towing wires shall at all times be hung over the ship's stern. These wires shall be secured on the bollards inboard to enable the vessel to be towed away should the need arise. They must be tended throughout to keep the eye of the wire not more than 2 feet above the water.

ANCHORAGE: For tankers requested to anchor, the recommended anchorage area is an area northward from the Single Buoy Moorings enclosed by a line drawn through the following positions.

"A" 5° 51′ 35″ S Latitude 107° 43′ 30″ E Longitude
"B" 5° 50′ 05″ S Latitude 107° 43′ 30″ E Longitude
"C" 5° 50′ 05″ S Latitude 107° 45′ 30″ E Longitude
"D" 5° 51′ 35″ S Latitude 107° 45′ 30″ E Longitude

Prior to their arrival Masters of tankers should contact the Terminal for instructions concerning anchorage positions.

Under no circumstances should the export tanker enter the restricted area around the structures without a Mooring Master aboard.

The attention of Masters is drawn to the existence of underwater pipe-lines in the restricted area.

NAVIGATION AIDS: Navigational aids are located on the following facilities and structures:

Export Single Buoy Moorings (Buoy No. 2 and No. 4): A white light flashing every second is mounted on the rotating deck of each SBM. Buoy No. 4 is fitted with a radar reflector. Approach information can be obtained by radio. See the section on communications.

Storage Barges "Arco Ardjuna" and "Wampun": By day, the black ball as required by the Regulations for Preventing Collisions at sea. The 2 storage barges at night display the lights for tankers at anchor as required by the Regulations for Preventing Collisions at

sea and are equipped with automatic fog signals at the bow and at the stern.

Each barge has a bell Forward as required by the Collision Regulations and an instrument to produce a "Whoop" aft, under the same rules. When visibility is restricted the Fog Signals are continuously sounded. The SBM to which the "Arco Ardjuna" is moored, is fitted with a radar reflector and a white light flashing every second visibility 5 miles. The "Wampum's" SBM shows a white light flashing every second visibility 5 miles.

Production Platform: There are 5 Production Platforms, 14 Well Platforms and 1 Junction Platform within the Ardjuna Marine Terminal area.

"B" (Bravo) Flow Station, with the specific significance as the "Centre" of the Flow Stations as well as the Storage Barges with respect to the production activities in the Ardjuna Marine Terminal. Indicated as platform BB.

"E" (Echo) Flow Station, situated 12 nautical miles Eastward of Bravo. Indicated as platform EA.

"K" (Kilo) Flow Station, located 8 nautical miles S.S.W. of Bravo. Indicated as platform KA.

"L" (Lima) Flow Station, situated 15 nautical miles West of Bravo. Indicated as platform LA.

"U" (Uniform) Flow Station, located 13 nautical miles S.S.E. of Bravo. Indicated as platform UB.

In addition to the above specified obstructions and navigational aids, all platforms display interrupted quick flashing white lights. The Storage Barges and Flow Stations will brightly illuminate the areas about them at night through the use of lights for normal working purposes.

MAX. SIZE: SBM No. 2 up to 100,000 d.w.t. SBM No. 4 up to 200,000 d.w.t. Depth of water, approximately 132 ft. below mean sea level.

RADIO: *Advice of arrival by cable or telex:* It is most important that incoming tankers advise Ardjuna Terminal 72 hours before estimated time of arrival, giving the best estimate of ship's arrival at the Terminal, via:

Cable address: ARDJAK, Jakarta

Telex number: 011–4379, Jakarta.

Time to be used for ETA is "GOLF" Time Zone of GMT +07 hours throughout the year.

The first message should also include the following information:

1. Name of tanker and Radio Call Sign.
2. Cargo requirements.
3. De-ballast time.
4. Maximum loading rate.
5. Arrival draft.
6. Last Port of Call.
7. Confirm that vessel has clean Bill of Health.
8. If there is any sickness aboard, give whatever information is available as to the possible type of sickness.
9. If cholera inoculation or smallpox vaccination required.
10. Distance in feet from the bow to tanker's loading manifold.

Further ETA messages should be sent to Ardjuna Marine Terminal via above cable address and Telex Number when the tanker is 24 hours and 12 hours distant from the Terminal and any other time if any appreciable change occurs in the original ETA or those subsequent thereto.

Masters are reminded to use the International VHF/FM Radio Telephone Channel 16 Frequency 156.800 mHz when tankers are arriving within radio range of the Ardjuna Marine Terminal and maintain this contact until arrival at the Terminal.

RADIO COMMUNICATIONS:

(1) VHF/FM Radio Telephone: (International Marine Calling & Safety Channel 16, Freq. 156.800 mHz).

Masters are recommended to use this system when they arrive within radio range of the Ardjuna Marine Terminal, particularly when approaching the port. If poor visibility exists the tanker's approach may not be observed from the storage barges, attention to VHF communications may be the means of avoiding delay in berthing.

During berthing the ship's radio will be under the sole control of the Master, and the storage barge radios will be under the sole control of the Terminal Marine Superintendent or his assistant.

Masters are reminded that if tankers are requested to anchor to await berthing, it is their responsibility to maintain constant listening watch on VHF Channel 16 to receive Terminal instructions.

Any delay due to failure to maintain a constant listening watch on Channel 16 will be for the ship's account, and will not be included in Lay Time calculation.

The Ardjuna Marine Terminal is equipped with VHF/FM Radio Telephone Sets and continuous watch is maintained on Channel 16 (Freq. 156.800 mHz) and Frequency 157.725 mHz. Tankers approaching the Terminal should make initial contact on Channel 16.

For subsequent inter-ship communications within the Terminal a "Handie Talkie" Radio Freq. 157.725 mHz will be used by the Mooring Master.

This frequency will not be used for general purpose, unless clearance is obtained by the Terminal. This is required for safety reasons.

Should all radios on the tanker become inoperative, the emergency signal i.e. continuous blasts on the ship's whistle will be sounded to notify the Terminal of the radio failures. Upon hearing this signal from a loading tanker the storage barges will immediately stop loading to the Export Tanker until communications have again been established.

(2) High Frequency Single Side Band Radio Telephone: A voice message from incoming tankers may be relayed by HF/SSB. Atlantic Richfield Indonesia Inc., located in Jakarta, Indonesia, is inter-connected to the Ardjuna Marine Terminal via local communications system and maintain a continuous watch on HF Frequency 7320 kHz (Upper Side Band A3J Mode, 100 Watts, Vertical Whip Antenna, Call Sign 8 G J 9).

(3) *Pertamina Control Radio Stations — HF/SSB:* In the event incoming tankers are not able to contact the Ardjuna Marine Terminal on the foregoing VHF/FM Frequencies, or by HF/SSB, Pertamina maintains coastal radio stations located in Jakarta and Merak.

Pertamina Jakarta Radio, Call Sign PKI 2 may be contacted on HF/SSB per following frequencies and during the following service hours:

FREQUENCY/kHz	HOURS/GMT	KEEP WATCH/kHz
452*	H24	500
8626	0200–0300, 0400–0500, 0700–0800, 1030–1200, 1400–1500, 1800–2000, 2200–2300 GMT.	8356–8374
12890	0000–0200, 0300–0400, 0500–0700, 0800–1030, 1200–1400, 1500–1800, 2000–2200, 2300–2400, GMT.	12534–12561
VHF CH. 9/16/19	0000–1500 GMT.	CH. 16

*Call/Reply

Pertamina Merak Radio, Call Sign PKQ may be contacted on HF/SSB per following frequencies and during the following service hours:

FREQUENCY/kHz	HOURS/GMT	KEEP WATCH/kHz
452*	0000–0400, 0800–1000, 1200–1400 GMT	500
8626	0100–0200, 0900–1030, 1500–1600, 2300–2400 GMT	8356–8374
4361.6	0000–0100, 0200–0300,	2182, 4066, 4063, A3J A3H
6518.6	0300–0400, 1200–1400 GMT	2182, 6204 A3J/A3H
VHF CH. 16/19/24/26	0000–2400	CH. 16

*Call/Reply

Masters should request the Pertamina Coastal Radio Station to relay the necessary information to Atlantic Richfield Indonesia Inc., Jakarta by telephone numbers:
73204, 777121, 777122, 777123, 777124, 777125, 777126, 777359 or by Pertamina Internal Telex System number 18 which is the designated number of Atlantic Richfield Indonesia Inc., Jakarta.

HEALTH: In accordance with practice in Indonesian ports, quarantine, immigration, pilot and call sign flags must be displayed by all vessels approaching Ardjuna. These signals shall be displayed continuously until clearance is granted. The signals are as follows: Sunrise to sunset: quarantine flag "Q". Sunset to sunrise: signal lights (red over white).

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag (request for Pilot) should be flown until the Mooring Master boards. The vessel should also fly its call sign. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag which signifies that the Pilot is aboard. The tanker may fly the "P" flag if it is going to sail within 24 hours.

Indonesian Immigration, Customs and Harbour Master officials will board the vessel after it is all secured to grant clearance.

Each tanker entering the port of Ardjuna must have requested and been granted Flag Dispensation prior to its arrival. At the same time, application is made for Provisional Pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the harbour authorities. Port Health Clearance is issued prior to the tanker's arrival and is also valid for departure clearance. If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the Agent.

Each Crew member should be in possession of an International Vaccination Card.

After the tanker is all secured, the Customs Officer will seal the stores. If arriving from a foreign port, the Agent will prepare the General Cargo Declaration form stating the cargo onboard the tanker and attaching appropriate shipping documents. If the tanker is arriving from an Indonesian port, the 5-B form issued at the last Indonesian port will be retained by Customs and the arrival clearance at Ardjuna is granted.

MOORING: The following mooring Launches will be available for running lines as required, also for transporting Government Officials, Agents and other authorised personnel to and from the export tanker.

Name and description	*Length*	*Rated HP*
(1) *Arco Ardjuna III*	40ft	260
(2) *Arco Ardjuna IV*	40ft	260

LOADING: Ardjuna crude oil of approximately 37.0 degrees API at 60°F. is available at the storage barge.

After a vessel has berthed and pratique has been granted, a Terminal official will board to discuss loading arrangements. Before any crude is loaded all ship's scuppers on main decks must be plugged and cemented oil tight. Approved mechanical means of closing scuppers may be accepted. The vessel's cargo tanks are inspected by Ardjuna officials and, if suitable for loading crude oil a signed notation to this effect will be made on the ullage certificate.

It is absolutely essential that extremely careful supervision be exercised by officers of vessels while loading operations are in progress.

A responsible ship's officer is required to be on duty continuously at a point near to the tanks being loaded. He will be assisted by an adequate number of ship's personnel in these operations.

It is the responsibility of the vessel to ensure that all mooring lines are properly tended. Ardjuna personnel will constantly check a vessel's moorings and at any time may direct the lines to be heaved tighter or slackened off under the supervision of a responsible ship's officer, as circumstances warrant.

Raising, lowering, connecting, tending and disconnecting of oil loading hoses as well as other labours and duties on shipboard

connected with loading of cargo or maintaining mooring lines in a correct manner will be performed by the ship's crew directed by a responsible officer as required by the Mooring Master. Loading of export tankers is through two 12 in. I.D. hoses with No. 150 ASA flange rating. The weight of each hose is approximately 2.5 tons. All ships using Ardjuna Marine Terminal must be able to connect their manifold to the 12 in. hoses. Masters are reminded it is the ship's responsibility to provide such reducers as may be required to make the connection.

The Mooring Master will report unsatisfactory conditions to the Company Marine Superintendent who may, in turn, reject the ship until corrections are fully made. All costs accruing therefore will be for the ship's account.

The service of the Mooring Master are provided upon the express understanding and conditions that when any Mooring Master provided goes on board a vessel for the purpose of assisting such vessel, he becomes for such purpose the servant of the Owners of the vessel and the Company shall not be liable for any danger, or injury, resulting from any advice, or assistance, or actions given, or made, by such Mooring Master while on, or in the vicinity, of the assisted vessel.

The Company Marine Superintendent, or his designated alternate, shall be the sole authority to decide when the port is closed due to unsuitable weather conditions preventing normal working operations.

Various combinations of wind, sea, and tidal conditions, also the size, length, ballasted trim, and handling qualities of a vessel can affect the decision to berth a vessel at Ardjuna. All of these factors have to be evaluated before a final berthing decision is made.

Delays to vessels using Ardjuna Marine Terminal due to the port being closed because of bad weather conditions shall not be computed as used laytime when compiling vessel's turnaround time.

Request for the Terminal to stop the flow of oil cargo at a predetermined tonnage must be in writing. The request must include the statement by the ship's Master that the Company will not be held responsible for any error and that in case of vessel being overloaded the excess cargo cannot be pumped back to the storage barge. Ship's Master will also be held responsible for any oil spills caused by this request.

Typical Ardjuna crude specifications:

Gravity at 60°F.	36.0	—	38.0 API
Reid vapour pressure	6.0	—	12.0 PSIG
Sulphur, wt. %	0.060	—	0.100 wt. %
Kinematic viscosity at 100° F.	1.20	—	4.00 CS
Pour point, °F.	90+		
Carbon residue	0.50	—	1.45 at. %
BS & W	0.10	Vol. %	
Flash (TCC), °F.	Below room temperature		

TUGS: 1 tug to assist berthing and unberthing. A mooring launch will be available to pass line to the storage tanker on berthing.

BERTHING: *Storage Barge "Arco Ardjuna"* The Company Marine Administrative Offices, storage and a laboratory for testing Crude Oil stock are located on board a 137,673 d.w.t. Storage Barge of Liberian Registry designated "Arco Ardjuna". Overall length of the barge is 467 ft. 10 in. Total Crude Oil capacity is 1,022,000 gross barrels.

Loading of Crude Oil from the Storage Barge to the Tankers will be through A.O. Smith Positive Displacement Meters, of which there are 4, each having a maximum capacity of 12,500 b.p.h.

Storage Barge "Wampum": The second crude oil Storage Barge is of Liberian Registry designated "Wampum". Overall length of the barge is 616 ft and 6 in. d.w.t. 74,500 and the Crude Oil capacity is 565,149 gross barrels.

Export SBM No. 2 is designed, during reasonable weather conditions, to handle tankers up to 100,000 d.w.t. and is equipped with dual 150 ft., 12 in. circumference, Floating Braidline Mooring ropes with 22 ft. long anti-chafe chains fitted, so arranged as to avoid chafe to the mooring ropes while tankers are at the buoy. The other Export SBM, No. 4 is designed to handle up to 200,000 d.w.t. tankers, weather permitting, and equipped with dual 150 ft., 15 in. circumference, Floated Synthetic Fibre Mooring ropes together with the anti-chafe chains length 22 ft.

The crude oil loading hoses are connected to the ship's manifold from the port side of the Export Tanker. Tankers arriving are requested to have derrick on the port side raised and rigged, ready to lift aboard Terminal equipment.

Tankers are loaded through 2 strings of 16 in. I.D. floating hoses extending from each of the Export SBM's No. 2 and No. 4, connected to the tanker's manifold at the ends by means of the rail hoses of 12 in. I.D. All tankers not having 12 in. hose connections should provide their own reducers in such a way as not to cause any delay in the hose connecting operation. On SBM No. 2 the length of the hose strings is 755 ft. while on SBM No. 4 the length of the strings is 795 ft.

For tankers intending to load in the Ardjuna Marine Terminal the distance from the bow to the loading manifold should not exceed 450 ft.

The minimum loading rate in the Ardjuna Marine Terminal is 15,000 b.p.h. Any tanker arriving unable to receive Crude Oil at the above rate may be rejected.

Tankers loading Crude Oil on the SBM No. 2 can accomplish a maximum loading rate of approximately 30,000 b.p.h. and on the SBM No. 4 maximum loading rate is approximately 35,000 b.p.h.

In order to save time as well as to make the berth available for others, it is requested that ships receive Crude Oil as fast as it can be delivered, with due regard for safety.

Masters are reminded that for safety reasons it is advisable to have the ship half loaded as quickly as possible.

Rate can be reduced for topping off tanks. When requested by the ship to stop, cessation of Crude Flow is almost immediate.

EQUIPMENT: Tankers are required to have ready: on the port side, a derrick of least 5 tons safe working load, rigged and ready to pick up the mooring and hose connecting gear from the Mooring Master's launch.

This derrick subsequently will be used for raising, connecting, disconnecting and lowering loading hoses and eventually to transfer the mooring and hose connecting gear back to the launch before the tanker sails.

On the forecastle, at least 6 good ship's mooring lines shall be required. 2 of them will be used as messenger lines for bringing aboard both terminal mooring lines from the SBM. The 4 remaining ship's lines will be laid out 2 and 2 on either side of the foc'sle deck, eyes about 3.5 metres distant from the fairleads as advised by the Mooring Master. When the Terminal mooring lines have been hove up and antichafe chains have been hove about halfway inboard through the fairleads, the eyes of the ship's lines will be shackled onto the end links of the chain, so arranged that in the final position of mooring, the tanker is tied to the SBM using the Terminal mooring lines/chains and made fast to the ship's bollards by means of the ship's own lines. This will be backed up by 2 lengths of wire strops each 30 ft in length and 2 in. dia. These wires will be provided by the Terminal to be used as preventer wires. These 2 wire strops will not be used as the permanent mooring system.

Their purpose is to hold the ship safely moored in the event 1 or more of the ships lines part until the crew can replace such lines.

In certain weather conditions such as calm sea, light air and/or slack water tide, an additional ship's line may be required to be sent to the SBM and to be hove up from the tanker as required by the Mooring Master to avoid the vessel overriding the buoy.

A ship may be rejected if, upon inspection, it is not properly equipped, or if it is not suitably manned, or if it has dirty ballast, or tanks unsuitable for the cargo.

A vessel is suitably manned if it has a full complement of qualified officers and a crew all of whom are in a sober condition, competent and willing to carry out their duties and orders.

A ship must be equipped with a good working propulsion unit as passed by the appropriate survey society. Inoperative ships, or partially inoperative ships, will be rejected. Should it become inoperative while at the Export SBM it will be removed at the vessel's expense.

No repairs are to be made while mooring or unmooring, or at the Export SBM without the express permission of the Marine Superintendent or his alternate.

The export tanker must lift the export hoses from the water by means of its own derricks and using its own crew.

A vessel must have both bower anchors in good working condition and in such sizes and amounts as to meet either "Lloyd's" or "A.B.S." standards although they may be, in fact, classified by other societies. It is strongly recommended that anchors have proper anchor buoys attached to each anchor.

All vessels must carry suitable stoppers for all Manila or synthetic lines for mooring use.

Vessels to have suitable winches or capstans in good working order and able to heave on the 12 in. and 15 in. braid lines from the Export SBM. Such winches must have sufficient power to heave the ship to the position required by the Terminal Mooring Master. Power supply to deck machinery must be maintained throughout the period ship is secured to the SBM. Failure to comply with this requirement may result in cessation of loading and delay so caused will be for ship's account.

To assist in vessel's turnaround, tankers should have all necessary booms and cargo gear rigged and ready before ship is boarded by Mooring Master.

Vessels which may consider the lifting capacity of their gear to be marginal should strengthen their gear accordingly. A common way to do so is to rig a second topping lift on the boom.

BALLAST: No facilities are available for disposal of dirty ballast. It is the responsibility of the Ship's Master to see that no oil of any kind is pumped or spilled overboard from his ship.

As soon as practical after arrival, all tankers will be inspected by an Ardjuna Marine Terminal official for dirty ballast. During discharge of ballast similar inspections will continue.

If evidence of oil appears at any of these inspections, the ship will be rejected and will not be accepted again until satisfactory evidence is produced that such ballast was disposed of in a proper manner. If, during inspection, or during progress of loading, it is revealed that ship's tanks are not tight, or that oil is leaking from the ship, the ship may be rejected or refused further loading.

A tanker must have sufficient ballast for safe handling having due regard to existing weather and sea conditions. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own ship, a ship's Master may come to the Terminal with a minimum ballast and thus lessen any possibility of infringement of sea pollution regulations.

In addition to the lights usually displayed, vessels in the moorings discharging ballast or loading cargo during darkness will brilliantly illuminate the sea around the ship, so that any pollution will be noticeable.

Tankers equipped with a separate system of ballast tanks will be allowed to discharge ballast, and load oil simultaneously, providing approval is first obtained from the company Marine Superintendent.

Most responsible ship Owners have adopted a system of tank

cleaning using circulatory methods of transfer of tank washings on shipboard and treating these washings with chemicals. The result is that no oil is discharged into the sea and the oil separated is collected in a slop tank. With the written permission of lifting companies, the Terminal will load on top of such slops. This system is highly recommended to avoid pollution of the Java Sea.

Masters are warned that inspection of ballast is strict.

If, at any time an overflow of crude oil occurs, loading will be suspended immediately, and not be resumed until the oil is cleaned up and removed from the decks of the vessel, and/or from the surface of the sea, and any damage is repaired and no further danger exists. It is stressed that during loading operations, the Ardjuna Cargo Supervisor will immediately slow down the loading rate on receipt of a request for same from the ship's deck officer — in charge of loading.

All spillages of oil must be reported immediately to the Ardjuna Marine Superintendent, or his alternate, and, subsequently, a detailed report, in writing, submitted by the Master of the vessel concerned giving all relevant details.

If the ship's tanks are found to be leaking, it will not be accepted for loading unless satisfactory evidence of repair certified by Lloyd's or A.B.S. surveyors, or other recognised surveyors is submitted.

Any tanker rejected because of dirty ballast or sea pollution will automatically nullify his notice of readiness and will lose any priority of position for loading. Tankers with dirty ballast will be rejected and will have to tender a new notice of readiness upon second arrival.

Owners and Masters are responsible to observe international convention laws and Indonesian Government regulations concerning pollution of the sea, having particular regard for this area of the Java Sea.

The categories of pollution include oily water from bilges, crude residual from previous voyages, or any other matter that may result in pollution of the sea. Any fines imposed shall be for ship's account.

FRESH WATER: No fresh water is available.

FUEL: No bunkers are available.

MEDICAL: No clinic is available.

CONSULS: There are no consulates available at Ardjuna Terminal. However, there are many embassies and consulates represented in Djakarta about 59 miles S.W. of the Terminal.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs' seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars.

Special allowances are made for the Master under special circumstances.

REPATRIATION: No crew changes. If emergency conditions prevail, for humanitarian reasons exceptions to the foregoing may be permitted. All expenses incurred will be for ship's account.

TIME: Ardjuna time is GMT plus 7 hours throughout the year.

SHORE LEAVE: Not allowed.

FIRE-FIGHTING EQUIPMENT: Fire-fighting equipment such as salt water hoses, fire hoses, or a reel and fire extinguishers will be available on the storage barge.

REGULATIONS: The ship's Master is responsible to ensure that no communications by radio is allowed within the terminal area. Unauthorised radio communications will be cause for cessation of all operations, except clearing of the berth, and vessel's Notice of Readiness will be immediately nullified. No repairs are to be made while berthing or unberthing, or alongside the storage barge. The Indonesian Flag must be flown throughout the the vessel's stay in port.

The laws of Indonesia govern this Terminal and all personnel are urged to abide by them.

Only authorised personnel or visitors are permitted on the storage barge and/or export tanker.

GENERAL: The crude oil testing laboratory is equipped to perform the following tests: API gravity, BS&W and pour point. Any additional tests that may be required will be performed in Djakarta.

For convenience, mail for personnel on incoming tankers may be sent to the Djakarta office of the Company for transmittal to the tanker when it arrives at Ardjuna Marine Terminal. Except on an emergency basis, spare parts or other material will not be accepted for delivery to incoming tankers.

No stores available.

AUTHORITY: P. M. Pertamina, Djalan Perwira Nos. 2–6, Djakarta, Indonesia. P. N. Pertamina, the Indonesian State Oil Company, handles all agency matters for tankers.

(**TERMINAL OPERATOR:** Atlantic Richfield Indonesia, Inc., Gedung Veteran R.I. Jalan Jenderal Soedirman, P.O. Box 63/DKT, Jakarta, Indonesia.

AGENT: *Procedure for appointing Agent:* Owners should Telex or Cable:

Pertamina Shipping Directorate
32–34, Jalan Yos Sudarso
P.O. Box 327
Jakarta – Indonesia
Cable address: Pertaminaship Jakarta
Telex number: 2885
Telephone: 290312 (11 lines) Ext. 217 Agency Section.

The Telex or Cable should appoint Pertaminaship as General Agent to attend the vessel at Ardjuna and should be sent 2–4 weeks prior to vessel's arrival.

Also, the following information should be given in the Telex or Cable to enable the General Agent to obtain Flag Dispensation for the vessel:

1. Name of vessel
2. Flag
3. Port of Registry
4. Certificate of Registration Number
5. Name of Master
6. Number of Crew
7. Last Port of Call
8. ETA Ardjuna
9. Indonesian Ports of Call.

BALIKPAPAN: 01.13 S. 117.00 E.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Loading Line Certificate.
Safety Certificate (passengers ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
10 Crew Lists and Passenger's Lists.
Ship's Articles.
2 Stores Lists.

PILOTAGE: Compulsory pilotage. Application for Pilots can be made via Radio Station or the Signal Station on Tokong Hill. Vessels arriving by night should anchor off the outer buoy and give their call sign to the Signal Station. Pilot boards in position 1° 19′ 30″ S. 116° 54′ 30″ E. Vessels leaving should order a Pilot at least 6 hours prior to departure and when leaving between 0600–1200 hrs. application should be made before 2000 hrs. the preceding day. If vessel's draft exceeds 70 dm. same should be mentioned in the pilot's cable application.

APPROACH: The surrounding land is in general low with few conspicuous hill rows as background. Only the high spit on which Balikpapan is built can be used as a landmark with the regular cone-shaped hill Tokong.

RESTRICTIONS: Mooring and unmooring is restricted to daylight hours only.

MAX. SIZE: Tankers: Shell normally permit max. LOA of 750 ft. Drafts are restricted by the bar where the depth below chart datum is 25 ft. 3 in. Minimum keel clearance required is 1 ft. 3 in. Sailing drafts depending on rise of tide up to a max. of 33 ft. salt water.

HEALTH: Vessels arriving from abroad have to apply well in advance from the Department of Health (Quarantine Section) for provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

TUGS: One small tug is available.

BERTHING: Dry-cargo jetty 1: berth length: 240 m. with depths alongside 75 dm. at LWS. Combination dry cargo and oil: berth length: 300m. depth 75 dm. at LWS.

TANKERS: Jetties 3, 4, 5, 6, 7 and 8 are oil berths. When alongside vessels should keep 2 wires ready over the water-side so that vessels can be towed away in case of emergency.

STEVEDORES: Working hours: 0700–2000 Monday–Friday. 0700–1500 Saturdays. 0700–1500 overtime if required.

FRESH WATER: Available in limited quantity.

FUEL: Available at the berth 200 t.p.h. Coal not available.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore-pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp. 50. – (fifty Rupiahs only) ashore. It is recommended that Masters consult the Agents with the local prevailing Customs with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

AUTHORITY: Department of Sea Communications.

BANYUWANGI: 08.13 S. 114.23 E.

OLD PORT NOW PRACTICALLY CLOSED FOR SHIPS. (OPENED FOR BOATS AND FISHING BOATS ONLY).

DOCUMENTS: Customs and Harbour Master requires:

Crew List.
Passenger List.
Customs Documents.
Health Certificate.
Port Clearance.
Harbour Report.
Derat. Certificate.
Radio Certificate.
Certificate of Registry.
Perfection Certificate.

PILOTAGE: Not necessary because anchorage open.
ANCHORAGE: Position: Lat. 8° 12′ S. Long. 114° 23′ 16″ E. Depth 25–30 m.
MAX. SIZE: No restrictions, vessels must be anchored outside harbour.
HEALTH: All vessels boarded by Harbour Quarantine on arrival.
RADIO: None, moved to Meneng Port.
TUGS: 2 tug boats belong to P.T. Jakarta Lloyd Banyuwangi Branch.
BERTHING: Distance 500 to 750 m. from lighthouse. Anchorage berths only.
STEVEDORES: 6 gangs available. P.T. Jakarta Lloyd Banyuwangi Branch. 1 gang consists of 13 labourers, 1 gang boss, 1 tallyman, 2 winch drivers, 1 commander.
MEDICAL: Arranged by Department of Health.
FRESH WATER: None available.
FUEL: None available.
GANGWAY/DECK WATCHMEN: None available from shore.
OPENING/CLOSING HATCHES: Arranged by stevedores.
CUSTOMS ALLOWANCES: 50 cigarettes each Crew member. Packs or tins of tobacco must be open before going ashore. Wine and/or spirits: Enough for own use, if more required must pay import duties.
CARGO GEAR: Ship's gear used. Cargo loading on board by lighter.
IDENTIFICATION CARDS: Required.
CONSULS: No local representation.
REPAIRS: No facilities.
REPATRIATION: Not possible.
TIME: GMT plus 7 hours.
HOLIDAYS: On Sundays and holidays no work available, but if necessary, work can be arranged. No work when raining.
POLICE/FIRE/AMBULANCE: Police and ambulance available. Fire brigades belong to District and Paper Mill. Phone Nos. 352, 653, 353 and 503.
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Allowed.
DELAYS: Possible. During loading if it rains.
AUTHORITY: Kepala Pelabuhan (Port Administration).
AGENT: P. T. Jakarta Lloyd. Jln. Pelabuhan 32, P.O.B. 7. Port Banyuwangi.

BANYUWANGI (Port Meneng): 08.07 S. 114.23 E.

NEW PORT FOR LARGE VESSELS.

DOCUMENTS: Customs and Harbour Master require:
Crew List.
Passenger List.
Custom Documents.
Health Certificate.
Port Clearance.
Harbour Report.
Deratisation Certificate.
Radio Certificate.
Certificate of Registry.
Perfection Certificate.
PILOTAGE: Compulsory pilotage for vessels over 5,000 gross tons. Pilots must be ordered by respective Agent at least 48 hours in advance of the time their service is required.
MAX. SIZE: Draft alongside quay max. 40 ft. Present quay permits max. LOA of 500 ft. Bar 200 m. East of quay, depth below chart datum is 24 ft.
RESTRICTION: Mooring and unmooring is restricted to daylight hours only.
HEALTH: All vessels boarded by Harbour Quarantine on arrival.
RADIO: Name: Department of Sea Communication. Call sign: 8 AD 22 with freq. 8110 kc/s., receiver SSB 5316 kc/s. Shore radio station only used for district contact (used by Department of Sea Communication).
VHF: Call sign: Meneng Radio, freq. Channel 16, 14, 13, 12, used shore to ship and can be contacted about 25 miles before arriving at Meneng Port.
TUGS: 2 small tugboats are available. Both of 80 h.p., owned by P. T. Jakarta Lloyd.
BERTHING: Present berth length 110 m., to be lengthened to 200 m. in 1977/78. Depth alongside 40 ft.
STEVEDORES: 12 gangs available P. T. Jakarta Lloyd, Banyuwangi Branch and P. T. Pelni Banyuwangi Sub. Branch.
One gang consists of 1 gang boss, 2 winch drivers, 1 Pilot and 13 labourers.
GODOWN: One transit godown 20×50 sq. m. owned by Port Administrator and one transit godown 20×50 sq. m. is being built.
Two 2nd line godowns capacity 10,000 tons owned by P. T. Jakarta Lloyd Banyuwangi Branch. Open storage 10,000 sq. m., 6 godown 2nd line owned by National Logistic Board capacity ±20,000 ton specially for rice.
Equipment: One forklift capacity 2.5 tons owned by Port Administrator. Five lorries at 1 ton owned by P T. Jakarta Lloyd. Crane 15 tons can be supplied if necessary.
MEDICAL: Arranged by Department of Health.
FRESH WATER: Available. Handled by Harbour Board, with a loading capacity of about 300 tons per day.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Normally by stevedores.
CUSTOMS ALLOWANCES: 50 cigarettes each Crew member. Packs or tins of tobacco must be open before going ashore. Wines and/or spirits enough for own use. If more required must pay import duties.
CARGO GEAR: Ship's gear used.
IDENTIFICATION CARDS: Required.
CONSULS: No local representation.
REPAIRS: No facilities.
REPATRIATION: Not possible.
TIME: GMT plus 7 hours.
HOLIDAYS: On Sunday and holidays no workers available, but if necessary work can be arranged, except Independence Day (17th August) and 1st Sjawal (Idhul Firti/Moslem Holiday).
POLICE/FIRE/AMBULANCE: Police and Ambulance available. Fire Brigade owned by District and Paper Mills, telephone Nos. 352, 653, 353 and 503..
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Allowed, shore pass required.
DELAYS: Possible. During loading if it rains.
AUTHORITY: Kepala Pelabuhan. (Port Administration).
AGENT: P. T. Jakarta Lloyd Banyuwangi Branch. Tel. 363, 386, 432. Post Box 7 Banyuwangi.

BEKAPI TERMINAL: 01.00 S. 117.30 E. **(See Plan)**

SHIPMASTER'S REPORT:
DOCUMENTS:
3 Crew Lists.
1 Personnel Manifest.
1 Ship's Stores List.
3 Passenger Lists.
1 Transit Cargo Manifest.
Clearance from last port.
Smallpox certificates.
Valid documents, all crew.
Indonesian Immigration, Customs and port officials board to give clearance.
PILOTAGE: Compulsory. Mooring Master boards at anchorage. 72, 48 and 24 hours notice of arrival required.
ANCHORAGE: Position 00° 59′ S. 117° 27′ E. Depth 100 ft.
RESTRICTIONS: Vessels berth in daylight only as Oil storage barge "Waipiti" is moored to SBM production source. Vessels may berth at any stage of tide and may leave berth daytime or night-time.
MAX. SIZE: 60,000 d.w.t. 700 ft. LOA. Size of vessel limited by size of storage barge.
RADIO: Jakarta, Merak and Balikpapan.
VHF: Storage barge equipped with Channel 16 and others, also equipped with telex with direct relay to Jakarta office.
TUGS: None available.
MEDICAL: Not available.
TANKERS: Vessel anchors on arrival, N.W. of Oil storage barge "Waipiti" (ex "Massachusettes Getty"). Vessel berths during daylight to the starboard side of the "Waipiti". The barge supplies one 12 in. hose. Product handled, crude oil API 40.7. Loading temperature 96° F. Depth of water as berth 32 m. Barge equipped with 4 large "Yokohama" type fenders. Accommodation ladder not required. Vessel used port derrick, max. lift 3 tons.
DENSITY: 1025.
FRESH WATER, FUEL, OTHER SERVICES: Not available.

BELAWAN: 03.48 N. 98.43 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:
Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.
Pilot's Certificate.
Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Other certificates and documents as required.
2 Stores Lists.
RESTRICTIONS: Bar is excessively silting and continuous dredging is necessary to keep the shallowest part at 8 m. at LWS. Narrowest part of channel is 50 m. wide.
Outer roads about 600 m. square marked by light buoy. No pilot light vessel. This roadstead is approx. 600 m. wide, the centre of which is the range-line of the swept channel. This channel is provided with buoys and beacons.
PILOTAGE: Compulsory pilotage for vessels over 500 M3 gross, consisting of sea and harbour (docking) pilotage; working hours

0600–1700 W.I.T. Pilots must be ordered by the respective Agents at least 6 hours in advance of the time their service is required. Vessels will not be taken alongside wharf unless the vessel can be berthed before 1600 hrs. Incoming sea Pilot embarking at anchorage when berth has been allotted. Harbour Pilot boarding on passing harbour limits. Outward harbour and sea Pilot will board vessel alongside wharf, while harbour Pilots will disembark at harbour limits and sea Pilot at the anchorage in outer roads.
TUGS: 2 tug-boats, *Laut Timor* and *Asta*, both of 650 h.p., owned and operated by P.N. Tunda Bara (State owned), assist in mooring and unmooring, towing of lighters, supply steam, etc. The "Brahmayuda" of 350 h.p. is owned and operated by the Harbour Board and used in cases of emergency only.
RADIO: Coastal Radio Station: Call sign PKT; Class A1, Frequency 8714, A2, Frequency 8754.4.
BERTHING: *Ocean Quay*: Depth alongside 8 to 8.5 m. *Old Belawan*: Depth alongside 6 m.

Mooring buoys: There are 2 sets of moorings laid in the river i.e. in Old Belawan, but mooring is subject to the following conditions: approval of Harbour Master who views each case separately from the point of vessel's draft and the tide in the river.

If granted, the following ropes must be used both fore and aft: 2 good manilla ropes, 1 strong steel wire with shackle complete, 1 slip wire.
STEVEDORES: Working hours: Monday–Thursday 0800–1200 hrs., 1300–1600 hrs. Friday 0800–1100 hrs., 1300–1600 hrs. Saturday 0800–1200 hrs., 1300–1500 hrs. Overtime to be applied with authorities concerned is usually granted: on working-days during meal-hours, from 1600–2000 hrs. and occasionally till 2200 hrs.; on Sundays and holidays, except Independence Day, 1st Ramadhan, Christmas and 1st January.
FRESH WATER: Handled by the Harbour Board. Artesian wells all along the Ocean quay with a loading capacity of about 10 t.p.h. The water is regularly laboratory checked and declared drinkable but boiling before use remains recommended.
FUEL: Coal not available. Oil, at 5 points on the quay alongside go down 18 and 19 for Stanvac diesel and marine fuel oil, applications for which must be made 2 weeks in advance. Pumping capacity about 60 t.p.h.
REPAIRS: Slipways available for small craft only. Machine-shops available for minor repairs. Radio repairs available, viz. the Post Telegraph and Telephone Office. Electronic repairs not available.
PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.
CUSTOMS: It is strictly prohibited take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp. 50.– (fifty Rupiahs only) ashore. It is recommended that Masters consult the Agents with the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
SHIPMASTERS REPORT: February 1976, I would inform you that all vessels are now berthed or unberthed on a round-the-clock basis, within the draft limits imposed by the dredged channel, which at present is 8 m. LWS with a tidal range of about 2 m. The chief Pilot stated that they would berth vessels up to 10 m. draft at high water.

The pilot station is now equipped with VHF and work on Channel 12: they pass berthing information on this channel to vessels at anchor. They seem to use 12 as a calling-up and working channel.
AUTHORITY: Departmeen Perjubungan, Direktorat Djendral Perhubungan Laut.

AGENT: P. N. Djakarta Lloyd, Medan Branch Office, Djl. Kesenian No. 4, Port Medan/Belawan.

BIMA: 08.25 S. 118.42 E.

DOCUMENTS:
6 Crew Lists.
6 Vaccination Lists.
6 Stores Lists.
6 Passenger Lists.
PILOTAGE: None available.
ANCHORAGE: 300 m. off the quay in depths of 16 m.
RESTRICTIONS: None, vessel may enter harbour day or night.
MAX. SIZE: Not limited at anchorage.
RADIO: Coastal Radio Station, cable address Pelni Bima by Post Office.
TUGS: No tug-boat available.
BERTHING: Entering and sailing allowed after dark. No berthing facilities except for very small ships.
STEVEDORES: Ordered by Agent. No work allowed on Muslim holidays, New Year and 17th August.
MEDICAL: 1 government hospital available.
FRESH WATER: None available.
FUEL: None available.
GANGWAY/DECK WATCHMEN: None available, police and Customs officers posted on board.
OPENING/CLOSING HATCHES: Carried out by stevedores.
AIRPORT: Flights from Bima to Sumbawa, Ampenan, Bali. By AOA Zamrud (Dakota) every Sunday, Tuesday, Thursday and Saturday. Aviation Corporation.
TIME: GMT plus 8 hours.
HOLIDAYS: Muslim holidays, New Year, 17th August.
TELEPHONES: No phone connections between ship and shore available.
SHORE LEAVE: Crew members are allowed to go ashore and arranged by Agents.
DELAYS: 1 motor-boat, 4 lighters each of 15 tons and 1 lighter of 25 tons. Loading general cargo live buffaloes and fodder. For heavy cargo max. 7 tons each lift can be handled through lighters.
AGENT: Pelni Bima. Nusatenggara Barat Indonesia. Cable address: Pelni Bima. Tel. Office No. 46. Residence: No. 7.

BITUNG: 01.26 N. 125.12 E.

PORT LIMITS: The area between limits:
125° 10′ E. 125° 13.5′ E.
01° 25′ N. 125° 10′ E. to coastline of Lembeh Island.
01° 27′ N. 125° 13.5′ E. to coastline of Sulawesi.
Coastline of Lembeh Island between Lat. 01° 25′ N. 125° 13.5′ E.
Coastline of Sulawesi between 125° 10′ E. and Lat. 01° 27′ N.
DOCUMENTS:
4 Crew Lists.
4 Lists Passengers in Transit.
4 Lists Passengers Disembarking.
3 Cargo Lists.
3 Provisions Lists.
1 List of Articles new and Customs-barred in possession each crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Ship's Register.
International Vaccination Certificate for Crew and Passengers. (Especially for International Travellers.)
Health Book/Maritime Declaration of Health.
Derating Exemption Certificate.
PILOTAGE: Contact Coastal Radio Station Bitung (call sign PKM), telegram address: Port Administration Bitung; advance notice of ETA 24 hours. Pilot boat: motor launch, light grey. Requiring a Pilot: flag, sound and Morse Signal: "G" anchorage for vessel awaiting a Pilot: the area between: 01° 26.3′ N., 125° 10′ E.; 01° 25′ N. 125° 10.8′ E. and 01° 24.1′ N., 125° 07.1′ E.; 01° 24.1′ N., 125° 09.9′ E.
ANCHORAGE: The area between coast of Lembeh Island and coast of Sulawesi: 01° 27′ N., 125° 12.3′ E.; 01° 26.2′ N., 125° 13.5′ E. and 01° 26.3′ N., 125° 10′ E.; 01° 25′ N., 125° 10.8′ E. Depths: 42 ft. to 114 ft.
RESTRICTIONS: No restrictions on night entry.
Shipmaster's Report: Numerous fishing boats at the port entrance especially at night time, also fishing sticks, and small fishermen's houses on bamboo sticks built at sea, without lights, dangerous to navigation. Approaching or sailing from port at night time, should not be attempted.
MAX. SIZE: Draft alongside pier, max. 32 ft.
HEALTH: Vessels coming direct from other countries or coming from infected port: "Q" flag to be flown. Pratique procedure and action necessary to obtain pratique according to the Int. Sanitary Regulations.
RADIO: Bitung Radio/PKM for vessels to route ETA cables to Agents, receivers, etc.
TUGS: None available.
BERTHING: Depth alongside pier 18 to 34 ft. dependent location.
STEVEDORES: Arranged by handling Agent.
MEDICAL: Masters to advise by radio prior arrival if medical attendance required aboard. Vaccination/fever certificates required, 3 copies.
TANKERS: 1 oil jetty for domestic tankers.
DENSITY: About 1030.
FRESH WATER: Available from hose connections on the pier, at a rate of 100 t.p.h., or by barge.
FUEL: Not all grades fuel available. Diesel and marine lubricants can be supplied. 48 hours notice required.
DEVELOPMENTS: Extension of pier to total length of 1,821 ft. to be completed 1976.
REPAIRS: Some deck and minor engine repairs are possible at Bitung dockyard. Radar and electronic repair available, but not for big repairs.
GANGWAY/DECK WATCHMEN: Not needed.
OPENING/CLOSING HATCHES: Normally by crew/stevedores, otherwise according charter party.
SHIP CERTIFICATES: Registered Tonnage Certificate and all certificates normally required to be on board.
CUSTOMS ALLOWANCE: 100 cigarettes or 20 cigars or 100 gram. tobacco each crew member; 1 bottle wine or spirits for each crew member.

Passengers: Commodity to be worth US$25 per person or US$100 per family.
CARGO GEAR: Loading and discharging by ship's own derricks. Shore cranes capacity 15 and 35 tons.
IDENTIFICATION CARDS: Shore pass issued by the Immigration Office for crew members at Agent's request.
CONSULS: Philippines only.
REPATRIATION: Facilities available.
AIRPORT: About 50 km. from port of Bitung. Regular airlines: "Garuda" 7 flights a week, "Mandala" 2 flights a week and "Zamrud" 3 flights a week.
TIME: Local time GMT plus 8 hours, permanent.
HOLIDAYS: New Year's Day; Idul Adha; 1st Muharam; Ascension Day; Birthday of Prophet Mohammad; Good Friday; Proclamation Day (August 17); Ascension Day of Prophet Mohammad; Idul Fitri and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 107; Ambulance 24; Fire 111.
SHORE LEAVE: Crew members are allowed ashore with a shore pass issued by the Immigration Office.
AUTHORITY: Port Administrator.

CINTA TERMINAL: 5.30 S. 106.14 E. (See Plan)

DOCUMENTS: The following documents are required for immediate inspection by the Terminal Officials:
Maritime International Declaration of Health.
Valid Deratisation or Exemption Certificate.
6 copies of Crew Lists.
Passenger List, if any.
Smallpox Vaccination Certificates for all crew members or passengers within three years.
Certificates of Inoculation against any communicable diseases.
Valid Passports and/or Seaman's Certificates for all crew members or passengers.
Notice of Readiness.
Indonesian Consular Clearance.
1 Crew Declaration of Personal Belongings.
1 Ship's Stores Inventory.
6 copies of Cargo Manifest for Cinta Terminal loading.
1 Copy of Cargo Manifest for Transit Cargo with a Summary.
1 Copy of Passenger Manifest.

Clearance from the last port of call will be required by the Government Authorities. Crew Lists and Crew Declaration of Personal Belongings must be on the approved Indonesian documents. Vessels are advised on their initial visit to the port to obtain sufficient forms for future visits.

In the normal course of events, Cinta Terminal acts as tanker agent and prepares all crude oil documents. No charges are made for these services. A tanker will be considered clear to depart Cinta Terminal when the crude oil loading documents and his outward clearance certificate have been delivered to the Master of the vessel.

EQUIPMENT: A vessel must have both bower anchors and ground tackle in good working condition and in such sizes and amounts as to meet either "Lloyds" or "A.B.S." standards, although they may be in fact classified by other societies. It is strongly recommended that anchors have proper anchor buoys attached to each anchor.

All vessels must carry suitable stoppers for all Manila or synthetic lines for mooring use.

Vessels to have suitable winches or capstans in good operating condition on the forecastle deck. Constant tension-type winches may not be used except when they can be solidly locked and the constant tension feature not used.

PILOTAGE: Pilotage is compulsory within the Terminal limits. Vessels to be moored at Cinta Terminal will be boarded by Cinta Terminal Mooring Master in the anchorage area. The Mooring Master will advise the ship's Master on approaches to the SBM, mooring, unmooring, connection and disconnecting hoses, and all other operations within the Terminal area. Vessels are requested to have a pilot's ladder, safely and securely rigged, ready for immediate use and long enough to meet the Mooring Master's launch. Vessels will provide a lee for the Mooring Master, both when boarding and leaving. Also a light line should be ready to take aboard the Mooring Master's portable radio.

ANCHORAGE: Position is 5° 25′ 25″ S., 106° 12′ 10″ E. with a radius of one mile which must be used by vessels required to wait at anchor. Anchoring within the Terminal Area is prohibited. Mooring Masters will board arriving tankers in the anchorage area.

The hold area is South of the SBM with water depth of 18 to 20 fathoms. Holding ground is fairly good. Area is large enough for sufficient manoeuvring and swinging room for several vessels.

If a tanker is not scheduled to berth on arrival (e.g. another vessel is already in the berth, or the Terminal is closed on account of adverse weather, etc.), Master will be advised by radio and requested to anchor.

RESTRICTIONS: Weather permitting, Cinta Terminal will operate on 24 hours per day, 7 days per week. Tankers will be berthed during daylight hours only and unmoored on 24 hours basis provided the berth is not occupied and/or storage is not critical.

MAX. SIZE: Minimum size tanker acceptable: The minimum sized tanker acceptable at the Terminal will be not less than 20,000 d.w.t.

Max. size tanker acceptable: The max. sized tanker acceptable at the Terminal calling for a full cargo will be 55,000 d.w.t. Larger tankers may be accepted subject to weather conditions at the time of loading without recourse to IIAPCO for any delays.

NAVIGATION AIDS: The SBM is fitted with a 5 nautical mile white flashing light; flashing at a rate of 60 flashes per minute. The SBM is located Lat. 5° 25′ 21″ S. and Long. 106° 14′ 10″ E. and bears 318° True, approximately 51 nautical miles from the Port of Jakarta.

A large 602 ft. long barge Cinta Natomas is used for storage of crude oil and for accommodation and headquarters of Cinta Terminal personnel. It lies permanently anchored to an SBM 5° 26′ 40″ S. and 106° 14′ 42″ E. on a line bearing approximately N. 88° W. and 8,500 ft. from the location of the SBM. The barge shows lights and shapes as prescribed in the International Regulations for preventing collisions at sea for vessels engaged in underwater operation, see Rules 4 (c) and 11 (b) (c) (d). The barge is also equipped with a foghorn with 5 seconds on and 55 seconds off sequences forward and 5 seconds on and 55 seconds off abaft, 10 seconds apart.

Four permanently fixed oil producing structures are located in the Terminal area:

Cinta platform "A" rises approximately 65 ft. above water and is located approximately 7,100 ft. from the barge at 5° 26′ 23″ S. by 106° 15′ 50″ E.

Cinta platform "B" is an identical structure to platform "A" and is located at 5° 27′ 01″ S. and 106° 15′ 22″ E. and 4,500 ft. from the barge.

Cinta platform "A" and "B" have heliports.

Cinta platform "C" rises approximately 54 ft. from minimum low water and is connected by a 110 ft. long bridge to Cinta platform "B" on East side.

Kitty platform "A" is located about 33,000 ft. from the barge at 5° 30′ 57″ S. and 106° 11′ 59.5″ E. This platform rises approximately 54 ft. from minimum low water.

RADIO:

Cable address: "Iiapco Jakarta".
Telex: 4221.

Operating Schedules and frequencies: Direct communication by radio telephony between Cinta Terminal (call sign: 6ZFT) and incoming vessels will be by: amplitude modulation (A3, A3H and A3J) operation in the 2-4-8 and 12 mHz bands and by International Marine VHF Channel 16. (156.80 mHz).

Cinta Terminal (call sign: 6ZFT) particulars are as follows: operated by: Independent Indonesian American Petroleum Company (IIAPCO). Position: Lat. 5° 26′ 40″ S. Long. 106° 14′ 42″ E. Hours of operation: 24.

Frequencies	*Class*	*Power*	*Mode*
2182 kHz	A3, A3H, A3J	150 W	AM
2398 kHz	A3, A3H, A3J	150 W	AM
2638 kHz	A3, A3H, A3J	150 W	AM
2738 kHz	A3, A3H, A3J	150 W	AM
4078.0 kHz	A3, A3H, A3J	150 W	AM
4456.0 kHz	A3, A3H, A3J	150 W	AM
8281.2 kHz	A3, A3H, A3J	150 W	AM
8223.6 kHz	A3, A3H, A3J	150 W	AM
12421.0 kHz	A3, A3H, A3J	150 W	AM

International Marine VHF Channels:

6 — 156.30 mHz	Simplex		
12 — 156.60 mHz	Simplex		
13 — 156.65 mHz	Simplex		
14 — 156.70 mHz	Simplex		
16 — 156.80 mHz	Simplex		
20 — 157.00 mHz	Receive	161.60 mHz	Duplex
26 — 157.30 mHz	Receive	161.90 mHz	Duplex
28 — 157.40 mHz	Receive	162.00 mHz	Duplex

Notes: 6ZFT keeps continuous watch on 2182, 4456 and 8281.2 kHz. 6ZFT keeps continuous watch on VHF Channel 16.

All communications between ships and Cinta Terminal (6ZFT) will be way of this station except should a vessel be unable to contact 6ZFT, she should send messages through: Singapore Radio/9VG or Pertamina Radio/PKI-2.

Initial Communications: It is most important that ships establish communications with the Centa Terminal (6ZFT) not less than 72 hours prior to arrival at the Terminal, giving estimated time of arrival. Further ETA information should be sent when the vessel is 48 hours, 24 hours, 12 hours and 4 hours distance or any time a change of one hour in original ETA occurs. These messages should specifically state whether ETA is given in GMT (Z) or local time (K).

Cinta Terminal time is GMT plus 7 hours throughout the year.

The 72 hours signal should include the following:

1. Name of vessel and radio call sign.
2. ETA and date.
3. Cargo requirements.
4. Deballast time.
5. Max. loading rate.
6. Vessels draft on arrival.
7. If there is any sickness aboard or clean bill of health.
8. Last port of call.
9. Any hull, bulkhead, valve or pipeline leaks on vessel which could affect loading or cause pollution.
10. Distance in feet from bow to vessel's loading manifold.

On receipt of the first signal from a vessel Cinta Terminal (6ZFT) will transmit a message to her giving preliminary requirements and details as to Terminal. Masters are urged to comply with this in all details in order to facilitate vessel turn-around and Government formalities.

Communications within 4 hours of terminal: Once ships are within the 4 hours distance of Cinta Terminal (6ZFT) communication, valid radio-telephone communications on International marine VHF may be established on Channel 16 (156.80 mHz). This channel is monitored continuously.

Once contact has been made on Channel 16 further conversation will be conducted on a mutually compatible channel.

The 4 hours signal should confirm information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distance from the Terminal.

Communication in Terminal: The Mooring Master will be in direct control of all ship communications while in the Terminal Area. Any unauthorised communications will be cause for cessation of all operations excepting clearing the berth, and the vessel's Notice of Readiness will be nullified immediately.

PRATIQUE: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Cinta Terminal area. These signals shall be displayed continuously until pratique is granted. By day the flag of Indonesia should be flown throughout the vessel's stay in port. The boarding officials will attend the incoming vessel from the Cinta Terminal launch.

NOTICE OF READINESS: After arrival in the anchorage area and when the tanker is in every respect ready to load, the Master may tender his Notice of Readiness. Notice of Readiness will not be accepted during periods when the Terminal is closed. The Terminal is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the Terminal will rest with the Terminal Superintendent. Tenders by vessels to load crude oil cargo will be normally accepted and berth assigned to vessels in chronological order of arrival provided such vessels have current nomination for cargo valid at the time of tender, carry clean ballast (if any), and have cargo tanks in fit condition to receive cargo. Also they must be in all respects properly equipped and ready to moor. Should berthing be delayed on account of bad weather, vessels will keep their position in line.

TUGS: Tugs and/or launches may assist in berthing vessels. These are under the direct supervision and control of the Mooring Master.

BERTH DESCRIPTION: The Terminal and Production Administrative Offices are located on board the 143,000 d.w.t. crude storage barge *Cinta Natomas* permanently moored approximately 8,500 ft. on a line bearing North 88° W. from the SBM. The nearest port with facilities is Jakarta approximately 51 nautical miles South-east.

The single point mooring buoy berth (SBM) is 11 m. in diameter, and designed to handle tankers in the 55,000 d.w.t. class, or larger, during reasonable weather. The buoy is equipped with dual 12-inch floating hose with ASA 150 pound flanged connections. Both strings must be taken aboard. Loading rates will be from 13,000 to 40,000 barrel per hour range. The SBM is also provided with two permanently attached 12-inch circumference synthetic fibre floating mooring lines. These lines should be held under tension by the vessel at all times.

MOORING: Tankers are requested to have ready on the forecastle head the following:

(a) Messenger lines on the forecastle head for bringing 2 mooring lines aboard from the SBM (min. 6-in. circumference).

(b) Mooring winches on forecastle head for handling two 12-in. circumference synthetic fibre floating mooring lines from the SBM.

(c) Adequate chafing gear to prevent damage to mooring lines.

(d) Derrick rigged and ready to pick up from launch, mooring shackles, nylon stops and hose connection gear on the port side midships.

On the near approach to the buoy a launch will attach a ship's line to one of the Terminal's floating mooring lines. This will be hove aboard and secured to the towing brackets, if the ship is so fitted, or otherwise secured by a ship's mooring wire and nylon stop previously passed aboard. The same operation will be repeated with the second mooring line.

The Mooring Master may require the vessel to unmoor at any time he deems it necessary for the safety of the vessel or mooring buoy or both, or infringement of the Terminal regulations.

HOSES: The Mooring master along with a ship's officer will direct the ship's crew in the raising, lowering, connecting and disconnecting the oil loading hoses as well as all other labour pertaining to the loading of crude. The Terminal will not provide any labour for work done aboard the vessel.

Vessels must be adequately equipped with boom, blocks, tackle, wire runners and sundry equipment on the port side to hoist the floating hoses from the sea to the loading position. (5 tons min. hoist size required.) Vessel's loading manifolds should be prepared for two 12-in. ASA 150-lb. flanged hose connections prior to vessel's arrival at Terminal. Where no crossover valves exist on loading manifolds it is recommended that loops between loading lines on the starboard side of these manifolds be fitted. 8-in. hose connections to be removed; also, if necessary, "Y" pieces removed so that max. flow through the 12-in. cargo hoses will not be reduced. To assist in vessel's turnaround, tankers should have all necessary booms and cargo gear rigged and ready before ship is boarded by Mooring Master.

Vessels which may consider the lifting capacity of their gear to be marginal should strengthen their gear accordingly. A common way to do so is to rig a second topping lift on the boom.

LOADING: Before the loading begins, the Master will ensure that all Terminal and Port Regulations pertaining to the readiness of the vessel have been complied with; that the vessel is manned and in all respects ready to receive crude, and that all precautions required by the circumstances have been taken.

All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with storage barge *Cinta Natomas* constantly via portable VHF Units. In case of temporary breakdown of the portable VHF circuit, contact may be continued on International Marine Channels if the vessel is so fitted.

Should communications with the *Cinta Natomas* fail, loading ceases. An emergency cessation of loading may be effected by a continuous sounding of the ship's whistle.

The max. loading rate will be 40,000 b.p.h. (5,300 long t.p.h.). Loading will commence with one pump; when the vessel advises that the cargo is flowing into the tanks, the loading rate will be increased until the desired rate has been reached.

Vessels shall not close down against the incoming oil flow. Vessels will be held liable for damages resulting from failure to observe this precaution.

The vessel must give 30 minutes notice to the *Cinta Natomas* before starting to "top-off", and shall advise if a decrease in loading rate is desired.

The vessel must give 15 minutes' notice to the *Cinta Natomas* prior to the completion of loading, at which time the *Cinta Natomas* may reduce to one pump.

On completion of loading, all pumps will be stopped, loading hoses disconnected, and blind flanges with gaskets installed on the loading hose before lowering over the side. There should be no leakage. All cargo tank openings and pressure vacuum relief valves must be closed immediately after ullages and samples have been taken.

All documentation will be completed as soon as possible after loading is completed.

If during loading it is revealed that oil is leaking from the tanker, so as to constitute a safety or pollution hazard, loading shall cease and the tanker may have to leave the Terminal limits at the sole discretion of the Mooring Master. Completion of loading will only be undertaken if repairs have been carried out to the tanker to the satisfaction of the Mooring Master. A tanker so rejected shall not later be accepted on a subsequent visit for loading until satisfactory evidence of repair is submitted duly certified by ABS, Lloyds or other recognised surveyors.

Notice must be given by the vessel to the Mooring Master 30 minutes before vessel completes deballasting. The Mooring Master will advise the Cinta Terminal.

BALLAST: It is responsibility of the ship's Master to see that no oil (crude, bunkers, diesel or bilge) or dirty ballast is pumped or spilled overboard from his ship while in the area. Drip pans should be used, especially when disconnecting hoses, in order to prevent spillage overboard.

Before loading commences all overside scuppers shall be made oiltight. At Cinta Terminal there are no slop tanks or facilities for receiving dirty ballast. Tankers must arrive with clean ballast. In the event a tanker does have dirty ballast it will not be allowed to be pumped overboard.

A vessel must have sufficient ballast for safe handling, having due regard to existing weather and sea conditions. Through careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own vessel, the ship's Master may come to the Terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, provided approval is first obtained from the Company Mooring Master and provided Government Petroleum Inspector agrees to do so.

Discharging ballast at night: When any vessel is discharging ballast in darkness, the sea around the area of discharge will be adequately lighted, so that any pollution will be readily noticeable.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No repairs are to be made while berthing or unberthing, or in the berth. All engines to be on 30 minutes standby and steam on deck at all times.

MEDICAL: At Cinta Terminal, medical and dental services are not available. In emergencies requiring hospitalisation, the patient will have to be flown by helicopter to Djakarta. All expenses will be charged to the ship owner.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beer, perfume, arms, ammunition and possibly other items will be locked up under customs' seal from time of arrival of ship at the Terminal until the time of leaving territorial waters.

Each person is allowed 20 cigarettes per day of stay or 3 grams of tobacco or cigars in lieu thereof. Each man is allowed one litre of beer or half litre of wine per day. Special allowances are made for the Master under special circumstances.

Indonesian Customs and Immigration Officials will board the vessel as soon as possible after arrival to give inward clearance and pratique service. Indonesian Government Regulations are strictly enforced.

Contraband: The attention of Masters is called to the strict enforcement of Indonesian Regulations against smuggling. Illegal possession or landing of such items as narcotics, liquor, cigarettes, ammunition, sheath knives and similar weapons or other articles of contraband is subject to severe penalty and may result in prolonged delay of the vessel concerned.

All precautions must be taken to prevent the violation of contraband laws.

Masters are requested to inform the ship's officers and crew of the foregoing regulations pertaining to contraband, shore liberty, etc., and to be assured that all personnel completely understand.

IDENTIFICATION CARDS: Visitors must obtain a Special Pass from Indonesian Government Officials located in the Terminal and from the Company's Mooring Masters. It is recommended that visitors be restricted to a minimum due to hazards involved.

TIME: Indonesian local time is GMT plus 7 hours.

SHORE LEAVE: Shore liberty will not be granted except in cases of extreme emergency. Crew members cannot pay off or leave vessel at Terminal.

GENERAL: Safety rules and regulations are strictly enforced. The safety requirements are based upon the provisions of the Code of Safe Practices currently accepted by the Oil and Tanker Industries.

Provisions, spare parts or stores of any sort shall not be loaded from or discharged into any craft while the tanker is in or near the berth.

When a Mooring Master and his launch crew are assigned to a ship on business, it is expected that the ship will supply them with meals at the same time and in the same manner as comparable with personnel of the ship. No special meals or special foods will be required. The Terminal will keep this item to a basic minimum. The

ship should also provide shelter and smoking facilities in the same manner as meals. All communictions between Terminal personnel assigned to a ship and ship's personnel should be through the Mooring Master.

AUTHORITY: Independent Indonesian American Petroleum Company, Djakarta.

DJAKARTA (Tandjong Priok): 06.10 S. 106.50 E. (See Plan)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Vaccination Certificates.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Other certificates and documents as required.

Ship's arrival and departure: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services. The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).

Before departure, port clearance is issued by the Harbour Master, after clearance has been obtained from Customs, the Port Health Service, and Immigration.

Ship's Certificate: The Ship's Certificate should be delivered to the Harbour Master through the Agent. This certificate will be returned to the Ship's Master prior to the ship's departure.

Ship's Manifest and Bill of Lading: The copy of the ship's manifest should be delivered to the Port Administrator through the Agent.

IMMIGRATION: Vessels arriving from abroad with passengers must hoist the N Flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: *(a)* disembarking. *(b)* transhipping. *(c)* through passengers.

No persons are allowed on board until the vessel has been examined and the N Flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.

PILOTAGE: Compulsory. Pilots will board the vessel at the Outer Anchorage, from 0800–1800 hrs.

The ship's Owner/Agent has to inform the Port Administration (the Pilotage Division) of the ship's arrival 24 hours in advance.

Walkie-talkie radio with a frequency of M.27 is used for communication between the pilot boats and the Pilot station.

ANCHORAGE: Anchorage for vessels waiting for the Pilot is outside the breakwater.

RESTRICTIONS: Max. draft is approximately 10 m.

MAX. SIZE:

Harbour	*Length* (m.)	*Draft* (m.)
1st	150	7
2nd	170	8
3rd	170	10
Oil	170	10
Coaster	60	4

HEALTH:

Quarantine: A vessel is in quarantine and must hoist the quarantine flag (Q, QL, QQ), when it is a vessel:

1. that comes directly from abroad (Q flag),
2. that comes from an infected Indonesian Port (Q flag),
3. that takes passengers or cargo over from vessels mentioned in items (1) and (2) (Q flag),
4. whose captain has declared that a quarantinable disease exists or is suspected on board (QL/QQ).
5. which the Port Medical Officer has declared infected or suspected with a quarantinable disease (QL/QQ).

The concerned vessel is free from quarantine measures when free pratique has been obtained. The free pratique becomes invalid when a vessel is in quarantine as stated above or a quarantinable disease occurs during the validity of free pratique.

The Port of Tunjung Priok is a 1st class Quarantine Port.

At the request of the ship's Owner/Agent, the Department of Health will provide "provisional pratique", for vessels calling directly from abroad to any Indonesian port which is not classified as a quarantine port, provided that health conditions on board comply with the required health conditions. This "provisional pratique" however does not relieve the vessel from quarantine measures, and it is not to be construed as "free pratique".

Accordingly vessels enjoying "provisional pratique" are still required to hoist the quarantine flag.

Vaccination/Immunization: Vaccination and Immunization against smallpox and cholera can be carried out by the Port Health Service.

BOARDING AREA: Harbour Pilots, Quarantine Officer and Immigration will board the vessel at the Outer roads.

RADIO: Coastal Radio Station Call sign PKI Class A1, A2, A3; call sign PKZ Class A3.

VHF:

Harbour Master	Channel 16
Pilot	Channel 12–14
Tugboat Operations	Channel 12
Port Operations	Channel 14
Public Service	Channel 16

TUGS: Tugs are operated by the State-owned P.N. Tunda Bara, Cable address: "Coaltug", which also handle the mooring facilities. Vessels over 80 m. in length have to use at least 1 tug. 10 tugs available from 135 h.p. to 1,500 h.p. 2 tugs are equipped for fire fighting.

BERTHING:

Wharves	*Length* (m.)	*Depth* (m.)
Coaster Harbour	663	3–4
1st Inner Harbour	1,855	5–8
2nd Inner Harbour	1,900	
for coal	150	7–9
for fertilizer	150	
for mineral oil	25	
3rd Inner Harbour	1,080	8–10.5
Mineral Oil Harbour		
Oil Jetty (3 at 25)	75	9–10
Bogasari (wheat)	140	9–10
Wooden	100	5–7

Buoys	*Number*	*Capacity* (tons)
West buoys	6	15,000
East buoys	10	5,000
1st Inner Harbour buoys	7	6,000
3rd Inner Harbour buoys	4	15,000
Nusantara buoys	2	5,000
Dredging Yard buoys	1	2,000

SPECIALISED CARGO-HANDLING FACILITIES: There are 2 transporters with grippers available at the coal wharf.

CRANES: *Mobile cranes:*

No.	*Capacity* (tons)
4	5
5	20
1	35
14	3–20
Shore cranes/Portal cranes:	
12	3
Floating cranes:	
1	15
1	60
1	25
1	200

STEVEDORES:

Working hours: The usual working hours at the harbour are:

Monday–Thursday	0800–1200 hrs.
	1300–1600 hrs.
Friday	0800–1100 hrs.
	1330–1600 hrs.
Saturday	0800–1200 hrs.
	1300–1400 hrs.

Overtime is allowed on request.

Shipmaster's Report: Cargo work continuous, 7 days a week. No work for 2 days at the end of Ramadan.

MEDICAL: First Aid at the scene of accident. Medical treatment or advice available on request to the Port Health Service. Hospitalisation available in general and private hospital in Jakarta.

FRESH WATER: Available by pipe-line or barge, rate 50/60 t.p.h. Barge capacity 60–350 tons.

FUEL: Available by pipe-line or barge, supplier is Pertamina.

REPAIRS: Dry-docking and repairs are carried out by the State-owned P.N. Dock.

Electronic Repair Shop: Repair of electronic navigational aids and radio can be carried out by experts.

Repair and Testing of Navigational Instruments: Carried out by experts of the Hidral (Hydrography of the Indonesian Navy) and those of the P.N. Pelni workshop. Compass can be adjusted by an expert of the above-mentioned Hidral. Testing and issuing of certificates for navigational lamps by the Pelni workshop.

DRY DOCKS: 3 floating docks, max. capacity 17,500 tons, and 7 slipways, max. capacity 3,275 tons.

GANGWAY/DECK WATCHMEN: Available if required.

CUSTOMS ALLOWANCES: Tobacco: Each crew member is allowed to carry 200 cigarettes or 50 cigars or 100 grams of tobacco ashore without paying import duty. Alcohol: There is no allowance for alcoholic drinks. Other commodities: Maximum value of US $100. Each crew member is allowed to bring personal goods in use up to maximum value of US $100.

REPATRIATION: A valid document is needed. A re-entry permit from the country concerned is sufficient, if there is no passport available.

AIRPORT: Kemayoran International Airport is approximately 8 km

from Tanjung Priok, and Halim International Airport is approximately 25 km. Kemayoran Airport phone: 47031.

TIME: The Port of Tanjung Priok is located in the zone of Western Indonesian Time, which is based on the time at the meridian of 105° East Longitude.

POLICE/AMBULANCE/FIRE: Fire 291399; Security 291691/291459; Ambulance 291045/290097.

CREW IDENTIFICATION CARD: Crew members having no passport are required to carry a Seamen Identification Card (S.I.C.).

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

AUTHORITY: Port Administrator.

AGENT: Head Office: P.N. Djakarta Lloyd, Djl. Hadji Agus Salim 28, Djakarta.

P.N. Djakarta Lloyd, Tandjung Priok Branch Office, Djl. Ambon 1, Port Tandjung Priok.

DUMAI: 01.41 N. 101.27 E. (See Plan)

DOCUMENTS:

Maritime International Declaration of Health.
Valid Deratisation or Deratisation Exemption Certificate.
12 Crew Lists.
12 Passenger Lists (if passengers carried).
Smallpox Vaccination Certificates for all crew members and passengers.
Certificates of inoculation against any communicable diseases.
Valid Passports and/or Seamen's Certificates for all crew members and passengers.
Quarantine Certificates if expired, can be renewed.
Harbour report/last port clearance.
Load Line, Ship's Registry, Safety Radio, Construction and Equipment Certificates.
For Customs: 1 Crew List, 4 copies Personal Effects List, 4 copies Stores List.

APPROACHES: The Dumai Port installations can be reached by deep draft vessels by proceeding from Malacca Strait into Bengkalis and following a buoyed channel on a Southerly course for a distance of 22 miles to the junction of the Rupat Strait. Vessels must make a turn of approximately 180 degrees to enter the Rupat Strait and thence Westerly for a distance of 33 miles to Dumai. The Bengkalis and Rupat Strait fairways have been wire-dragged clear to a depth of 24 m. and 18.3 m. LWS respectively.

PILOTAGE: Harbour pilotage is performed by Government Pilots. The Harbour Pilot will board a vessel at anchorage for berthing or immediately on arrival at Buoy No. 18 when berth is available.

Sea piloting for the Rupat and Bengkalis Straits is provided by the Department of Sea Communication.

Sea piloting for the Rupat Strait is compulsory. According to the Dumai Port Authority's letter dated June 25, 1974, there are 2 piloting areas for Sea Pilot.

Bengkalis Strait and Rupat Strait from fairway buoy or Eastern part of Morong Strait to Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.).

Rupat Strait and Bengkalis Strait from Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.) to Northern limit of Sungai Pakning Harbour Pilot Area. Subject to pilotage compulsory for the vessel capacity more than 300 cu.m. gross.

For arriving, vessel should call 6 hours prior CPI's Radio Telephone (VHF) on Channel 12 and 16 at fairway buoy as "request for Pilot" or hoist International Code Flag, painted white, to call "Pilot".

According to the Dumai Port Authority's memo dated May, 1972, effective on 1st June, 1972, all vessels proceeding to Dumai should hoist the International code flag H or PT when passing buoy No. 17 as "requesting for Pilot" and call CPI's Radio Telephone (VHF) on Channel 12. You will be informed whether or not Pilots are available, if not you may then proceed directly to Dumai Harbour anchorage area.

The practice of berthing and unberthing vessels utilising CPI mooring masters has been discontinued.

ANCHORAGE: The Dumai general anchorage area is North and West of oil wharves. Minimum depth of water in this area 43 ft.; 35 ft. shoal spot to East of general anchorage should be noticed. Holding ground in anchorages considered good, bottom clay. Area large with sufficient manoeuvring and swinging room for several vessels of size to be accommodated at oil wharves.

If vessels are not met by the Pilot's launch on arrival, or not instructed by the Dumai Port Control Radio to berth on arrival, it is suggested that they proceed to the recommended anchorage area.

MAX. SIZE: Length 1,263 ft., draft 57 ft.

ETA ADVICES:

1. Proceeding direct from ports other than Palembang and not stopping at Singapore en route:
   - *(a)* Radio 96 hour ETA to "Calpaking Dumai" (include operational data).
   - *(b)* If any time this estimated arrival time changes by 2 hours, send an amended ETA message immediately.
   - *(c)* 24 hours before arrival, *confirm* or *amend* the ETA message regardless of any change from the last advice.
2. Proceeding from Singapore:
   - *(a)* Prior to arrival at Singapore, radio 96 hour ETA Dumai include words "From Singapore" to "Calpaking Dumai" predicted on estimated time of stay at Singapore.
   - *(b)* At Singapore, when departure time from Singapore is known confirm or amend the ETA to "Calpaking Dumai" through your Singapore ship's Agent.
   - *(c)* Immediately upon departure from Singapore, and when able to use the vessel's radio legally, again *confirm* or *amend* the ETA to "Calpaking Dumai".
3. Proceeding from Palembang:
   - *(a)* When departing Dumai on voyages to Palembang and return, give the Dumai Agent a verbal estimate of arrival back at Dumai in each instance.
   - *(b)* Whether or not *(a)* is applicable, when time of departure from Palembang is known, cable an ETA message to "Calpaking Dumai" through your Palembang Agent.
   - *(c)* Immediately on departing Palembang, and when able to use the vessel's radio legally, *confirm* or *amend* this ETA to "Calpaking Dumai".

RESTRICTIONS: All vessels inbound to Dumai from the time abreast Raleigh Bank light buoy until anchoraged off Dumai Terminal must display the following recognition signals.

By day: The International Code Flag hoist "CAL" flown from a single hoist from the signal yard.

By night: A red light 6 ft. above a white light both visible all around the horizon at a distance of not less than 2 miles.

Vessels should be prepared to answer identification queries from Indonesian naval patrol crafts. The foregoing is subject to change.

For some years, the Rupat-Bengkalis Strait area has been designated a restricted Maritime Zone by decree of the Government of Indonesia. A partial exemption from the requirement to secure special Indonesian Consular Clearance before entering this zone has been granted by the Indonesian Navy to tank-vessels proceeding to Dumai from any port in the world except Singapore. Vessels require only normal clearances from their last port to obtain entry at Dumai. Vessels diverted at sea need only normal clearance from last port and the diversion cable.

RADIO: There is a Government coastal station at Dumai. Any message for Dumai Terminal should be sent through this radio station which operates as follows:

Name: Dumai Radio.
Call Letters: "PKP"

Time (GMT)	*Transmits*	*Listens on*
0000–0030	448 kc/s.	500 kc/s.
0400–0500	448 kc/s.	500 kc/s.
0800–0900	448 kc/s.	500 kc/s.
1200–1300	448 kc/s.	500 kc/s.
1300–1400	8726/AL kc/s.	8726 kc/s.
0030–0130	8726/AL kc/s.	8726 kc/s.
0230–0330	13101 kc/s.	13101 kc/s.
0630–0730	17184 kc/s.	17184 kc/s.
0130–0200	2182 kc/s.	3195 kc/s.

If contact cannot be made with Dumai Radio, then you should immediately contact Singapore Radio, Call Sign 9VG and forward your ETA message to "Amoseas Singapore RS-21349".

A C.P.I.-operated VHF station is maintained 24 hours a day, and is available for information concerning vessel's port activities. Channel 12 is utilised. Frequencies: 156.6.

Channel 16 is also utilised. Frequencies: 156.8.

HEALTH: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Dumai. These signals shall be displayed continuously until pratique is granted. These signals are: Sunrise to Sunset, Quarantine flag "Q". Sunset to Sunrise, Signal lights (red over white).

Quarantine Officer and Immigration Officer will come on board to prepare the clearance at anchorage, except when the vessel comes alongside on arrival by issuing berthing permit only (not free pratique).

TUGS: Mooring and unmooring assistance is provided by three 3,000 h.p. diesel electric tugs which are stationed in the immediate vicinity of the wharves. While rendering assistance the tug-boats are under order of the Pilot on duty.

BERTHING: Incoming ships are assigned in accordance with time of arrival, product to be loaded, size of vessels, and loaded draft.

Every effort will be made to berth vessels immediately upon arrival, and to this end Master should maintain radio contact with radio telephone (VHF) Channels 12 and 16.

At Dumai there are 6 wharves. 1 wharf is a Government-owned and operated cargo wharf which can also handle discharge of petroleum products. Another wharf is Pertamina, owned and operated for the sole use of its refinery. The other 4 wharves are C.P.I. owned and operated and referred to as Oil Wharf No. 1, Oil Wharf No. 2, Oil Wharf No. 3, and Oil Wharf No. 4. These C.P.I. wharves are utilised for loading of crude oil and can handle refinery product and caustic soda resin.

- *(a)* Oil Wharf No. 1, located in approx. position 01° 41′ 14″ N. 101° 28′ 07″ E. Design capacity 150,000 d.w.t. Length between outer dolphins 1,210 ft. Least depth at face of wharf 57 ft. (MLWS). In terms of vessel's size and design this would be an LOA of approx. 1,008 ft., and a draft of 57 ft. Orientation of the wharf parallels the current flow.
- *(b)* Oil Wharf No. 2, located in approx. position 01° 41′ 14″ N. 101° 27′ 52″ E. Design capacity 150,000 d.w.t. Length between outer dolphins 1,465 ft. 8 in. Least depth at face of wharf 58 ft. (MLWS). In terms of vessel's size and design this would be an LOA of approx. 1,263 ft., and a draft of 55 ft. Orientation of the wharf parallels the current flow.

(c) Oil Wharf No. 3, located in approx. position 01° 41′ 14″ N. 101° 27′ 42″ E. Design capacity 84,000 d.w.t. Length between outer dolphins 1,170 ft. Under favourable weather conditions capable of receiving vessels of 100,000 d.w.t. Least depth at wharf face 57 ft. (MLWS). In terms of vessel's size and design this would be an LOA of approx. 940 ft. and a draft of 54 ft. Orientation of the wharf parallels the current flow at 095–275 true.

(d) Oil Wharf No. 4, the former T-2 wharf, located between the Cargo Wharf and Oil Wharf No. 3. Wharf used mostly for handling domestic tankers. Basic design is for 55,000 d.w.t. In terms of vessel's size and design this would be an LOA of approx. 680 ft. and a draft of approx. 46 ft. Least depth of water at face is 51 ft. (MLWS). Overall length between mooring dolphins is 680 ft. Orientation of the wharf parallels the current flow.

(e) Government Cargo Wharf located in approx. position 01° 41′ 14″ N. 101° 27′ 04″ E. Design capacity 16,500 d.w.t. but able to handle 23,000 d.w.t. Length between outer dolphins 750 ft. Least depth at wharf face 34 ft. (MLWS). Orientation of the wharf parallels the current flow. Only mobile cranes with a maximum lifting capacity of five (5) tons are available. As no heavy lift floating crane or stationary crane is available, heavy lifts must be handled by ship's gear.

(f) Pertamina Refinery Wharf, located in approximate position 01° 41′ 12″ N. 101° 28′ 16″ E. Design capacities, Outer Berth 100,000 d.w.t., Inner Berth 10,000 d.w.t.

BALLAST: There are no shore facilities at Dumai for disposal of dirty ballast water. Vessels should arrive with sufficient clean ballast water to enable safe manoeuvring under prevailing weather conditions. All ballast water must be pumped overboard after arrival at berth, and prior to loading, unless "load on top" procedures apply. If, after arriving alongside, a vessel is found to have oily ballast water on board, such vessel will be sent to sea to accomplish the necessary tank cleaning. A new Notice of Readiness to load must then be tendered.

Effective First Quarter of 1977 (approx.) there will be shore facilities for the disposal of dirty ballast water.

Minimum draft schedules recommended for various tonnage tankers are as follows:

D.w.t. *(deadweight tons)*	*Minimum draft* *forward – aft*
(a) 12,000–22,000	12 ft. – 20 ft.
(b) 22,000–32,000	16 ft. – 24 ft.
(c) 32,000–45,000	18 ft. – 26 ft.
(d) 45,000–60,000	19 ft. – 27 ft.
(e) 60,000 and over	22 ft. – 28 ft.

CARGO: There are 2 types of cargo in Dumai at C.P.I. Terminal.

1. Sumatra Light Crude with API Gravity=35° approximate Pour Point ±100°F Solid Point ±95°F.
2. Duri Crude with API Gravity=22.0° approximate Pour Point ±40°F Solid Point ±35°F.

LOADING: The Master or his representative is required to hand to C.P.I. within normal business hours a written Notice of Readiness to load.

Wharf	*Size of arms*	*Number of arms*	*Size of flanges*	*Capacity b.p.h.*
Oil Wharf No. 1	12″	4	12″	60,000
Oil Wharf No. 2	16″–12″	3	12″	90,000
Oil Wharf No. 3	12″	4	12″	60,000
Oil Wharf No. 4	12″	2	12″	40,000

Oil Wharves 1, 2 and 3 use U.S. standard flanges, faced and drilled. These wharves have Chicksan loading arms while Oil Wharf No. 4 operates with hoses swung on board by the wharves' derricks.

Wharf crews and launch crews are on duty to handle loading arms and/or oil hoses and mooring lines on the wharf. Mooring lines on the vessel will not be handled by C.P.I. personnel. Rat-guards must be fitted on all mooring lines.

The required reducers to fit vessel's manifold must be connected and disconnected by ship's personnel.

Upon completion of loading, the vessel will be required to leave the berth immediately after disconnecting hoses and await clearance at the anchorage.

Notice must be given by the vessel to the Piermaster one half hour before the vessel completes deballasting.

Loading will commence under gravity or with 1 pump. When the vessel advises that the cargo is flowing into tanks, the loading rate will gradualllly be increased until the desired rate has been reached.

The vessel must give 30 minutes notice to the wharf before starting to "top-off", and shall advise if a decrease in loading rate is desired.

The vessel must give 15 minutes' notice to the wharf prior to completion of loading at which time the Piermaster may reduce to 1 pump.

Ship's valves shall not be closed against loading pump pressure.

On completion of loading, loading arms and/or cargo hoses must be drained and disconnected immediately.

All cargo tank openings and pressure vacuum relief valves must be closed immediately after ullages and samples have been taken.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: The port health doctor has only limited facilities for medical treatment. If the services of more complete and/or specialised medical assistance are needed or emergency cases arise on board tankers calling at Dumai, the port health doctor might refer such cases to CPI hospital facilities. However, Masters of all vessels bound for Dumai are requested, if possible, to call at Singapore for medical assistance.

REPAIRS: No repairs shall be carried out to the main propulsion machinery and/or essential auxiliaries while alongside. The vessel's main propulsion machinery shall be in readiness for instantaneous use on short notice. No repair facilities ashore.

CUSTOMS: Ships' bonded stores will be sealed by the Indonesian Customs officials on arrival and will remain sealed until the vessels leave Indonesian waters.

GANGWAY/DECK WATCHMEN: Strongly suggest that all Masters of tankers calling at Dumai maintain a close security watch while at anchor as well as when alongside the wharves. It is further recommended that on board the tankers unoccupied rooms should be securely locked and port holes closed before being vacated.

TIME: GMT plus 7 hours all year round.

REPATRIATION: Due to stringent Indonesia Government regulations, normally no passengers and/or crew members from any vessel are allowed to disembark for repatriation purposes.

SHORE LEAVE: Shore liberty may normally be granted to ship's officers and crew after clearance of the vessel by harbour authorities, and open for 24 hours. Recreational facilities are not available for seagoing personnel at present and few facilities exist in the village of Dumai. Personnel proceeding on shore liberty should be provided with ship's pass and advised that the CPI compound is out of bounds with the exception of the road from the wharves to the village road.

PROVISIONS: No facilities for supplying provisions, nor for handling ship's laundry.

CONSULS: At Dumai the Indonesian Government Port Authorities are located in the Government Building situated close to the Government Cargo Wharf.

There are no Consuls or other foreign Government Representatives located at Dumai, or in the immediate vicinity.

TELEPHONE: As soon as the vessel is berthed a ship-shore telephone connection will be provided.

Ships berthed at No. 1 oil wharf tel. 351; No. 2: 352; No. 3: 353; and No. 4: 354.

The loading master will provide a list of important numbers in Dumai.

WEATHER: *Tides and Currents:* The tide rise is approximately 8 ft. in the springs and approximately 5 ft. at neaps.

Max. tide currents: Flooding Easterly at 3 knots. Ebbing Westerly at 2 knots.

The general direction of the current is parallel to the faces of the wharves. There is no slack current period in the Rupat Strait during spring tides and only a very brief period of slack current during neap tides. The current reverses its direction almost immediately. Vessels will always be berthed stemming the current flow.

Winds: The N.E. monsoon is never very steady but is most constant in January when from 20 to 40 per cent of winds are N.E. In November and December N.W. winds are the most frequent. In February the most frequent winds are N.E. The S.W. monsoon begins in late May or early June. From June to September winds in the straits are mainly S.E. but not steady. At this season squalls known as "Sumatra's" occur off the coast; they are most frequent between 2200 and 0200 hrs.

Rain: The rainfall is heavy with yearly average from 80 to 100 inches. The wettest months are October to December or January. There are 2 comparatively dry seasons, February to March and June to August. The most intense rainfalls are in the afternoon but these heavy downpours are often short in duration. The duration of the rain is more evenly spread over 24 hours during the N.E. monsoon than during the rest of the year when rain most likely occurs in the evening and night.

Temperature: The average temperature is a little below 80°. The range in an average year is only 30°, between 65° and 95°. The daily range is from 15° to 20°. The humidity is high (70 to 90 per cent).

GENERAL: While alongside, vessels must have the eye of towing (fire) wires lowered to the water's edge from offshore bow and quarter for emergency use. The eye of the wire should be painted white.

AUTHORITY: Caltex Pacific Indonesia (C.P.I.).

AGENTS: C.P.I. will act as ship's Agents for vessels loading at C.P.I. facilities Dumai except for certain interinsular vessels. As mail service to and from Sumatra is relatively slow and subject to some frequent delays, ample time should be allowed in dispatching mail to vessel calling at ports in this area. The mail and cable addresses for C.P.I. are as follows:

Mail: P.T. Caltex Pacific Indonesia (for Dumai), Kebon Sirih 52, Djakarta, Indonesia (via mail).

Cable: Calpaking Dumai (via Radio Station "PKP").

Another Agent is Pertamina, a State enterprise, who usually handles matters pertaining to Pertamina owned or chartered tankers.

KIDJANG: 00.53 N. 104.37 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:

Harbour Report obtainable from the boarding Pilot, or from the Harbourmaster.

Pilot's Certificate.

Upon arrival vessels have to produce the following Certificates and

Documents, which will remain in the Harbourmaster's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Stores List.

RESTRICTIONS: Vessels with destination Kidjang should call at Tg. Pinang first for a Pilot or at Tg. Tilli at about 00° 48′ 12″ North and 104° 35′ 30″ East, slightly South of Tg. Pinang Roads. Fairway East of Tg. Tilli 5.6 m. and Kelong Strait 7.4 m. at LWS.

PILOTAGE: Compulsory Pilotage. Pilot stations are in Tg. Pinang Roads or off Tg Tilli. Vessels should arrive at Tg. Pinang preferably between 0600 and 1200 hrs. Application should be made 48 hours prior to ship's arrival via radio station addressed to the Agency, mentioning ship's ETA, Pilot station and draft.

MAX. SIZE: Vessel: Length max. 160 m. and draft max. 32 ft.

RADIO: Coastal Radio Station: Refer to Tg. Uban Radio, cables for TG. Pinang can be sent via Tg. Uban Radio call sign PKI.

HEALTH: A 3rd Class port and can only be called at after obtaining a free pratique at one of the 1st Class Ports.

Vessels arriving from abroad have to fly the "Q" Flag (Yellow Flag) until boarded and released by the Quarantine Officer. Masters have to fill in the Quarantine Form and signed by him and the Ship's Surgeon, if any, and produce the following:
Health Book or Bill of Health.
Deratisation (Exemption) Certificate.
Valid International Vaccination Certificates of Crew members and Passengers.
Crew and Passenger's Lists showing the validity dates of above Certificates.

During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.

TUGS: Tug assistance not available.

BERTHING: Vessels are moored alongside 2 jetties on dolphins, with 4 good manilla fore and 4 aft. At Springtide a Hercules wire is available. Shifting only during slack tide.

STEVEDORES: Working hours: Loading to be effected with customary quick dispatch on clear working days, whereby Sundays, Holidays, governmental, local holidays and Saturdays between 1200 and 2400 hrs. and Mondays between 0000 and 0800 hrs. are always excepted.

Overtime. At Master's request, work on Sunday, holidays, governmental, local holidays and Saturday between 1200 and 2400 hrs. and Mondays between 2400 and 0800 hrs. can usually be arranged.

Working capacity: Loading capacity by conveyor belt, 200–350 t.p.h.

FRESH WATER: Not available.

FUEL: Not available.

SHORE LEAVE: Crew members are not allowed to leave Kidjang and have to report back aboard at 2300 hrs. Identification cards must be carried along. It is prohibited to lower the boats with the purpose of visiting the other islands, fishing, etc.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp. 50 (50 Rupiahs only) ashore. It is recommended that Masters consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

AUTHORITY: Dept. of Sea Communications.

LABUANTRING BAY: 08.44 S. 116.04 E.
AMPENAN: 08.34 S. 116.04 E.

DOCUMENTS:
Health Certificate.
1 Vaccinations List (Smallpox and Yellow Fever, Cholera/Typhus).
9 Crew Lists.
7 Passenger Lists (landing/transit).
4 Lists of Personal Effects.
7 Ship's Store Lists.
2 Cargo Manifests (discharge/transit).
4 Dangerous Cargo Lists.
1 Stowage Plan; all to be signed by Ship's Master and/or Chief Officer.

PILOTAGE: Normally not provided. When Pilot required, vessel must request via Agent or via Ampenan Radio at least 24 hours before arrival. Pilot service will then be given by Harbour Master from Ampenan to Labuantring Bay.

ANCHORAGE: Overseas vessels not familiar enter Labuantring Bay, normally calling Ampenan awaiting particular information and/or Pilot to enter Labuantring Bay (outer buoy). Good holding ground in about 16 m. Vessels with a draft of more than 6 m. must keep clear from channel to inner harbour. Navigating in channel without Pilot may cause difficulties; channel equipped with buoys, depth approx. 7 m.

APPROACHES: When approaching Ampenan, harbour is marked by light tower. Excellent holding ground in about 16 m.

RESTRICTIONS: Vessel may enter Ampenan and Labuantring Bay (outer buoy) day and night. Vessel not visited by port authorities between 1800 hrs. to 0700 hrs. (local time), exceptional cases allowed. Vessels are not allowed enter into inner harbour (Labuantring Bay) after sunset.

BERTHING: Length of quay at Labuantring Bay approx. 40 m. Vessels with a length of less than 100 m. and a draft of less than 6 m. may berth safely. Berthing at Ampenan (anchorage) for all sizes of vessel.

WEATHER: November till April rainy season. Quite heavy winds and rain can affect cargo work.

HEALTH: Pratique granted by port doctor after boarding vessel. Vessels from an infected port have to hoist "Q" flag. If any suspected disease or fever on board, necessary inform Agent by cable or via radio station. Treatment of crew members for illnesses other than quarantinable diseases arranged by Government's practitioners through ship's Agent.

TUGS: 1 tugboat of 125 h.p. 2 motor launches only, for cargo handling purposes.

RADIO: Ampenan Radio. Call sign PKD 9. Freq. 500 kc/s. and 430 kc/s. Qtu: 0000z–0100, 0500z–0600: except Friday and Saturday: 0000z–0100z, 0900–1000z. Sunday and holiday closed.

MEDICAL: Cable or radio before arrival if medical assistance necessary on entry. Government's hospital facilities available. Some specialised surgery is not. Smallpox vaccination and Yellow Fever Certificates inspected on arrival.

TANKERS: Berthing at Ampenan.

FRESH WATER: Not available.

FUEL: Not available.

SHIP'S CERTIFICATES: Registered Tonnage Certificate, Load Line Certificate, Safety Radio Certificate, Safety Equipment Certificate, Light dues Receipt, Deratisation Certificate, Clearance from previous port, all to be shown on arrival.

IDENTIFICATION CARDS: All crew's passports must be certificated by Immigration Officer on arrival, whereafter to be used as shore passes.

GANGWAY/DECK WATCHMEN: Usually employed during loading and discharging operations.

CARGO GEAR: Wire and rope-slings, nets and net-slings, lighters all supplied by stevedores except rain-tents. No shore cranes available. Loading and discharging using ship's derricks.

STEVEDORES: Ordered by Agent. To enable Agent ordering necessary gangs, vessel must give accurate ETA at least 24 hours in advance. Working on Sunday and holidays allowed by agreement in exceptional cases.

OPENING/CLOSING HATCHES: Normally carried out by stevedores; ship's crew may if required by vessel to do so.

CUSTOMS ALLOWANCES: No restrictions. Custom's Officer supervises opening and resealing of bond.

CONSULS: None available locally.

AIRPORT: Served by regular airlines to Bali and Java.

TIME: GMT plus 8 hours.

HOLIDAYS: 1st January; Independence Day (17th August); Christian, Islamic and Balinese holidays as appointed by the Indonesian Government.

GENERAL: Vessels should not use ship's radio station. Harbour Police and Customs' guards on board during ship's stay in harbour.

SHORE LEAVE: Crew allowed ashore; passports required whilst ashore.

DELAYS: Normally minimal.

AGENTS: P.N. "Pelajaran Nasional Indonesia" (PELNI), 192 Djalan Pabean, Ampenan, Nusa Tenggara Barat, Indonesia. Tel. Ampenan 94-101-160. Cable: Pelni Ampenan.

MACASSAR: 5.05 S. 119.24 E.

DOCUMENTS:
Certificate of Registry.
Crew List.
Log Book.
Certificate of Seaworthiness.
Certificate of Plimsoll Mark.
Radio Certificate.
Health Certificate.
Equipment Certificate.
Shipping documents as follows:
Manifest of Cargo.
Bills of Loading.
Charter Party (if necessary).

PILOTAGE: Compulsory for all vessels, who have to use Port Administration's tug-boat. To order Pilot contact Macassar Radio, call sign PKF. Besides, Agent contacts the Harbour Master (Inspektur Keselamatan Pelajaran). Pilot boards vessel at anchorage, about 1 mile off shore. Exact area where vessel waits for Pilot or anchorage is between Lae-Lae Island and Samalona Island. Depth of anchorage is 3 fathoms.

RESTRICTIONS: Every ship needs permission from Dit. Dken. Perhubungan Laut (General Directorate of Sea Communication) to enter Macassar Harbour. When ship has no permission, Agent must apply to Port Authority and give details of ship, i.e. name of vessel, nationality, name of shipping enterprise, ETA, ETD, last port of call, next port of call, loading or discharging and aim of entry. No entry after 1800 hrs.

MAX. SIZE: No limit on length or breadth. The port consists of 2 bases; (1) Soekarno Base 1,360 m. long. (2) Hatta Base, 550 m. long. Draft at Soekarno Base 8 m. Draft at Hatta Base 9 m. Besides these bases there is a special pier for oil carriers outside main port area not far from Soekarno base.
HEALTH: Every vessel must have a certificate of health on board. When vessel enters a member of Port Health Authority boards. If there is any disease on board the vessel must go to quarantine area.
RADIO: Macassar Radio with call sign PKF.
TUGS: 1 tug *Anggada VII.* Used for vessels of 5,000 d.w.t. or over, and 4 tugs of smaller size.
STEVEDORES: Stevedoring by shipping enterprise or shipping enterprise agent. Capacity for discharging about 20 tons every gang/hour. No heavy cranes.
MEDICAL: Doctor and clinic available.
FRESH WATER: Ground-pipe with 10 t.p.h capacity. Barge with machinery pump 25 t.p.h. capacity.
FUEL: Fuel capacity in a day 400 tons.
DEVELOPMENTS: In near future, Macassar to have bonded warehouse.
GANGWAY/DECK WATCHMEN: There are no special deck watchmen services but can be arranged through Agent.
OPENING/CLOSING HATCHES: Work carried out by stevedores.
CUSTOMS ALLOWANCES: Tobacco – only sufficient for personal use. Wine and/or spirits – none permitted out of bond.
CARGO GEAR: Local regulations comply with Bureau of Classification with which vessel registered.
IDENTIFICATION CARDS: Identification cards needed by Immigration Office.
CONSULS: None available locally.
REPAIRS: Minor deck or engine repairs possible.
AIRPORT: Macassar Airport, called "Mandai Airport". Distance from town about 23 km. Services (1) Macassar – Kendari and (2) Djakarta – Surabaja – Macassar – Manado 3 times a week.
TIME: Middle Indonesian Time. GMT plus 8 hours.
HOLIDAYS: Every Sunday; New Year (1st January); Idul Adha (27th February); 1st Muharam 1389 H. (19th March); Isa Almasih (15th May); Maulud Muhammad (29th May); Sancta Maria (15th August); Proclamation Day (17th August); Mikradj Muhammad (9th October); Idul Firit (11th and 12th December); Christmas Day (25th December). Work can be arranged at overtime rate.
POLICE/FIRE/AMBULANCE: Police, Fire 4306; Ambulance 7227.
TELEPHONES: No arrangements exist for placing telephones on board.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Caused by rain; no mechanical equipment for cargo handling.
AUTHORITY: Departemen Perhubungan, Direktorat Djenderal Perhubungan Laut, Port Administrator Macassar.
AGENT: P. N. Djakarta Lloyd, Djl. Pankalan Bung Karno, Port Makassar.

MUNTOK: 02.04 S. 105.10 E.

DOCUMENTS:
Register Book.
Load-line Certificate.
Deratisation Certificate.
Harbour Report.
Radio Certificate.
Nationality Certificate.
Safety Equipment Certificate.
Port of Call List.
Last Port Clearance.
Light dues Payment.
Health Book.
6 copies Crew List.
3 copies Store List.
6 copies Passenger List (if any).
Navy Book.
Next Port Manifest from every port.
Vaccination Certificate.
All loading Custom paper from every port.

PILOTAGE: Not available.
ANCHORAGE: Safe anchorage in 10 m.
RESTRICTIONS: None.
MAX. SIZE: 2 m. draft at quay length 100 m., breadth 30 m.
RADIO: Not available.
TUGS: 7 tugboats available for communication between shore and ships, with capacity 340 h.p. each.
BERTHING: Anchorage 165° Tg. Kalian, 2 miles from shore. Only small vessels draft 7 ft. alongside quays.
STEVEDORES: Ordered by Agent.
MEDICAL: Facilities available.
TANKERS: None.
FRESH WATER/FUEL: None.
CUSTOMS ALLOWANCES: 200 cigarettes per man; 1 bottle per man.
IDENTIFICATION CARDS: Not necessary.
CONSULS/REPAIRS/DRY DOCKS: None.
AIRPORT: None.
HOLIDAYS: On Moslem holidays, no cargo work.
SHORE LEAVE: After permit by Chief of Police.
REGULATIONS: Customs, Harbour Master, Police Maritime, visit ship on arrival.
DELAYS: Delays due shortage lighter space.
AGENT: P. N. Djakarta Lloyd, Muntok Branch. Port Muntok.

PALEMBANG: 02.59 S. 104.45 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:
Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.
Pilot's Certificate.
Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
10 copies Crew List.
6 copies Passenger List.
2 copies Ship's Articles.
2 copies Store List.
Manifests.
Bills of Lading.
Maritime declaration to be completed by Master upon arrival, obtainable from boarding Quarantine officer, or via Agency.
ARRIVAL: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services.
Agent/Owners to advise Port Administration (Pilot Division) of vessels arrived 24 hours in advance.
PILOTAGE: Compulsory, consisting of Outer (River) and Harbour Pilot. Applications should be cabled to pilot vessel via Palembang Radio Station. Pilot vessel located at station position 02° 11′ 08″ S. 104° 57.03″ E.
The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).
Vessels arriving in afternoon and unwilling to navigate the river in darkness should not hoist the Pilot signal. The signal station is at the aforementioned pilot vessel, which answers the pilot signal as follows:
By night:
A flare-up light slightly over the railing, or waving with a white light means: Pilot will soon board the vessel. 1 red light vertical over a white light means: No Pilot available, vessel allowed to proceed until Pilot is met.
By day:
1. The international flag signal KYS from the International Code of Signal meaning: Pilot unable to attend due to motor defect or heavy seas. The Pilot can be picked up by ship's motor-boat.
2. The flag signal KKO meaning: No Pilot available, vessel allowed to proceed until Pilot is met.
Use of Harbour Pilot in Palembang is compulsory.
ANCHORAGE: *Musi Bar:* anchorage position 2° 08′ 30″ S. 104° 58′ 30″ E., in depth of 9 fathoms, used for topping up ocean tankers from river craft.
RESTRICTIONS: Palembang is 54 miles upstream. The main entrance is the river arm between Tg. Tjarat and Tg. Gedeh.
Depths from sea to Palembang:

Outer Bar	45 DM	at mean level
For incoming vessels Channel East of Pajung	42 DM	,, ,, ,,
For outgoing vessels Channel West of Pajung	45 DM	,, ,, ,,
Channel South of the light-buoy South of Pajung	48 DM	,, ,, ,,
Bar of Kupang	50 DM	,, ,, ,,
Bar downstream of Kampung-Peradjen (9 miles from Palembang)	50 DM	,, ,, ,,
Bar downstream of S. Lais (opposite Kundur)	50 DM	,, ,, ,,

Incoming ships have priority in passing the Outer Bar from 2 hours to 1 hour prior to HW. From 2 hours to 45 minutes prior to HW, outgoing ships have to wait between Tangjung Gedeh and Tandjung Tjarat.
Channel East of Pajung for incoming ships.
Channel West of Pajung for outgoing ships.
MAX. SIZE: Max. length 185 m. Max. draft 7.5 m.
RADIO: Call sign PKC.
Time operating (GMT). Frequency 500/448 Kc.; 0000/0100, 0400/0500, 0800/0900, 1200/1300 hrs. Frequency 8706 Kc.: A.I 0100/0200, 0500/0600, 0900/1000, 1300/1400 hrs. Frequency 8799, 2 Kc.: A.III 0200/0230, 0600/0630, 1000/1030 hrs.
VHF Channel 16, 20, 22, 26 and 28. Time operating (local time) 0700/1330, 1500/1730, 1900/2100 hrs.
VHF:

Harbour Master	Channel	14
Pilot	Channel	12
Tugboat Operations	Channel	Not known
Port Operations	Channel	12 – 16
Safety/Security	Channel	09 – 12 – 16

HEALTH: Vessels arriving from abroad have to apply well in advance from the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the

port. The provisional free pratique is only valid for this port, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.
TUGS: Vessels over 60 m. length are required to use at least 1 tug. 3 tugs available, 60 h.p., 650 h.p. and 1,100 h.p. 2 fire-fighting tugs at Pertamina, 750 and 850 h.p.
BERTHING: Anchorage in the vicinity of the quay, see chart for prohibited anchorage.

Harbour board quay: Berth length 450 m., depth alongside 5.5 m., depth front/middle 6/8 m.

Pusri wharf (fertiliser plant) Left Bank: Wharf No. 1, length 140 m. No. 2, 116 m. No. 3, 110 m. No. 4, 120 m. Depth alongside, 8 m.

Coal Wharf – Kertapati quay (Right Bank): Berth length 250 m., depth alongside 5.5 m. Situated 2.7 miles upstream from Harbour board quay.

Plaju and Sungai Gerong:

Wharf No.	*Length (m).*	*Depth (m).*
1	19	9
2	100	9
3	19	10
4	18	9
5	114	9
6	9	9
Lemabang	12	4.5
7	62	9
8	34	9
9	35	9
10	34	9
11	100	9
12	36	12

CRANES: *Palembang:* (Mobile cranes). 1 at 7 tons, capacity, 1 at 10 tons, 3 at 15 tons, 2 at 18 tons, 1 at 25 tons and 1 at 30 tons.

There are 17 fork-lift trucks available, capacity 2-15 tons.

Pusai: 2 mobile cranes, Capacity 5 & 7.5 tons 3 shore cranes, capacity 25,40 and 100 tons.

Plaju and Sungai Gerong: 3 Mobile cranes, capacity 15, 30 and 45 tons. 3 shore cranes, 1 at 15 tons and 2 at 5 tons.
MEDICAL: Hospital and First Aid available.
TANKERS: Pladju Terminal (Right Bank): Downstream of Harbour Board quay operated by P. N. Pertamina Unit II (Pladju) (ex-Shell).

Sungai Gerong Terminal (Right Bank): Downstream of Harbour Board quay, operated by P. N. Pertamina Unit II Sungai Gerong (ex-Stanvac).
DENSITY: 1000.
STEVEDORES: According to the requirements of the vessel concerned, labourers are requested from the U.K.A. (Port Labour Pool).

The usual working hours at the harbour are:

Monday – Thursday	0800 – 1200 hrs.
	1300 – 1600 hrs.
Friday	0800 – 1100 hrs.
	1300 – 1600 hrs.
Saturday	0800 – 1200
	1300 – 1400 hrs.

Overtime is allowed on request.
FRESH WATER: Piped water supply is at 15/20 t.p.h., and through water barges is at 50/60 t.p.h. Water barge capacity 100 tons.
FUEL: Obtainable from Pertamina provided payment is arranged in advance through their Head Office in Djakarta. Delivery by pipe-line or barge.
REPAIRS: Facilities available.
PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.
CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or 100 grams of tobacco. There is no alcohol allowance.
TIME: The Port is located in the zone of Western Indonesian Time, which is based on the time at the meridian of 104° 46′ 36″ East Longitude.
AIRPORT: Talang Betutu Airport is approximately 12 km. from the port.
POLICE/FIRE/AMBULANCE: Security – 22386, Fire 20451/22386, Ambulance 22531.
IDENTIFICATION CARDS: Crew members having no passport are required to carry a Seaman's Identification Card (S.I.C.). A re-entry into country if there is no S.I.C.
REPATRIATION: A valid document is needed. A re-entry permit from the country concerned is sufficient, if there is no passport available.
CUSTOMS/NAVY REG.: Upon vessels arrival/departure, boarding team will come on board consisting of:

2 Navy Officers.
2 Customs Officers.
2 Health Officers (in case vessels coming from infected ports or abroad).
2 Immigration Officers (in case vessels coming from abroad only).
3 Clerks from Agents.

Nobody allowed on board until this team declares the vessel cleared.
AUTHORITY: Port Administrator.
AGENT: P. N. Djakarta Lloyd, Palembang Branch Office, Djalan Pasar No. 158, 16 Ilir, Palembang.

PANARUKAN: 07.42 S. 113.56 E.

DOCUMENTS:

Port Clearance.
5 B/Model/Customs Clearances.
Customs papers.
Store List.
Crew List.
Passenger List.
Light Dues Certificate.
Seaman's Book and Health Certificate.
Ship's Registry.
Load Line Certificate.
Safety Radio Certificate.
Deratting Certificate.
Certificate of Nationality.
Tonnage Certificate.
Suez Canal Certificate.
Dispensation for Deck and Engineer Officers.

PILOTAGE: Nil.
ANCHORAGE: With bearings: Patjaron Hill, 275°; white light, 128°; red light, 187°. This anchorage leaves ship 300 m. from 20 m. line and over 500 m. from 7.5 m. patch.
RESTRICTIONS: No restrictions, vessel may enter and leave port at any time.
MAX. SIZE: In anchorage position draft permissible up to 15 m.
HEALTH: Pratique will be arranged by Sourabaya Agent and especially if the ship is just coming from a country suspected of special disease or fever, otherwise pratique is automatic and a quarantine doctor from Sourabaya boards. When vessel coming from domestic port, pratique is not necessary.
RADIO: *(a)* Coastal station: Call sign, PKD 2; medium wave, 500 kc/s.; WF, 474 kc/s.; working hours GMT, 2400–0100 hrs., 0400–0500 hrs. *(b)* Fixed station: Call sign, 8 AD 3; short wave, 8 Mc/s.; working hours GMT, 0100–0400 hrs., 0500–0600 hrs.
TUGS: Tugs join vessel at anchorage position. Vessel can use tug's lines and the Agent will arrange. Usual charge for use of tug's lines.
BERTHING: There are no berths alongside quays.
STEVEDORES: 24 hours before ETA advice needed to arrange gangs.
MEDICAL: Hospital facilities available, vaccination/fever Certificates for crew can be issued by authority.
FRESH WATER: No facilities.
FUEL: No facilities.
GANGWAY/DECK WATCHMEN: Available, consist of security team of P.N./Djakarta Lloyd Panarukan Branch.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: No restriction as long as goods remain on board ship.
CARGO GEAR: All gear supplied by stevedores except rain tent.
IDENTIFICATION CARDS: Needed if crew going ashore.
CONSULS: No local representation.
REPAIRS: No facilities.
TIME: GMT plus 7 hours.
HOLIDAYS: Sundays, 1st January; 17th February; 9th March; 7th May; 18th May; 15th August; 17th August; 28th September; 30th November; 1st December; 25th December. Work cannot be arranged on 30th November and 17th August but on other holidays cargo work can be arranged.
SHORE LEAVE: Can be arranged.
AGENT: P.N. Djakarta Lloyd, Tjabang Panarukan, Port Panarukan, Java, Indonesia. Tel. Panarukan 8-10-15; after office hours, Situbondo 29-47-159. Telegraphic address: Djakarta Lloyd, Panarukan.

PANDJANG (Teluk Betung): 05.27 S. 105.19 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:

Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.
Pilot's Certificate.

Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Ships Stores Lists.

PILOTAGE: Pilots are in Government Service. Pilot signals according the International Code of Signals. Pilots can be ordered direct by cable to the Harbour Master or via the ship's Agents.

Harbour Pilots available (2) from 0800 to 1400 hrs. daily, and till 1700 hrs. upon request. Rules are that incoming vessels are served first.
RESTRICTIONS: *Shipmaster's Report:* Approaching Pandjang

there are numerous small fishermen's houses built on bamboo sticks at sea, without lights, therefore approaching or sailing from Pandjang at night time should not be attempted.
HEALTH: A 3rd Class port and can only be called at after obtaining a free pratique at one of the 1st Class Ports.
Vessels arriving from aboard have to fly the "Q" Flag (Yellow flag) until boarded and released by the Quarantine Officer.
Masters have to fill in the Quarantine Form and signed by him and the ship's surgeon, if any, and produce the following:
Health Book or Bill of Health.
Deratisation (Exemption) Certificate.
Valid International Vaccination Certificates of Crew members and Passengers.
Crew and Passenger's Lists showing the validity dates of above Certificates.
During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.
RADIO: Coastal Radio Station, Pandjang Radio, call sign PKC 4, operating 24 hours. Radio telegraphy service.
VHF radio service operating on Channels 9 and/or 16, from Monday to Thursday, 0800 hrs. to 1330 hrs., local time. Friday, 0800 to 1100 hrs. local time. Saturday, 0800 to 1200 hrs. local time.
TUGS: There are 2 tug-boats. 1 owned by PT. Trikore Lloyd and the other owned by PN. KA. Both can be hired.
BERTHING: Quay on the South side with a length of 160 m. and a min. depth of 7.9 m. LW alongside.
Quay on the East side with a length of 110 m., and a min. depth of 6 m. LW alongside. This quay is used by PN. KA vessels that serve the Pandjang to Merak route as ferry-boat service.
Quay on the West side with a length of 75 m., and min. depth of 4.5 m. LW alongside.
Nagah Berlian Quay on the East side with a length of 20 m., and a min. depth of 3 m. LW.
Ocean vessels can be berthed at 3 buoys in the Inner Harbour.
LIGHTERAGE: 3 lighters of 100 tons capacity owned by the P.N. DKA can be hired.
STEVEDORES: 0800–1200 hrs. (1300 hrs. on Saturdays), 1300–1600 hrs. Overtime possible after granted by the Authorities concerned. *Gang's capacity* average 20 t.p.h.
FRESH WATER: Not available.
FUEL: Not available.
MEDICAL: There is a port doctor.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp.50. – (fifty Rupiahs only) ashore. It is recommended that Masters consult the Agent about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
AGENT: P. N. Djakarta Lloyd, Panjan Branch Office, Djl. Jos Sudarso Pelabuhan, Port Pandjang.

PANGKALAN SUSU: 04.07 N. 98.13 E.

PILOTAGE: Pilot obtainable.
TUGS: 2 tugs available, each of 400 h.p.
ANCHORAGE: Suitable anchorage for vessels up to 40,000 d.w.t. at outer bar.
BERTHING: Alongside wharf max. draft 5 m., overall length 95 m. Depth at low water spring 3 m.
TANKERS: Pertamina/Japanese Terminal: A single buoy mooring situated 17 km. offshore in 15 m. depth of water. Mooring designed for vessels up to 150,000 tons. Loading rate 3,000 t.p.h.

PANGKALBALAM: 02.06 S. 106.08 E.

DOCUMENTS:
Register Book.
Load Line Certificate.
Deratisation Certificate.
Harbour Report.
Radio Certificate.
Nationality Certificate.
Safety Equipment Certificate.
Port of Call List.
Last Port Clearance.
Light dues payment.
Health Book.
6 copies Crew List.
3 copies Store List.
6 copies Passenger List (if any).
Navy Book.
Next Port Manifest from every port.
All loading Custom paper from every port.
Vaccination Certificate.
PILOTAGE: Not available.
ANCHORAGE: Safe anchorage at green buoy, 10 m.
RESTRICTION: No night entry. No anchoring at Eliot (red buoy).
MAX. SIZE: Length 140 m., breadth 30 m. Only steamers drafted 8 ft. allowed to discharge alongside the quays.
RADIO: Port radio station. Working times 0800–1300 hrs. except Sunday. Call sign PKC7.
TUGS: 1 tugboat available owned by P.N. Djakarta Lloyd for communication between shore and ships. Capacity 120 h.p.
BERTHING: Near green buoy, and as near as possible to shore. Sounding 10 m. Only small vessels 8 ft. draft alongside quays.
STEVEDORES: Ordered by Agent.
MEDICAL: Facilities available.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle per man.
IDENTIFICATION CARDS: Not necessary.
CONSULS: None.
REPAIRS/DRY DOCKS: None.
REPATRIATION: Not available.
AIRPORT: Airport service by regular airlines 6 times per week.
HOLIDAYS: On Moslem holidays, no cargo work.
POLICE/AMBULANCE/FIRE: Police 386 SM; Ambulance 444 Otm; Fire 39 LB.
SHORE LEAVE: After permission by Chief of Immigration.
REGULATION: Every ship on arrival must be passed by; Customs, Harbour Master, Police Maritime, Health service and Chief Immigration.
DELAYS: Due shortage of lighter space.
AGENT: P.N. Djakarta Lloyd, Pangkalpinang Branch.

PULAU SAMBU: 01.09 N. 103.54 E.

DOCUMENTS: Upon arrival ships have to fill in the following forms:
Harbour Report (obtainable from the boarding Pilot).
Pilot Certificate.
Also required from the Masters are:
6 copies of Crew List.
1 copy Stores List.
1 copy Personal Effects List.
PILOTAGE: Pilots are in Government Service. Pilot signals according the International Code of Signals. Pilots can be ordered direct by cable to the Harbour Master or via the ship's Agent. Pilot boards in position 1° 10′ 38″ N., 103° 52′ 12″ E.
RADIO: Vessels calling at Pulau Sambu for bunkers should communicate with PKC 2 Pladju Radio or Tunasix Singapore, or direct with Sambu Radio PKJ 51 (A3 Radio Telephone) and VHF Channel 19.
HEALTH: Vessels arriving from abroad have to fly the "Q" Flag (yellow flag) until boarded and released by the Quarantine Officer. Masters have to fill in the Quarantine Form and signed by him and the ship's surgeon, if any, and produce the following:
Health Book or Bill of Health.
Deratisation (Exemption) Certificate.
Valid International Vaccination Certificates of Crew members and Passengers.
Crew and Passenger's Lists showing the validity dates of above Certificates.
During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.
TUGS: Available.
BERTHING: Pulau Sambu has an excellent location 8 miles South of Singapore and approximately 3 miles from the International waterway. It has 2 deep water jetties with a max. depth of 36 ft., a max. length of 440 ft., and the length of the navigable channel is 1,500 ft.
FUEL: Ideally, it is necessary to advise suppliers of bunkers required at least 15 days before the ETA of the vessel. The authorities at Pulau Sambu also require the vessel to contact them 24 hours prior to their ETA.
Bunkers available: Fuel Oil, 1000 seconds, and MDO.
CUSTOMS: Masters have to declare all local currency on board. It is strictly prohibited to take local currency ashore. No limitation for foreign currency.
Master should consult the Agent about prevailing Customs regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and fines.
AUTHORITY: Department of Sea Communications.

SABANG: 05.50 N. 95.20 E.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Health Book or Bill of Health and vaccination certificates.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists with vaccination dates.
Ship's Articles.
Stores List.
Passport or seaman's card remain in Immigration office until cleared and the crew to use shore pass to go on shore, issued by the Immigration.
PILOTAGE: *Approach:*
Vessel should steer on the light of Klah Island and keep at least 1 mile offshore, especially of Ujung Masam owing to an inward drift,

until the bay is well open. When entering the bay, the light-buoy South of Ujung Lho Me should be kept on port side.

The Signal Station at Peunimpun reports day and night the arrival of ships, by night an unofficial white light, showing all around is shown, visible at a distance of 12 miles.

Signals by day with flags according the International Code of Signals and by night by signal lamp.

HEALTH: Vessels arriving from abroad direct have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the Port. The provisional free pratique is only valid for this Port, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

RADIO: Sabang Radio. Call sign: PKA. Frequency: 500 kc/s./438 kc/s. Time: 0100–0200, 0400–0500, 0900–1000 GMT. 8473 kc/s./8686 kc/s. Time: 0200–0230, 1000–1030 GMT. 17184.5 kc/s. Time: 0230–0300, 1030–1100 GMT. VHF – Available. Power – 1 KW.

TUGS: A small tug available for mooring assistance, subject advance notice.

BERTHING: The usual anchorage in the inner roads is the North side of the bay, vessels can approach shore until in 32 and 29 m. depth. There is good holding ground. During S.W. or S.S.W. squalls in the West monsoon vessels have to be kept free from the quays by means of the mooring buoys moored off the berths.

Western coal wharf, usable berth length 140 m. with depths alongside of 7 m. at LWS.

Eastern coal wharf: usable berth length 150 m. depths 6.8 m. at LWS.

Commercial wharf, usable berth length 150 m. depths 8.0 m. at LWS (length: 220).

At the head of the oil jetty there is a depth of 10 m. at LWS.

FRESH WATER: Available, rate 30 t.p.h. with one hose. Usual to use 3 hoses. Water can be pumped faster if additional water pump used.

FUEL: Available from Pertamina, Jakarta if permit obtained.

REPAIRS: Minor repairs can be carried out at the West end of the Coal Wharf at the repair shop and electrical power station.

CUSTOMS: It is recommended that Masters consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

AIRPORT: Two flights a week, 5 minutes drive from the Harbour.

AUTHORITY: Department of Sea Communication.

SANTAN TERMINAL (Attaka): 00.07 S. 117.32 E.

SHIPMASTER'S REPORT **(See Plan)**

Situated about 80 miles North of Balikpapan on the East coast of Borneo, in 00.07 S. 117.28 E., the only chart available BA2636 is of too small a scale to advise safe first time entry in darkness. So, after a number of unsuccessful attempts to contact Santan Terminal for instructions – only the latter portion of his transmissions were being received, and very underpowered, it was decided to await daylight, cruising on 118.00 Meridian.

At 0600 hrs. vessel was again in the vicinity of Attaka Buoy, and Pilot contacted by VHF 16. He instructed us to proceed 270° T and he would meet us, East of SBM. The SBM is located about 4.5 miles offshore, marked by a QK.FL.W. light, vis. 6 miles, and is impossible to distinguish from Attaka Buoy, SBM is in 00.07° S., 117° 32.5′ E.

The best approach is to reach a point 4 miles North of Attaka Buoy which has a Ra.Refl. and was identified at just under 12 miles. From thence, subject to the Master's assessment of the situation, and assuming possession of a copy of the Chartlet, to proceed inward on 257° T, which will take him along the Approach Channel. But he should be prepared for quite strong set to North or South – this being my experience, both inward and outward. Pilot states that up to 125,000 d.w.t. can be handled. Originally, the channel had 4 buoys, marking the South side of the channel, but the outer 2 have been withdrawn. Channel has been swept and min. depth shown is 50 m. Each buoy has a Ra.Refl. and with 3.5 mile spacing, are easy to track on radar and visually, once their existence is known, from the Chartlet.

An anchorage area exists between 0.5 and 2 miles East of the SBM, bounded by 3 buoys to West side and 1 to South. These mark Coral Shoals. The Pilot said it was acceptable to come straight in from Attaka Buoy, in ballast, but loaded vessels must stay in Swept Channel, as the possibility of isolated Coral Heads exists, and the area South of the channel has not been fully swept.

A mooring/hose party boards with the Pilot, and takes care of these duties, the vessel only being required to provide an officer and 2 winchmen on the foc's'le and an officer and winchman for connecting the hoses (2×16 in.). A ship's mooring line is lowered to the launch to pick up the port SBM polypropylene line, this finally brings up a chain (approx. 8 in. dia. link). A special very flexible wire, provided by shore, is secured round both Port and Starboard forward bitts on foc's'le head, with an eye at each end projecting forward. The mooring chain is then shackled to this. A stout messenger is acceptable for picking up the starboard mooring, but it is advisable to have a second mooring line available on deck in our opinion. The chain is then shackled to the South eye of the shore wire, which is around the bitts. There is no provision for quick release gear, so letting go in an emergency, e.g. wind, would not be easy.

Hoses are 16 in., but fitted with 12 in. flanges (not reducers) and are bolted to manifold, again no quick release provided. Pilots' estimate of weight of each hose is 7.5 tons. Hoses are hung off on chains passed round manifold supports, instead of cruciform bollards – apparently because of the length of chain used. Hose/mooring party work well and safely.

EDP is not available, and vessel had to lie awaiting papers after leaving SBM for about 40 minutes, after which passage outward along the channel was without problem, with adequate water depths all the way.

Radio messages are sent via Balikpapan PNK2 to Petroleum Balikpapan, but appears to be on only 2 hours a day. But Pilot said they had not received our ETA's, but said this was quite normal. Agents were Pertaminaship DJAKARTA. No relief facilities, stores, water or bunkers available, and mail both in and out not advised, due uncertain delivery.

SEMARANG: 07.01 S. 110.27 E.

DOCUMENTS:

Crew Lists.
Passenger Lists (if any passengers to be disembarked).
Customs Documents.
Health Clearance from last port of call.
Harbour Report forms supplied by Harbour Master.

PILOTAGE: Ships with deadweight of more than 900 tons and with draft of more than 3.5 m. must anchor in roads. To enter the Harbour, Pilot required. Pilot can be applied for by raising "G" flag while ship is anchoring/arriving.

ANCHORAGE: Anchorage 3 nautical miles from coast, where depth 9 m. For smaller ships safe anchorages 1,900 m. from pier, where depth 5–7 m.

HEALTH: Vessels arriving must hoist "Q" flag. Work can only begin after inspection of security team boarding vessel upon arrival during working hours.

RADIO: Name, Semarang Radio. Call sign, PKR.

TUGS: Normally tugs join vessel in roads.

BERTHING: Ships anchoring in roads can anchor any time of day. For berthing alongside quays ships with a draft max. 3.6 m. require Pilot. Entering port guided by a pilot vessel.

STEVEDORES: Necessary to inform Agent exact time of arrival. Labour gangs to be arranged 1 day before. Also details of cargo to be discharged needed to arrange stevedoring materials, especially for ships anchoring in roads.

MEDICAL: Medical assistance can be given upon ship's arrival. First aid can be given by harbour doctor in harbour area. Serious cases taken to hospitals in town. 4 hospitals available. Port Health Officer can issue vaccination/fever Certificates if required.

FRESH WATER: Can be supplied by 100 ton barge once every 2 days. Suggest take on water in Djakarta or Sourabaja.

GANGWAY/DECK WATCHMEN: No gangway/deck watchmen needed.

OPENING/CLOSING HATCHES: Opening and closing hatches done by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes or equivalent in tobacco permitted for each crew member to hold out of bond. Wine and/or spirits, maximum value of U.S. $10.

IDENTIFICATION CARDS: Needed.

CONSULS: No local representation.

REPAIRS: Minor repairs only. Small dock only for repairing vessels no longer than 36 m.

REPATRIATION: Repatriation of crew members arranged by Agents by contacting Immigration Officer for permits concerned.

AIRPORT: 5 mins. drive from harbour. Domestic flights only.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year. (1st January); Independence Day (17th August); Id el Fitr; Christmas Day (25th December).

POLICE/AMBULANCE: Semarang 245 or 726.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore.

DELAYS: Normally the speed of loading of bulk cargo is 20–25 tons 1 gang/hours. Delays by bad weather during December, January and February, where it is impossible to come out of the inner port to ships anchoring on the roads.

AUTHORITY: Administrator Pelabuhan Semarang.

AGENT: P. N. Djakarta Lloyd, Djl. Mpu Tantular No. 23, Port Semarang.

SORONG (Kasim Terminal): 01.18 S. 131.01 E.

(See Plan)

SHIPMASTER'S REPORT:

LOCATION: The terminal is located on the Island of Jef.

DOCUMENTS:

Certificate of Register.
Load Line Certificate.
Safety Equipment.
Safety Construction Certificate.
Radio Certificate.
Derating Certificate.
6 Crew Lists.
6 Vaccination Lists.
2 Crew Declaration.
2 Stores Lists.

PILOTAGE: Not compulsory. Pilot boards in-bound vessels in position 00° 53′ S. 131° 10′ E. Vessels berth and unberth at any stage of the tide during the day.

Accommodation ladder not required; pilot ladder is sufficient. Also see "Anchorage".

ANCHORAGES: Recommended anchorage area is 4.5 miles West of Sorong in position 00° 53′ S. 131° 10′ E. Under no circumstances should the vessel enter the restricted area around the structure without the Mooring Master aboard.

Any vessel arriving in the anchorage area after 1600 hours local time may have to wait in the anchorage area until first light the next morning to transit the Sele Strait to the terminal.

On arrival at anchorage contact "Sorong Control" on VHF Channel 16.

RESTRICTIONS:

	Controlling depth (MLW)	*Mean tidal range*	*Velocity of current*	*Nature of bottom*
Entrance:	51 ft.	Approx. 5ft.	Max. 5 kt.	Sand, mud
Channel:	51 ft.	,,	,,	Sand, rock, coral
Anchorage:	120 ft.	,,	,,	Rock, sand
Berth:	60 ft.	,,	,,	Sand, rock, coral

MAX. SIZE: The channel is swept to a depth of 57 ft. Vessels max. draft is 51 ft. Also see "Berthing".

PRATIQUE: Available night and day Customs and Immigration board on arrival.

RADIO: *Advice for arrival:* 72 hours prior to arrival at Sorong vessels should advise the Company of their estimated time of arrival by cable sent via "Pertaminas Coastal Radio" Station at Jakarta or Government Radio Station at Sorong. They should also confirm or amend them when they are 48 hours and again 24 hours, distant from Sorong.

Cable address: Pertamina, Unit 5, Sorong.
Cable address: Pertaminas – Jakarta.
Name of the station: Jakarta Radio. Call signal: PKI-2.

Frequency	*Class*	*Power*	*Nature*	*Service (hrs.)* (GMT)
452	kc/s. A1	1 kW	CR	0000–0200—0400–0600
				0800–1000—1200–1400
8,626	kc/s. A1	1 kW	CR	0200–0300—0400–0500
				0700–0800—1030–1200
				1400–1500—1800–2000
				2200–2300
12,980	kc/s. A1	1 kW	CR	0100–0200—0500–0600
				0900–1030—1200–1300
				1500–1600—1700–1800
				2000–2100—2300–2400

Sorong Radio Station: Call signal: PKY–41

Frequency	*Class*	*Service*
6518.6 kc/s.	SSB	H.24
6518.6 kc/s.	SSB	H.24
8755 kc/s.	AM	0000–0100
8730 kc/s.	AM	0200–0300

The following information should be included in the cable:

(1) Name of vessel and radio call signal.
(2) ETA in GMT and date (local time GMT plus 9 hours).
(3) Cargo requirements.
(4) Deballasting time.
(5) Maximum loading rate.
(6) If there is any sickness on board or clean bill of health.
(7) Flange dimension of vessel's manifold connection.

TUGS: Depending on conditions up to 4 tugs of various h.p.

BERTHING: Berthing is restricted to daylight hours until light-buoys arrive. It is not unusual to undock with a strong stern tide running.

Kasim terminal is owned by Petromer Trend. Maximum size of vessel at the berth is, length 1,000 ft., beam 150 ft., and draft 51 ft. Depth of water 60 ft. (LW).

The berth is a standard type of tanker berth with 4 breasting dolphins and a loading platform set back inside the line of breasting dolphins. 4 mooring dolphins are set at intervals along the length of the berth and are fitted with quick release hooks and electric winches to handle light rope messengers.

Loading is through two 16 in. Chiksen loading arms and vessels with non-standard manifolds must provide their own reducers.

Loading arms are connected and disconnected by terminal staff.

The Kasim Marine Office is situated ashore level with mooring dolphin No. 2. A Mooring Master remains on board throughout the vessels stay and is in radio contact with the tank farm, pump station and Marine Office.

MEDICAL: Doctor available.

FRESH WATER: Available. Limited quantity in emergency.

FUEL: Not available.

REPAIRS: Can be undertaken at Sorong but not at Kasim Terminal.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits.

REPATRIATION: Possible in an emergency.

TIME: GMT plus 9 hours.

SHORE LEAVE: No shore leave.

GENERAL: Before sailing it is necessary that Sorong Harbour Master is aboard. No stores but clinic available.

During daylight hours Indonesian flag must be flown.

AGENT: 2 to 4 weeks before arrival, vessels must appoint as general Agent Pertaminaship, Jakarta 3234 Yos-Sudarso, P.O. Box 327, Tanjung Priok, Jakarta, Indonesia.

Telex JKT 2885, Answerback: Pertamina. Tel. 290 312 Ext. 217.

SOURABAJA (Tandjong Perak): 07.12 S. 112.44 E. (See Plan)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's List.
Ship's Articles. 2 Stores Lists.

PILOTAGE: Pilots are in Government service. Pilot signals according to International Code of Signals. Pilots have to be ordered by Agent 24 hours before arrival and 6 hours before departure.

Compulsory Pilotage, consisting of sea and harbour pilotage.

Western Channel: The sea Pilot will board the vessel at the entrance of the Western Channel from pilot launch stationed at Karang Jamuang position 06° 55′ 43″ S. 112° 43′ 46″ E. Application for Pilots can be cabled via above radio station and must be received at least 24 hours prior to the ship's arrival at the boarding area, by the Harbour Master of Tg. Perak. Upon arrival at the Pilot station by day, ships should hoist the International Code Flag "G" and the Ship's International Call Sign. Pilot station on VHF Channel 12, from 0600 hrs. – 0000 hrs. Pilot boat on VHF 12, 14 and 16. The following local signals regarding Pilots should be observed if shown by the pilot vessel:

(a) By night: a flare-up light (white) or waving a white light above the railing means: Pilot will soon board your vessel.

(b) By day: the First Substitute over the Code Flag "S" means: no Pilot available, vessel allowed to proceed until she meets the Pilot. By night: a red light over a white light.

(c) By day: 2 black cones 1 vertical over the other points downwards or by night: 2 green lights 1 over the other means: no Pilots are available for ships of less than 10,000 cu.m. gross. If this signal is made by the Pilot, vessels do not have to show the pilot signals.

(d) By day: the International Signal GFM or by night: a green light over a white light means: Pilot will board your vessel by row-boat as no motor-boat is available.

Eastern Channel: No pilot vessels. Pilots will board the vessel at the entrance by means of a pilot barge dispatched from Tg. Perak Pilot station at the Harbour Master's office.

Sea Pilot will take the vessel up to the Inner Roads, where the Harbour Pilot takes over.

ANCHORAGE: Waiting anchorage for Pilot within: 06° 51′ S. 112° 45′ E.; 06° 51′ S. 112° 47′ E.; 06° 52′S. 112° 47′ E.; 06° 52.5′ S. 112° 45′ E. Depth 22 m. at LWS.

RESTRICTIONS: There are 2 entrances: Western and Eastern Channels.

Western Channel: Used for deep-drawing vessels with depth of 9.0 m. at LWS. Distance to Tg. Perak about 25 miles.

Eastern Channel: Least bar depths through this channel is 4.0 m. at LWS. Distance to Tg. Perak is about 16 miles.

Boarding Area: Harbour Pilots, Quarantine Officer and Immigration will board the vessel at the Inner Roads (anchorage).

IMMIGRATION: (Department of Defence and National Security). Vessels arriving from abroad with passengers must hoist the "N" Flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: *(a)* disembarking. *(b)* transhipping. *(c)* through passengers.

No persons are allowed on board until the vessel has been examined and the "N" Flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.

RADIO: Coastal Radio Station call sign PKD. Classes: A1 Frequency 430, 550, 8730, A2 Frequency 430, 500, A3 Frequency 8754, 4.

Pilot station Karang Djamuang is also reachable through radio call sign PKW: frequency 500 kHz. This station can also be contacted by VHF Channels 12, 16.

TUGS: For poor steering vessels and those with deep drafts, tugs assistance is indispensable from light buoy No. 5 till light buoy No. 4 is passed.

Tug-boat assistance is handled by Port Administrator's tugs, consisting of 2 tugs of 800 h.p. each.

Tugs equipped with VHF Channels 12, 14 and 16.

BERTHING: The total length of effective quay in Tanjung Perak Port is 4620 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	900 m.	8.6 m.
Jamrud Selatan	800 m.	7.9 m.
Jamrud Barat	210 m.	8.2 m.
Berlian Barat	750 m.	7.3 m.
Berlian Timur	780 m.	8.4 m.
Berlian Utara	140 m.	7.5 m.
Nilam Timur	900 m.	8.2 m.
Perak	140 m.	8.2 m.

Tanker Terminal:
Government Petroleum Pier Depth alongside at LWS is 90 dm.
Semampir East ,, 120 dm.
Semampir West ,, 100 dm.
Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.
CRANES: 1 floating crane, capacity 50 tons. 5 electric cranes of 3 tons capacity and 3 electric cranes of 5 tons capacity. 2 mobile cranes of 3 tons capacity. One gantry crane of 5 ton capacity, 2 tractor cranes of 2 tons capacity.
STEVEDORES: Working hours: Monday–Thursday 0700–1200; 1300–1500 hrs. Friday 0700–1100; 1300–1500 hrs. Saturday 0700–1200 hrs. Overtime: Monday–Friday 1500–1700 hrs. Sundays, holidays 0700–1200; 1300–1500 hrs. Night work allowed after permission from the Port Authority.
Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang
MEDICAL: Hospital and Port Health Centre.
FRESH WATER: Supply is handled by the Harbour Board to the berths and by 3 water barges. Present capacity about 875 tons per day for the whole harbour. Priority is for Passengers vessels and application required 48 hours prior to ship's arrival.
FUEL: Fuel can be obtained via pipe-lines to all berths.
REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.
Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.
CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium. Australia, India, Pakistan, Philippines, France and Netherlands.
PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp.50.– (fifty Rupiahs only) ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
AUTHORITY: Port Administration.
AGENT: P. T. Jakarta Lloyd, Sourabaja Branch Office, Djl. Pahlawan 26-28, Port Sourabaja.

TANDJONG LEPEE: 04.14 S. 121.32 E.

SHIPMASTER'S REPORT:
Tandjong Lepee is only an anchorage port, being a convenient outlet for the shipping of Nickel Ore in bulk, the operation being based on Pomalaa, about 5 miles away, where the Mining Company plant etc. is situated.
CHARTS: B.A. Chart No. 3616 is quite inadequate for approaching either Pomalaa or TG. Lepee, Japanese Chart No. 903 is better, while Netherlands Chart No. 152 is the best.
DOCUMENTS:
6 Crew Lists.
4 Vaccination Lists.
2 Customs Declaration of Crew Effects.
2 Bonded Stores Lists.
1 List of Favour Parcels (including a Nil declaration).
Last Port Clearance and Derat. Certificate to be produced together with usual Safety, Loadline Certificates, etc. Port Health Doctor brings Health Declaration Form on arrival. 'Q' Flag must be flown until pratique granted.
PILOTAGE: No Pilots available, a small tug meets the vessel in a position about 1.5 miles West of Tandjong Pakar, in approx. Lat 4° 14.5′ S., Long. 121° 30′ E. The Agent and officials board from the tug (accommodation ladder only) and the tug then leads the vessel into the anchorage.
From the above rendezvous position, a course of 055° for 1.5 miles will lead between 2 beacons marking reefs N.W. of Tg. Pakar. Right ahead on this course will be sighted another beacon to the North of Tg. Pakar, when this beacon is about 9 cables off, course should be altered to 090°, and about 8 cables from here should then bring the vessel to the anchorage position, half-way between 2 beacons approximately 6 cables apart.
Beacons are only thin posts about 2 m. high with small top marks similar in appearance to a 10 litre paint-can painted white, they are quite difficult to pick up under the best of conditions. Would not recommend making an approach at early morning if sun is shining, once the sun is well up the reefs themselves show fairly well, especially at Low Water. There are no navigational lights in this area, beacons do show up on radar at short range, but due to the possibility of local fishing boats being present, too much reliance should not be placed on radar detection of beacons for night navigation.
RADIO: Macasser Radio (Unjung Pandang). The Mining Company have telex link with Djakarta. No VHF communication here.
TUGS: One tug of 1,800 h.p. mainly used for towing barges, can be used to push vessel round to head out on sailing if necessary. A second similar sized tug could be made available by prior arrangement, and if not already engaged on other work up the coast.
MEDICAL: There is a hospital at Pomalaa, which is reputed to be well equipped.
STEVEDORING: Mining Company supply competent crane drivers to operate ships' cranes and grabs, to load Nickel ore in bulk from barges. There are 12× 80 ton barges, 1× 200 ton flat top barge and 1× 300 ton coaster available, this 'fleet' is divided according to requirements between a vessel working at Pomalaa and one working at Tandjong Lepee. At Tg. Lepee there is a barge loading conveyor capable of handling 4,500 tonnes per 24 hours. A similar loader exists at Pomalaa, and if there is no ship at Pomalaa, this is also used to feed cargo to Tandjong Lepee.
Stowage Factor of the Ore is declared as 0.7 cu.m./tonne (approx. 25 cu.ft./ton) but during a dry spell stowed at about 30 cu.ft./ton with an angle of repose over 45° and became very compacted, even reluctant to fall out of a wide open grab. The ore has mainly the appearance of coarse soil with a few stones and small rocks mixed in.
FRESH WATER: Can be supplied by barge in 40 ton tanks, but ship must provide pumping facility.
COMMUNICATIONS: 2 flights daily by Mining Company aircraft between Pomalaa and Macasser. Repatriation can be arranged in emergency.
SHORE LEAVE: Permitted, official shore passes provided, which must be returned prior to departure.
AGENTS: P.T. Aneka Tambang Unit Pertambangan Nickel. Cables:— Nickel Unjungpandang (Macasser) or:— Aneka Tambang Jakarta.

TANDJUNG UBAN: 01.03 N. 104.13 E.

P.T. Stanvac Indonesia Oil Terminal.
DOCUMENTS:
11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.
PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.
ANCHORAGES: 0.5–0.75 miles opposite oil jetties.

MAX SIZE:	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.
RADIO: Tandjung Uban Radio – call sign PKJ.
TUGS: No tugs available.
BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.
MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid smallpox and cholera certificates for crew members required.
DENSITY: 10254.
FRESH WATER: Available ex-pipe-line – 5 t.p.h.
FUEL: Medium fuel oil, viscosity Redwood 1, 600–900 seconds; heavy fuel oil, viscosity SSF, 30–40. Prior approval from PT Stanvac Indonesia, Djakarta, required for obtaining bunker fuels.
GANGWAY/DECK WATCHMEN: Port authority provides 1 safety guard during vessel's stay in port.
CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.
IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.
REPATRIATION: No facilities available.
AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Djakarta only.
TIME: GMT plus 7 hours.
POLICE/AMBULANCE/FIRE: Police, tel. 55; Clinic, 37 and 58; Fire, 44 and 13.
TELEPHONES: Agents place telephone on board at no cost.
AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".
PILOTAGE: Compulsory pilotage consisting of sea and harbour pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.
Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.
HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free

pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.
RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.
TUGS: Nil.
BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and delapidated and normally handles only small craft of local inter-island character.
STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.
TANKERS: The Pertamina jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.
GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.
PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.
AGENT: P. N. Djakarta Lloyd, Tarakan Branch Office, Djl. Djendral Sudirman 1/16, Port Tarakan.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Deratisation (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Constructions Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police officials board for search.
PILOTAGE: None.
ANCHORAGES: Tegal roads. Safe anchorages: Lat. 06° 49′ 00″ S. Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.
RESTRICTIONS: No restriction night entry, but work is done next day (after 0800 hrs.).
MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).
HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.
RADIO:
I. Fixed Station:
Call sign 8AC on freq. 5315 kc/s. at 0100–0130 GMT, 0230–0300
freq. 5165 kc/s. at 0430–0500 GMT, 1000–1015
II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kc/s. at 0030–0100 GMT, 0400–0430
Channel 16 – VHF 156.80 mc/s. 0100–0500 GMT
III. Open every day except on holidays.
TUGS: Only used for towing lighters to vessels on the roads.
BERTHING: None. Anchorage only.
STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.
MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.
FRESH WATER: Nil.
FUEL: Nil.
GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.
OPENING/CLOSING HATCHES: Is carried out by crew – sometimes by stevedores.
CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.
IDENTIFICATION CARDS: Necessary.
CONSULS: None available locally.
REPAIRS: None.
REPATRIATION: Agents arrange necessary repatriation of crew.
TIME: Indonesian Western Time = GMT plus 7 hours.
HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.
POLICE/AMBULANCE/FIRE: Accident, Police, tel. 10; First Aid for Ambulance (Texin Hospital), tel. 387; Fire Departments (Texin), tel. 17.
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.
REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.
AUTHORITY: Sjahbander, Djl.
AGENT: P. T. Jakarta Lloyd Tegal Branch Office. Office address: Djl. Laksamana R.E. Martadinata No. 5, Tegal, Indonesia. Telegraphic address: "Jakartalloyd Tegal". Telephone Office: Branch Director: Tegal 86. Terminal Manager: Utara 850. Shipping Manager: Tegal 539.

TELUK BAYUR (PADANG): 00.58 S. 100.20 E.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and Wharfage if any.
Crew Lists and Passenger's Lists.
Ships' Articles.
Other Certificates and Documents as required.

Immigration: Vessels arriving from abroad with passengers must hoist the 'N' flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: (a) disembarking (b) transhipping (c) through passengers.

No persons are allowed on board until the vessel has been examined and the 'N' flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.
PILOTAGE: Compulsory harbour pilotage. Ships have to wait for Pilot inside the roads limits, anchoring as near the breakwater as possible. Pilot is available each day from 0600–1800 hrs. ETA required 6 hours before arrival. ETD required 3 hours before departure.
HEALTH: Vessels arriving from abroad direct have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port. The provisional free pratique is only valid for the port and the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.
RADIO: Coastal station: Call sign PKP2. *Type of equipment:* Transmitter, JRC 250 watt, Transmitter, JRC 125 watt, Receiver, JRC –.

Frequency: 500 kc/s. 0000–0100 hrs., 0400–0500 hrs., 0800–0900 hrs. Frequency: 6355 kc/s. 0130–0200 hrs., 0530–0600 hrs.
TUGS: 1 Tug-boat (SKMP 8) of 250 h.p. is stationed at Teluk Bayur, the use of which is compulsory for incoming and outgoing ocean-going ships. 1 additional tug 180 h.p.
BERTHING:

Quay/Used by	*Length (m.)*	*Depth Below LWS Actual (m.)*	*(ft.)*	*Remarks*
Pier No. I				
Pilgrim Priority for tourist vessels, ocean-going for export	120	8.0	26.2	In case of Pilgrim tourist and ocean-going vessels are not used, this pier could be used also for passenger (RLS), import and inter-island vessels.
Pier No. II				
Idem	108	8.0	26.2	Idem
Pier No. III				
Inter island	108	7.5	24.6	
Pier No. IV				
Idem	96	7.5	24.6	
Pier No. V				
Own ship's/tug boat and mooring boat	10	7.0	23.0	
Pier No. VII				
Oil tanker	10	7.0	23.0	Oil jetty, special for white oil
Pier No. VIII				
Inter island. Temporary used for oil/asphalt tanker	27	7.0	23.0	Black oil and asphalt

Note: 1. High water Spring 1.65 m. (duration).
2. Maximum length of vessels 165 m. (540 ft.).
3. Gate: 7.1 m. (23.3 ft.).

CRANES: 1 electric crane, capacity 6 tons, 2 mobile cranes, capacity 3 and 5 tons.
STEVEDORES: *Working Hours:*
Monday to Thursday: 0800–1200; 1300–1600.
Friday: 0800–1100; 1330–1600.
Saturday: 0800–1200; 1300–1400.
Overtime until 2400 hrs. in normal time, round the clock special permit.
Cargo Handling Speeds:
1. General cargo: 15 to 20 tons per gang/hour.
2. Bulk cargo/cement: 20 to 25 tons per gang/hour.

FRESH WATER: Available at wharf, officially at a rate of 8 cu.m. per hour, unlimited quantity during the wet season (September-April). During the dry season with a maximum of 150 cu.m. and a capacity of 4–6 cu.m. per hour. Water should be boiled or chemically treated before consumption.
FUEL: Very limited (Diesel oil only).
REPAIRS: Dry dock available for ships up to 150 tons. Machine-workshops for minor repairs available.
MEDICAL: Teluk Bayur has harbour clinic for emergency cases. Hospitals at Padang.
AIRPORT: At Tabing, distance 15 km.
AUTHORITY: Department of Sea Communications.

TJILITJAP (CILACAP): 07.41 S. 109.05 E.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Deratisation (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Other certificates and documents as required.
Ship's Stores List.
RESTRICTIONS: Least depths at the bar and in the channel are 70 dm at LWS.
Current: semi-diurnal. By the influence of the Donan River, especially during the rainy season, the duration of the outgoing current is longer than that of the ingoing. In the rainy season the outgoing current can reach 5 knots.
PILOTAGE: Compulsory. The Pilot station is in Tjilitjap. Outbound vessels, application for Pilots must be made 2 hours before departure, provided that ships sailing before 0800 hrs., must apply before 1800 hrs. of the preceding day. Ships arriving by night must hoist the pilot signals at daybreak. Pilot signals as in the International Code of Signals until the Pilot boards the vessel or till a central signal is made at the signal yard of the Coastal Light "Gunung Tjimiring", where Tjilitjap will be phoned about approaching ships. The Lighthouse-keeper can make the following contra signals:
(a) The Indonesian Flag at the signal yard meaning the Pilot is coming out.
(b) 1 black ball over 2 black cones pointing upwards meaning wait for the next message.
(c) Double cones meaning no Pilot available permission granted to enter without.
(d) Black ball over a black cone pointing upwards meaning Pilot is not coming out, permission to enter without Pilot until you meet one.

Pilotage by night is not available except in very extraordinary cases. It takes the Pilot 1 hour from Tjilitjap to sea. If a ship can't enter on the same day 2 black cones pointing upwards will be shown with a black ball in between.
HEALTH: Vessels arriving from aboard direct have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.
TUGS: Not available.
VHF: Pilot on Channels 16 and 20.
BERTHING: Outer roads while waiting for the Pilot during the West monsoon a safe anchorage in 12 m. water. During the S.E. monsoon not a safe anchorage.
Inner roads, under all circumstances a safe Anchorage in 9 m. water in the vicinity of Nusa Kambangan opposite the quays for small crafts and East of Tg. Sodong. Vessels over 80 m. length have to moor due to limited swinging space, current and winds.
Berth length:
Berth I 120.0 m. depth alongside 70 dm at LWS.
Berth II 146.0 m. depth alongside 70 dm at LWS.
Berth III 142.5 m. depth alongside 70 dm at LWS.
Berth IV 130.0 m. depth alongside 70 dm at LWS.
TANKERS: Shell Tanker Terminal: Petroleum jetty with dolphins where tankers of 85 m. length can berth.
STEVEDORES: Working hours Monday–Thursday 0730–1200 hrs. and 1300–1530 hrs. and Saturday. Overtime Friday 0730–1130 hrs. and 1300–1530 hrs.; Sunday–holidays 0730–1200 hrs. and 1300–1530 hrs.; Night shift 1700–2300 hrs. Gang's capacity: Loading manganese ore average 15 t.p.h.; loading scrap iron average 6 t.p.h.; loading copra cake average 10 t.p.h.
FRESH WATER: Water is supplied through pipe-lines to the wharves, capacity 7 t.p.h.
FUEL: Not available.
PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. Crew members are not allowed to take more than Rp.50.–(fifty Rupiahs only) ashore. It is recommended that Masters consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
Ship's Inspection Team: Consisting of members of the Port Authority. This team will search the vessel, after the ship is cleared by the Port Medical Officer. Prior to mentioned search no Cargo handling is allowed. This Team will search the Store Rooms and Cargo hatches, and subsequently seals the Bonded Stores and Radio Transmitter. Careful attention should be given in making up the Store Lists, as any difference found in the items declared and discovered during the search may lead to difficulties.
SHORE LEAVE: Leaving and entering the Custom's Area the crew is checked on the basis of the Crew's List and Identification cards and searched.
AGENT: See "Semarang."

TJIREBON: 06.41 S. 108.33 E.

DOCUMENTS:
Crew List.
Passenger List.
Customs Documents.
Manifest.
Bills of Lading.
Ship's Papers/Certificates.
Health Documents.

PILOTAGE: Not compulsory. Applications made through Agent or to Port Administrator via coast station Tjirebon radio.
ANCHORAGE: Boundaries of port area are coast line, meridian 108° 35′ 30″ E. and the parallels of 06° 42′ 15″ S. and 06° 43′ 40″ S.
A light buoy on the position of 06° 42′ 10″ S. and 108° 36′ 20″ E. is placed on the guidance line to the entrance of the harbour.
RESTRICTIONS: Tjirebon roads only accessible for ships of 8 m. max. draft, by taking the Tandkung Sanggarong light buoy at port hand. Only ships with 4 m. max. draft can enter Inner Harbour and moor alongside wharves.
All other ships anchor at outer roads. The harbour is open for 24 hours. For vessels entering the harbour, a signal is given from signal station.
HEALTH: Usual international procedures.
TUGS: Tug services available. Order through Agents.
RADIO: Call sign PKZ2. Working freq. 6491.5 kc/s. and 8799.5 kc/s., watching freq. 6265–6285 kc/s. and 8204–8249 kc/s. Working time 0030–0130 hrs. and 0600–0700 hrs. GMT.
STEVEDORES: Arranged by Agent.
MEDICAL: Normal hospital facilities available. Agent will arrange for medical attention. Advance notice required.
TANKERS: Berthing for only 300 d.w.t. tankers at special oil jetty.
DENSITY: 1025.
FRESH WATER: Delivered by water lighter. One delivery 75 tons, discharged within 6 hours. For quick delivery 2 days advance notice to Agents required.
FUEL: None available.
DEVELOPMENTS: Surveys being made for extension and development of port with 10 m. deep basins, container facilities and a 10 m. deep channel for accommodation of 10,000 d.w.t. ships and future shipping.
GANGWAY/DECK WATCHMEN: Recommended. Arrange with Agent.
OPENING/CLOSING HATCHES: Usually done by stevedores. Appreciated if done by crew.
CERTIFICATES: Port clearance last port of call. Certificates as required by vessel's country of registry and by SOLAS 1960.
CUSTOMS ALLOWANCES: 200 cigarettes per person. Wine/spirits: 1 bottle per person. Bottle opened.
IDENTIFICATION CARDS: Preferably passports, seamens ID cards (issued by maritime authorities; vessel's country).
CONSULS: At Djakarta, 280 km. from Tjirebon.
REPAIRS: Light repairs only by local dockyard.
DRY DOCK: Graving dock of 600 d.w.t. capacity.
REPATRIATION: Can be arranged by Agents.
AIRPORT: Kemajoran International Airport 257 km. from Tjirebon. Domestic Airport 40 km. from Tjirebon.
TIME: Local time (Western Indonesia Time) is GMT plus 8 hours.
HOLIDAYS: New Year (1st January); Ascension of Christ (15th May); Santa Maria (15th August); Independence Day (17th August);

Maulud, Mir'adj and Idul Fitri determined by Moslem calendar and differ from year to year by International calendar. For definite dates consult Port Administrator. Cargo work on Idul Fitri (2 days) not guaranteed due to labour shortage.

POLICE/AMBULANCE/FIRE: Harbour Police 3897; City Police 4466; Ambulance 118; Fire brigade 113.

SHORE LEAVE: Allowed after satisfactory fulfilment of immigration requirements and in possession of crew's Harbour Card.

DELAYS: Bad weather (mostly rain).

AUTHORITY: Port Administrator.

AGENT: P. N. Djakarta Lloyd, Djl. Pasuketan No. 5, PO Box 44, Port Tjirebon.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Iran

ABADAN: 30.20 N. 48.16 E.

Port of Abadan situated on right bank of the Arvandrud, about 47 miles up river from Rooka Buoy.
OPERATORS: National Iranian Oil Company, Abadan Refinery.
DOCUMENTS/PILOTAGE: See "Khorramshahr".
ANCHORAGES: On arrival of pilot boat vessel can anchor with no depth restriction. On entering the Arvandrud the following are the recognized anchorages: Kasba Anchorage position about 2 miles above Fao with a max. depth of 35 ft. in fresh water. Bawarda Anchorage position about 2 miles above Abadan with a max. depth of 31 ft. in fresh water. Vessels which are too deep to pass out of the river on one tide will be required to anchor at Kasba.
RESTRICTIONS: The Port is open for day and night navigation with arrival and sailing being controlled by the tide. Vessels normally enter the Bar at 4 hours before high water at the Bar or at 2 hours after high water at the Bar. Those entering 4 hours before, arrive at Bawarda anchorage generally during flood tide, so must anchor for 6 hours awaiting ebb. Those entering 2 hours after high water, arrive Bawarda during ebb tide and berth on arrival, providing berth available, weather conditions permit and outward movements do not delay. Vessels always berth starboard side to stem the ebb tide and without using tugs and leaving Abadan 4 to 6 hours before high water at Bar.
MAX. SIZE: Max. draft at jetties 31 ft. fresh. Max. length 600 ft.
HEALTH: Inward clearance is affected on board after receiving free pratique. Also see "Khorramshahr" – "Documents".
RADIO: The National Iranian Oil Company Coastal Radio Station call sign EQZ. The station listens for various calls on the normal International Marine Calling frequencies. When close to may be contacted on 500 kHz transferring to 428 kHz for exchange of traffic. Traffic list sent at 5 minutes past odd hours.
TUGS: Not available.
BERTHING: While no changes have actually occurred in the production capacity of the Abadan Refinery, the number of jetties on the Abadan riverside have been reduced to eight. Nos. 3, 4, 7, 9, 11, 16, 22 and 26 have been maintained and are used for bunkering purposes and dry cargo operations.

Ships pass day and night so it is necessary that mooring lines be kept taut at all times to prevent surging on the jetties thereby breaking lines and causing damage to Company property.

Bunkering jetties for those vessels coming only for purpose of taking bunkers are:

Jetty No. 3	Draft alongside		31 ft.
Jetty No. 9	,,	,,	28 ft.
Jetty No. 22	,,	,,	25 ft.
Jetty No. 16	,,	,,	25 ft.

Bunkering jetties for those vessels bringing Oil Company's cargo are:

Jetty No. 7A, Jetty No. 7B, Jetty No. 7C — Draft alongside between 28 ft.–31 ft.

MEDICAL: Emergency cases: an ambulance will be dispatched on demand by calling telephone number 5555.

In ordinary cases of sickness or dental treatment: Agents will arrange transportation of patients, and advise Masters regarding necessary medical attention forms. If patient does not speak English he should be accompanied by an interpreter. Only in exceptional cases will a medical officer visit a patient on board.
TANKERS: Deliveries of the refined oil products of Abadan Refinery are effected to ocean-going tankers at Bandar Mahshahr since the inauguration of the products terminal of the National Iranian Oil Company at that port, therefore such shipments are not taking place from Abadan any more.
DENSITY: Fresh water.
FRESH WATER: Available at all jetties.
FUEL: Ships' bunkers are available; however not all types are available at all jetties, therefore, ship's Master should advise by radio the exact quantity and kind of bunkers required. Bunkers are delivered concurrent with loading unless otherwise requested by Master. Due to heavy bunkering commitments it is mandatory that vessels take their bunkers when convenient for the terminal, any delay incurred by a vessel taking bunkers after loading is the responsibility of the Master.
DEVELOPMENTS: A new berth "7D" under construction adjacent to berths A, B and C.
GENERAL: All other items, see "Khorramshahr."
AUTHORITY: National Iranian Oil Co. Abadan Refinery.
AGENT: See "Khorramshahr."

BANDAR ABBAS: 27.15 N. 56.19 E.

DOCUMENTS:
Quarantine Officer
Crew List (1 copy, also all crew vaccination cards for inspection).
Customs Officer
Crew List (2 copies).
Stores List (2 copies).
Port Authority
Crew List (1 copy).
Agents
Crew List (2 copies).

In order to avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bandar Abbas. Agents as far in advance of vessel's arrival as possible:
Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies each).

All cargo shown on Manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.
PILOTAGE: Application for Pilot to be made well in advance through Bandar Abbas Port Radio EQI. Agents may also arrange pilotage but should be advised of ETA well in advance.
ANCHORAGE: Approx. position 27° 04′ N. 56° 04′ E. Depth 36 ft. The distance from the outer anchorage at buoy No. 1 to the port entrance is about 2 miles.
RESTRICTIONS: Entry or departure day or night. Depth of water alongside jetty, minimum 34 ft. and depth in channel approx. 32 ft. at LW. Height of tide at HW about 3 m.

Width of entrance channel is about 150 m. at surface, and 100 m. at seabed.
MAX. SIZE: Port can accommodate vessels up to 600 ft. length with a max. draft of 33 ft.
RADIO: Bandar Abbas Port Radio EQI – 500 kc/s.

Port telecommunications working from 0600 hrs. to 2400 hrs every day.
VHF: Channels 13, 16, 18 and 25. HF call-sign EQI available. Also see "Radio".
TUGS: 2 tugs 550 h.p. each, for harbour services, as well as for towage, in case of necessity.
BERTHING: Berthing after sunset is not permitted, and if a vessel arrives after sunset berthing will not take place until the following morning. Unberthing after sunset is permitted subject to overtime payments being made to Pilots and tug workers, but this arrangement is not official and is subject to mutual agreements.

Quay is 1,050 m. in length, 35 m. width and capable of accommodating 6 vessels each of 175 m. LOA.

There are 2 closed sheds, each having a capacity of 7,500 tons, 1 closed shed with a capacity of 15,000 tons and 6 open sheds having capacity of 100,000 tons.

Ore handling installation. The ore is loaded by conveyor belt and the average daily loading rate is 1,500 tons per day running from 0630 hrs. to 2200 hrs. daily.

Chrome ore loading is carried out at one hatch at a time only, and therefore the vessel has to be shifted by the crew in order to load the other hatches.

Grain discharged at rate of 700 to 800 tons per day. No silos.
STEVEDORES: Bagged cargo can be discharged at the rate of 800/900 tons per day, working 5 hooks.

Working hours at the New Port are, 0730 to 1200 hrs., 1300 to 1800 hrs., and 1900 to 2300 hrs., making a total of 3 shifts.

The employer or Agent has to pay a gross tax of 13 per cent as social insurance premium to Workers Social Insurance Organization for the hands employed in addition to 5 per cent collected from the labourers making a total of 18 per cent as WSIO premium.
CARGO GEAR: All vessels calling at this port must be capable of loading/discharging with their own gear, including rope, canvas and wire slings as necessary and/or wire or rope nets, etc.

Equipment available ashore is as follows: 2 mobile cranes with lifting capacity of 18/20 tons; 2 mobile cranes with lifting capacity of 7 tons each; 2 mobile cranes with lifting capacity of 5 tons each; 3 forklifts with capacity of 3 tons; 7 forklifts with capacity of 2 tons; 2 tractors for towing trailers; 8 small trailers; 4 big trailers.
FREIGHT TAX: Freight tax is payable on any freight earned in Iran for any export cargo loaded at any Iranian port. Per article 90 of Tax Law, freight tax is payable at the rate of 5 per cent of gross freight, regardless of whether freight is collected in Iran or elsewhere. There is no tax on import cargo freight regardless of where the freight is paid. In other words, for cargo discharged in Iranian ports, even if freight is payable at destination to be collected in Iran, there is no tax applicable.
MEDICAL: There is a General Hospital with about 100 beds. A number of physicians and dentists are available. Facilities available for vaccinations and inoculations.
FRESH WATER: Fresh water is available at all berths ex-pipe-line excepting the chrome ore berth which is at a separate jetty. Vessels loading chrome ore must take fresh water (and bunkers) before or after loading as there is no connection at the ore loading berth. Fresh water also available ex-barge at the anchorage. Cost about US $15.00 per ton.
FUEL: Fuel is available at all berths ex-pipe-line excepting the chrome ore berth which is at a separate jetty. Vessels loading chrome ore must take fuel (and fresh water) before or after loading as there is no connection at the ore loading berth.
CUSTOMS: Customs Officer will seal the store-room. All liquor and cigarette stocks will be placed under bond and reasonable ship's requirements should be taken from store before sealing.
IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for Officers and crew to have a photo ready on arrival at the port to facilitate obtaining shore passes.

CONSULS: None.
REPAIRS: Minor repairs available at private workshops.
WEATHER: With the exception of about 2 months during the Winter, the air is generally wet and humid, but with little rainfall. Temperature seldom falls below 10 degrees centigrade in winter, and seldom exceeds 40 degrees centigrade in Summer.
AIRPORT: About 15 km. distance from the port. Jet flights to international destinations on virtually a daily basis.
TIME: GMT plus 3.5 hours.
TELEPHONES: May be placed on board.
SERVICES: Survey, repairs, crew changes at sea or launch service to vessels off the port can be arranged by BASCO Limited. Contact through Agent.
SHORE LEAVE: Provided Security Dept. approves, crew allowed to go ashore by surrendering their seamen's books to port police guard.
DEVELOPMENTS: An additional port area is under construction and is expected to be completed 1978/79. The new facilities will include the following:—

10 Jetties to be used for general cargoes. Length of jetties is to be 1,920 m., and there will be 162,000 sq.m. of covered sheds with an open area of 100,000 sq.m. Vessels of up to 30,000 d.w.t. will be accommodated alongside these jetties.

4 Jetties to be used for special cargoes. Length of jetties to be 720 m. with an open area of 60,000 sq.m. and suitable for vessels of up to 30,000 d.w.t.

4 Jetties for container cargoes. Length of jetties to be 960 m. with warehouses of 12,000 sq.m. and open area of 430,000 sq.m. suitable for vessels of up to 45,000 d.w.t.

1 special Jetty for cereal cargoes. Length of jetty to be 375 m. with a transit silo of 135,000 tons capacity and suitable for vessels of up to 100,000 d.w.t.

5 Jetties to be used for import/export of bulk ore cargoes. Length of jetties to be 1,140 m. with an open area of 220,000 sq.m. and suitable for vessels of up to 60,000 d.w.t.

5 Lash-Terminals with warehouses of 9,000 sq.m. and open area of 50,000 sq.m. suitable for barges of up to 500 d.w.t.

A special Ro-Ro Terminal which will accommodate vessels of up to 45,000 d.w.t.

A Bunkering Jetty, length 300 m. and to accommodate vessels of up to 30,000 d.w.t.

GENERAL: *Hotels.* The Gameron is a modern hotel equipped with air-conditioning and having 120 beds. A wooden swimming pier has been constructed on the sea-beach opposite the hotel for the use of residents. The Welcome Inn, a 3-star motel equipped with air-conditioning is used by seafarers.

There is another modern hotel, the Shah Abbas. Second-class hotels, about 4 in number are also available.

Provisions. There are no ship chandlers at Bandar Abbas, but fresh and canned provisions are available through the ship's Agent.

Transport. Distance between port and the town of Bandar Abbas is about 10 km. and there are private mini-buses and taxis available. Motor-boats are available for attendance upon vessels at anchorage and also at the chrome ore berth which is not approachable by land transport.

Laundry. Subject to time available, can be arranged by ship's Agent.
AUTHORITY: Port Director.
AGENT: Gulf Agency Co. (Iran) Ltd., PO Box 761 Bandar Abbas Iran, Cables: "CONFIDENCE" Bandar Abbas. Telex: Tehran 212507, 212856, 213043 and 213044 (stating for Bandar Abbas). Tel.: 4168, 4169.

BANDAR MAHSHAHR: 30.27 N. 49.20 E.

Refined Products Loading Terminal of the National Iranian Oil Company.
Iranian Flag: All vessels required to fly Iranian flag from foremast during daylight hours, while in port.
DOCUMENTS:
8 Crew Lists.
2 Bonded Store Lists.
International Health Form.
If cargo aboard, Manifest certified by Iranian Consulate.
Clearance from Last Port.
GENERAL: Khor Musa is deep tidal inlet at head of Gulf. Consists of triangular-shaped entrance 35 miles wide and 22 miles long followed by a channel, approximately 14 miles long with average width about 1,000 ft., ending at Port of Bandar Mahshahr. Khor Musa is entered by deep water approach channel 25 miles long and 0.8 miles wide, commencing at Khor Musa light float, located in position 29° 36′ 32″ N. 49° 34′ 47″ E. At end of approaches channel, near buoy No. 12, restricted depths and channel widths extend for distance of 8 miles, in vicinity of Khor Musa Bar. A deep water channel then exists up to commercial port of Bandar Shahpour, and to oil port of Bandar Mahshahr, a total distance of 37 miles from end of Bar Channel. Refined products delivered to Bandar Mahshahr Terminal from National Iranian Oil Company's Refinery at Abadan.
TERRITORIAL WATERS: The 12 mile limit of Iranian territorial waters crosses approaches channel in vicinity of Khor Musa Approaches Buoy No. 8, which is approximately 20 miles from Khor Musa light float.
KHOR MUSA APPROACHES:
Navigational Dangers. Numerous shoals and sand banks in Khor Musa with low-lying shore lines and few conspicuous marks. However, shipping channels well marked with light beacons and buoys and present no navigational difficulties in clear weather. A small unlit tide gauge platform located on edge of shoal West of shipping channel in 29° 42′ 30″ N., 49° 03′ 48″ E., approximately 1.75 miles West of Khor Musa Approaches Buoy No. 4, and shown on Admiralty Chart.

Outer Khor Musa Channel. Approaching vessels should steer for Khor Musa light float, in position 29° 36′ 32″ N., 49° 34′ 47″ E., and from there a course should be set along marked channel for buoy No. 12 in position 29° 56′ 03″ N., 49° 06′ 47″ E., bearing 308° 45′ from Khor Musa light float.

New Khor Musa Channel: Depth of channel is 40 ft. below L.A.T.

Note: Buoys South of and including Buoy No. 12 above are referred to as Khor Musa Approaches Buoys. Buoys North of No. 12 above are referred to as Inner Khor Musa Buoys.
PILOTAGE: Compulsory. Service operated by Bandar Shahpour Port Authorities up to Bandar Shahpour, and by Oil Company between Bandar Shahpour and Bandar Mahshahr. Pilot vessel maintains station approximately 1 mile, 135° from Khor Musa Approaches Buoy No. 12. Vessels requiring Pilot should approach within 2.5 cables of pilot vessel. During adverse weather conditions Pilot may proceed above bar for shelter; in such cases vessels should not attempt to proceed inward without Pilot. Essential that ETA Bandar Shahpour is transmitted to Coastal Radio Station EQZ as soon as possible after Pilot has embarked at Pilot station. If for any reason a vessel is required to wait at any time at Bandar Shahpour, it will be advised through EQZ. Marine Operation Section, Bandar Mahshahr Terminal, on receipt of ETA Bandar Shahpour, will arrange for Berthing Master to board vessel at Bandar Shahpour anchorage and allocate jetty berth at Bandar Mahshahr.
BANDAR MAHSHAHR APPROACHES:
Navigational Dangers. Khor Musa Channel well marked with buoys and beacons, but attention is drawn to following:

(a) Outer Khor Musa Bar. 29° 59′ N., 49° 04′ E. and inner Khor Musa Bar 30° 02′ N., 49° 01′ E., where restricted channel widths and depths exist and min. depth 30 ft. Buoyed channel over bar is 600 ft. wide, but declared min. depth of 30 ft. only applicable to central half of channel. Towards edges of channel, shallower depths exist.

(b) Qassar bin Siswan. A rocky shoal, in 30° 12′ N., 48° 58′ E. approximately 10 miles North of inner Khor Musa Bar, marked by Buoy No. 9 with min. depth 6 ft.

(c) Khor Wastah to Beacon 18. Near sharp bend to East in channel, where tidal streams reach rate of over 4 knots at ebb.

Khor Musa Bar. Reached approximately 5 miles N.W. from pilot vessel, and normally does not restrict passage of inward vessels.

Khor Musa Channel. After leaving bar, channel is followed up Khor Musa for about 32 miles to anchorage at Government Bandar Shahpour.

Bandar Shahpour. All inward bound ships required to anchor on arrival off Bandar Shahpour, where Pilot disembarks and a Government Medical Officer comes on board to grant pratique. For this purpose an accommodation ladder should be rigged and ready before arrival.

Bandar Mahshahr Roadstead. Shortly after leaving Bandar Shahpour, channel to Bandar Mahshahr entered between 2 beacons: port hand, No. 2, flashing red and starboard hand, No. 1, flashing white. Channel well marked by light beacons to entrance of Bandar Mahshahr, at beacon No. 4. All port hand lights flash red and all starboard hand lights flash white. Distance from Bandar Shahpour Anchorage to Bandar Mahshahr about 7 miles. Before arriving at Bandar Mahshahr, the accommodation ladder must be taken in and the ship's side cleared for tugs and berthing.
ANCHORAGE: No anchorages in Bandar Mahshahr or Bandar Mahshahr roadstead. Inward bound vessels must anchor on Northern side of Khor Musa channel, West of Bandar Shahpour, and await arrival of Oil Company Berthing Master.
WIND AND TIDE:
Khor Musa Bar. Classified as Standard Port in Admiralty Tide Tables, Volume II. Tidal predictions considerably affected by strong winds. Variations up to 3 hours in time, and 3.5 ft. in height have been recorded. North-Westerly winds tend to lower level and retard predicted times of high and low waters; South-Easterly winds have opposite effect. At Khor Musa Bar, Mean Higher High Water has rise of 11.6 ft. and Mean Lower High Water has rise of 9.6 ft. above chart datum. Rise of tide at bar is also given by automatic tide indicator established near inner Khor Musa Buoy No. 8. Masters may obtain expected depth of water on Khor Musa Bar at any time by telephone to Marine Operations Office, Mahshahr, 4264.

Khor Musa. Tidal range increases between bar and Mahshahr. Maximum tidal velocities in Khor Musa about 3.5 knots on flood and 4.5 knots on ebb, at bend near inner Khor Musa beacon No. 18.

At ports of Shahpur and Mahshahr. Average time high water is 1 hour 35 minutes later, and low water 16 minutes later than on Bar. Mean Higher High Water has rise of 17.0 ft., and Mean Lower High Water rise of 14.6 ft. above Mahshahr chart datum.

Mahshahr Terminal. N.W. prevailing winds blow across jetties, from shore. On average, 60% of prevailing winds from N.W., 30% from S.E., and 10% variable. N.W. and S.E. winds frequently reach Force 8, but winds from other directions normally do not exceed Force 4. Maximum tidal range 18.9 ft. At springs, flood tide has velocity of 2 knots and ebb tide velocity 3 knots.
MAX. SIZE: Max. LOA 780 ft. Max. permissible draft at Khor Musa Bar is 40 ft. Depths in tanker berths vary from 37 ft. at berth No. 4 up to 43.5 ft. at berth No. 6.
HEALTH: Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for Crew members. Medical officer boards at Shahpour Anchorage. Subject no infectious diseases reported on board during voyage, Mecical Officer will grant pratique.

RADIO: Oil company has coastal radio station at Abadan, call sign EQZ. Station handles messages to and from oil ports of Mahshahr, Abadan, Kharg Island and Cyrus Terminal.

Nomination and Loading Orders: Signalled by Iranmash on receipt of vessel's first ETA. Vessels should signal tentative ETA Khor Musa Bar, 72 hours in advance, confirming ETA not less than 48 hours before arrival Khor Musa Pilot vessel station.

Radio Watches: Continuous watch on 500 kHz to be maintained at all times while navigating Khor Musa waterway, and ordinary listening watches maintained when at anchor.

VHF: Mahshahr Terminal equipped with International Maritime VHF/FM Radio Telephone Service, using standard international frequencies. Masters recommended use this facility when within range of Mahshahr Terminal. Channels available on continuous watch basis:

No. 16 Safety and Calling.
No. 12 Port use, tankers and tugs.
No. 20 Port use, telephone extension.
No. 26 Port use, telephone extension.

Initial contact should be made on Channel 16 and then transfer to Channel 12 for port operations, or Channel 20 or 26 for telephone extension.

TUGS: 3 tugs at terminal, all of 1,500 b.h.p., all fully equipped for fire fighting. Incoming ships are met by tugs in channel about 1 mile below port limits. 2 tugs always used berthing, and 1 or 2 unberthing, according to state of tide and direction of ship's head. Vessels take tug's ropes.

BERTHING: Vessels arriving on flood tide berthed starboard side to jetty, vessels arriving on ebb tide berth port side to jetty. 6 bulk loading jetties, each fitted with Woodfield loading unit. 10-in. loading arms, 6-in. bunker arms. Minimum number mooring ropes or wires required is 14, as follows: (Forward) – 4 head ropes, 2 breast ropes, 1 back spring. (Aft) – 4 stern ropes, 2 breast ropes, 1 back spring. For additional security 1 extra breast line forward and aft should be used. Unless breasts of adequate strength line are used, there is every possibility of vessel when in light condition being blown off jetty by N.W. wind and damaging loading equipment.

Maximum loading rates are:

Liquid propane/butane	1,500 t.p.h.
Aviation gasolines	700 t.p.h.
White spirits (solvent)	400 t.p.h.
Motor gasolines	2,200 t.p.h.
Motor gasoline (over the rail blending)	400 t.p.h.
Naphtha	2,100 t.p.h.
Turbine fuels	1,600 t.p.h.
Kerosines	1,500 t.p.h.
Gas oils	2,500 t.p.h.
Marine diesels	700 t.p.h.
Fuel oils	5,000 t.p.h.

LPG LOADING: Propane and butane gas is loaded at No. 6 jetty at a rate of 1,500 t.p.h. Propane and butane cannot be loaded simultaneously.

As 16-in. fixed Chicksan liquid and vapour return arms are used for loading, certain ships are limited to one-side berthing only. To avoid delay of vessels, it is advisable to have vapour return connections on both sides of liquid connection on board.

Terminal has available a series of ASA Standard reducers and adapters.

Loading temperature of propane is about minus 48° F., and butane is about minus 23° F.

BALLAST: Tankers may discharge ballast ashore at Jetties No. 1, 2, 5 and 6. Ballast received at rate of 2,000 t.p.h. Slops and residues at rate of 200 t.p.h.

MEDICAL: No medical facilities at terminal. Agents may arrange medical attention through Oil Company clinic in Abadan. In event hospital treatment required, patient would be taken to Abadan.

FRESH WATER: Limited supply potable water available all jetties, but supply very limited during months June to October.

FUEL: Fuel and diesel oil available each jetty. 10-in. loading arms connected to 6-in. flexible hoses. Loading rates, fuel max. 500 t.p.h., diesel max. 400 t.p.h. 48 hours notice required.

FIRE PRECAUTIONS: On arrival Shahpour Anchorage Master is given 6 copies of Fire and Safety Regulations. Fire Station and Emergency tel. 4111.

CUSTOMS ALLOWANCES: Reasonable quantity spirits and tobacco for consumption in port may be issued prior sealing store rooms. Strict supervision imposed by Customs and prohibited items, particularly tobacco and cigarettes, should not be taken ashore in excess of 50 cigarettes, or cigars, or 1 oz. tobacco.

CONSULS: Consulates situated in Khorramshahr.

REPAIRS: No repair facilities at Mahshahr or Shahpour. In emergency, the Oil Company may be able to undertake minor repairs. No main engine repairs whilst alongside loading jetties without permission from Terminal Superintendent.

TIME: GMT plus 3.5 hours.

TELEPHONES: Available at each jetty. If requested, telephone may be placed aboard.

SHORE LEAVE: Restricted to foreshore area only. Recreation centre opposite No. 2 jetty.

CURRENCY: The unit of currency is the Iranian Rial. It is illegal to use any other than Iranian currency ashore and heavy fines have been imposed for infringement of this regulation. Masters are requested to bring this matter to the individual notice of their officers and crew. Currency denominations are:

Notes: 10,000, 5,000, 1,000, 500, 200, 100, 50 rials.
Coins: 20, 10, 5, 2 and 1 rial.

AUTHORITY: National Iranian Oil Co. Bandar Mahshahr.

AGENT: Gulf Agency Co. (Iran) Ltd., Bandar Mahshahr. Cables "Confidence". Iranian Head-office: Gulf Agency Co. (Iran) Ltd., POB 110, Khorramshahr, Iran. Tel. 2280, 4755; Cables "Confidence", Khorramshahr. Telex: 654033, 654000 and 654051. (answer back: "GAC IR").

Due difficulty reaching Khorramshahr with international telex messages, communicate via Tehran office, telex No. 212507, 212856, 213043 and 213044. Tehran, (answer back: "GAC IR"), stating "For Khorramshahr".

Ships' mail and spare parts for vessels calling at Bandar Mahshahr to be routed by flights arriving directly to Abadan Airport without transhipment at Tehran, and addressed to: Gulf Agency Co. (Iran) Ltd., POB 62, Abadan, Iran.

Cables from vessels should be sent via Khorramshahr Port Radio to "Confidence", Khorramshahr, as well as to "Confidence" Bandar Mahshahr.

BANDAR SHAHPOUR: 30.27 N. 49.05 E.

DOCUMENTS:

Quarantine Officer
Crew List (1 copy, also all crew vaccination cards for inspection).

Customs Officer
Crew List (2 copies).
Stores List (2 copies).

Port Authority
Crew List (1 copy).

Agents
Crew List (2 copies).

Order avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bandar Shahpour Agents as far in advance of vessel's arrival as possible:

Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

The names of consignees must be inserted on the manifest at the port of origin. This is due to the fact that names have not been inserted as per Iranian Customs authorities requirements.

In view of the above, Owners are kindly requested to make sure that manifests for Bandar Shahpour are properly made out at loading port with correct names of consignees.

PILOTAGE: Application for Pilot to be made well in advance through Bandar Shahpour Port Radio – EQN – 500 kc/s. If Agents required to arrange Pilot they should be informed well in advance.

Pilotage operated by Shahpour Authorities up to Shahpour. Pilot vessel approximately 1 mile, 135° from Khor Musa Approaches Buoy No. 12. Approach within 2.5 cables of pilot vessel. During adverse weather pilot vessel may proceed above Bar, in such cases, do not attempt proceed inward without Pilot.

APPROACHES: Shipping channels well marked with lightbeacons and buoys and present no navigational difficulties in clear weather.

Small unlit tide guage platform located on edge of the shoal West of shipping channel in Lat. 29° 42′ 30″ N., Long. 49° 03′ 48″ E., approximately 1.75 miles West of Khor Musa Approaches Buoy No. 4, and shown on Admiralty Chart.

Approaching vessels should steer for Khor Musa light float, in position Lat. 29° 36′ 32″ N., Long. 49° 34′ 47″ E., and from there a course should be set along marked channel for Buoy No. 12 in position Lat. 29° 56′ 03″ N., Long. 49° 06′ 47″ E., bearing 308° 45′ from Khor Musa light float.

MAX. SIZE: Vessels of 29 ft. draft may enter port at any time. Higher drafts depending on state of tide. Normal rise of tide about 11 ft. Entry permitted day or night.

HEALTH: Medical Officer boards at Shahpour. Subject no infectious diseases reported on board during voyage, Medical Officer will grant pratique.

RADIO: Bandar Shahpour Port Radio EQN 500 kc/s.

Continuous watch on 500 kc/s. is to be maintained at all times while navigating in Khor Musa Waterway.

VHF: Channels 13, 16, 18 and 25. Twentyfour hours service.

TUGS: Normally not required, but available if necessary due to bad weather.

BERTHING: Berth No. 1 – 31 ft. depth alongside.
Berth No. 2 – 29 ft. depth alongside.
Berth No. 3 – 29 ft. depth alongside.
Berth No. 4 – 33 ft. depth alongside.
Berth No. 5 – 34 ft. depth alongside.
Berth No. 6 – 34 ft. depth alongside.

BULK HANDLING FACILITIES: Iron Ore Installation, loading capacity about 2,000 tons per day. The loading installation consists of 2 powerful moving cranes with a capacity of 100 t.p.h. on each unit, 2 funnel-shaped containers with a capacity of 30 tons each and a 600 m. long conveyor belt with a capacity of 175 t.p.h.

Sulphur: The shiploader travels the length of the vessel and has a loading rate of 400 t.p.h.

All derricks to be swung away from the shore giving the loader maximum clearance. Radio aerials, and fore and back stays to be removed.

Due to high temperatures, every precaution must be taken to combat risk of fire.

Grain: All berths are available for grain discharge. Grain is bagged in holds and discharged in slings using ship's gear. At only one berth is discharge possible by vacuvators. All discharges into railway wagons and/or trucks supplied by receivers.

All vessels discharging general cargo or grain should be prepared to handle discharge with own gear.

MEDICAL: 24 hours advance notice of requirements to be sent to Agent.

FRESH WATER: There is water supply on every jetty, and Masters are requested to inform their Agents 24 hours in advance of their requirements, allowing Agents to pay for the water and take turn for supplying water to the vessel.

Fresh water can also be arranged at the inner anchorage by barge, and Agents will need 48 hours advance notice in order to obtain barge. Agents will have the barge loaded with water from jetty and deliver to anchorage.

As there is only 1 barge available, when this is out of commission, Agents cannot provide water at the anchorage, and vessels have to wait until they are docked alongside.

FUEL: Not available. In case of absolute need can be arranged at Bandar Mahshahr but jetty fees extremely high.

HATCHES: Opening and closing by ship's crew.

CUSTOMS ALLOWANCES: Reasonable quantity spirits and tobacco for consumption in port may be issued prior sealing store rooms. Strict supervision imposed by Customs and prohibited items, particularly tobacco and cigarettes, should not be taken ashore in excess of 50 cigarettes, or cigars, or 1 oz. tobacco.

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photo ready on arrival at the port to facilitate obtaining shore passes.

CONSULS: See "Khorramshahr".

REPAIRS: Radio and radar repairs can be arranged from Khorramshahr. At B. Shahpour minor technical and mechanical repairs possible by private workshops. Repair shop and slip of 1,500 tons capacity in process of construction.

AIRPORT: Distant 110 km. Regular flights.

TIME: GMT plus 3.5 hours.

DEVELOPMENTS:

Description	*No. of Berths*	*Wharf Length (m.)*	*Completion Date*
Extension of the 4-berth jetty (Container terminal)	4	771	1978
Extension of the 10-berth jetty	5	1,051.5	1977
Extension of the 10-berth general cargo jetty	5	911.2	1978
Construction of the 14-berth jetty	14	2,552	1979
Construction of the Lighter harbour	20	880	1976
Construction of the grain terminal	2	480	1976
Construction of the ore-loading facilities	1	220	1976

SHIPMASTER'S REPORT:

Congestion; In the event of the port being congested vessels anchor initially in the vicinity of No. 12 buoy. Masters should then cable "Harbourmaster Bandar Shahpour" to register the vessels turn giving: Date and time of anchoring; Gross and Net tonnage; length and draft. Pilot vessel "Assadeh" keeps watch on 2182 k/cs and occasional watch on VHF Channels 16 and 13, Call sign "Khormusa Pilots". Vessels subsequently anchor in river to seaward of Bandar Shahpour jetties to await turn. (At time of writing delay approx. two months.)

No water or stores can be obtained at outer anchorage.

At inner anchorage water and stores can be obtained by launch but with some difficulty.

AUTHORITY: Port Director.

AGENT: See "Khorramshahr".

BUSHIRE: 29.00 N. 50.45 E. (See Plan)

DOCUMENTS:

Quarantine Officer

Crew List (1 copy, also all crew vaccination cards for inspection).

Customs Officer

Crew List (2 copies).

Stores List (2 copies).

Port Authority

Crew List (1 copy).

Agents

Crew List (2 copies).

Order avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bushire Agents as far in advance of vessel's arrival as possible:

Cargo Manifest (6 copies).

Freight Manifest (2 copies).

B/L Copies (2 copies each).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

PILOTAGE: Compulsory. Application for Pilot to be made well in advance through Bushire Port Radio EQM, 500 kc/s. Agents may also arrange pilotage but should be advised of ETA well in advance.

ANCHORAGE: In outer port in (approx.) position 28° 58′ 30″ N., 50° 44′ 50″ E.

RESTRICTIONS: Entry and departure day or night. Depth in outer channel 10.5 m. at LW. Depth of inner channel, 30 ft. at LW and 35 ft. at HW.

The depth alongside the berth is 30 ft. at LW and 37 ft. at HW.

MAX. SIZE: LOA 600 ft. Max. draft see "Berthing".

RADIO: Bushire Port Radio EQM, 500 kc/s.

VHF: VHF radio, operating on International VHF Marine Channels 13, 16 and 25. MF call sign EQM available at following zone times: 0500 to 0800 hrs. and 1200 to 1500 hrs.

TUGS: Normally not used. In event of bad weather tug will assist berthing. 2 small and 1 large tug available.

BERTHING: Jetty 360 m. long.

Max. draft No. 1 Jetty – 28 ft.
No. 2 Jetty – 25 ft.
Dolphins – 29 ft.
Navy Jetty – 21 ft.

MEDICAL: 24 hours advance notice of medical requirements to be passed to Agents. Doctor available for vaccinations and inoculations.

FRESH WATER: Available at berths ex-pipe-line.

FUEL: Not available.

HATCHES: To be opened and closed by shore labour.

CUSTOMS: Customs Officer will seal the store room. All liquor and cigarette stocks will be placed under bond and reasonable ship's requirements should be taken from store before sealing.

CARGO GEAR: Discharge by ship's gear. Heavy-lift crane capacity 15 tons available. There are also some private cranes available, but these cranes are stationed in Bushire for limited periods only. The lifting capacity of these cranes varies from 35 to 100 tons.

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police authorities. All shore passes should bear a photograph of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photograph ready on arrival at the port to facilitate obtaining shore passes.

CONSULS: None.

REPAIRS: Minor repairs possible by local workshops.

AIRPORT: 7 km. from port. Regular flights.

TIME: GMT plus 3.5 hours.

TELEPHONES: May be connected on board.

SHORE LEAVE: Permitted.

DELAYS: Occasional delays awaiting berth turn.

SHIPMASTER'S REPORT:

Fresh Water: Available at wharf ex-pipe-line but mains pressure is insufficient to pump water up to deck level of vessels and is therefore only generally available to small craft, e.g. fishing vessels.

Fresh water is also available ex-road tankers (10 and 20 tons capacity) at an approximate cost of 200 rials per ton. Tankers are not equipped with pumps and a portable pump belonging to the Fire Brigade is used.

Identification Cards; Crew members proceeding ashore leave their Seamen's Book or identification card at the wharf check point and collect same on return.

Fuel: Bunker fuels and lubricating oils not available.

Watchmen: Posting of gangway and/or deck watchmen most advisable but recommend these should be provided from crew members.

AUTHORITY: Port Director.

AGENT: See "Khorramshahr".

CHAR-BAHAR: 25.17 N. 60.37 E.

Considerable development is taking place, and the port is expected to become of considerable importance in the future. No date for expected completion of various development work being undertaken has been received, but we understand that the following plans have been made:—

A Container Terminal with length of 270 m., a warehouse of 9,000 sq. m. and an open area of 60,000 sq. m., suitable for vessels of up to 30,000 d.w.t.

Two Jetties for general cargoes. Length of jetties to be 360 m. with warehouses of 54,000 sq. m., and an open area of 60,000 sq. m., suitable for vessels of up to 20,000 d.w.t.

One Bunkering Jetty. Length of jetty 300 m. and suitable to accommodate vessels of up to 30,000 d.w.t.

CYRUS TERMINAL: 29.01 N. 49.28 E. (See Plan)

Oil loading terminal of the Iran Pan American Oil Company.

LOCATION: Open, unsheltered submarine export mooring, Lat. 29° 01′ 27″ N., Long. 49° 28′ 51″ E. Storage barge (*Pazargad*). Lat. 29° 01′ 57″ N., Long. 49° 29′ 30″ E.

APPROACHES:

Obstructions. In addition to submarine export mooring and storage vessel *Pazargad*, various oil wells and production structures located in immediate vicinity, which constitute hazard to navigation, as follows:

	Lat.	*Long.*
Well C–2A and the Production Stations	29° 03′ 07″ N.	49° 29′ 57″ E.
C–3	29° 02′ 38.7″ N.	49° 27′ 23.1″ E.
C–4	29° 00′ 15″ N.	49° 32′ 00″ E.
C–5	29° 02′ 52″ N.	49° 31′ 34″ E.
C–6	29° 03′ 57″ N.	49° 29′ 57″ E.
C–7	29° 03′ 31.2″ N.	49° 29′ 05.6″ E.
C–8	29° 03′ 31.2″ N.	49° 30′ 48″ E.
C–9	29° 02′ 15″ N.	49° 29′ 57″ E.
C–10	29° 03′ 33″ N.	49° 27′ 22.5″ E.
C–11	29° 04′ 51″ N.	49° 26′ 31″ E.
C–12	29° 03′ 33″ N.	49° 23′ 56.5″ E.
C–13	29° 02′ 41″ N.	49° 25′ 39.5″ E.

Safest and most desirable direction of approach to Cyrus Terminal is from S.E. Due to numerous obstructions noted above any approach should be made with extreme caution.

Navigational Aids. All structures located within Cyrus Terminal area display interrupted quick flashing white lights and sound a fog horn. The storage barge *Pazargad* displays, as required, those day and night signals as prescribed by articles 4 (b) and 11 (c) of International Rules. The 6 mooring buoys for the Cyrus Terminal are not lighted.

DOCUMENTS:

Bill of Health.
Health Declaration (International Health Form to be filled out by Master on arrival).
Manifest (if with cargo certified by Iranian Consulate. If vessel is in ballast, no legalisation dues).
Clearance (from last port).
Register.
5 Crew Lists.
Passenger Manifest (if any passengers are on board).
5 Store Lists.
Bonded Store List.

PILOTAGE: Vessels will be boarded by Mooring Master of IPAC within 2 miles, approximately 180° true from *Pazargad*. Mooring Master will advise Master on approaches to berth, mooring and unmooring, connecting and disconnecting submarine hose and all other operations within berthing area. All manoeuvring within loading berth area shall be done only in accordance with advice of an IPAC Mooring Master, subject to understanding that Master shall remain solely responsible for safety and proper manoeuvring. Master or qualified deck officer must be on bridge at all times while ship manoeuvring.

Vessels requested to have pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. If at night, adequate lighting must be rigged overside for Mooring Master to approach side of ship and climb ladder safely. Adequate searchlights should also be rigged on both wings of bridge when mooring at night, to assist in running lines to buoys.

ANCHORAGE: Area bound by: 28° 59′ 00″ N. to 29° 01′ 00″ N. between meridians 49° 28′ 00″ E. to 49° 31′ 00″ E. Depth of water 24 fathoms.

Masters cautioned not to anchor North of Lat. 29° 01′ 00″ and East of Long. 49° 31′ 00″ as there are numerous flow lines on sea bed connecting various structures, storage tanker and submarine terminal. During Winter months, November through March, severe South-easterly storms often encountered with little or no indication of impending storm. Vessels at anchor, and loading in submarine terminal, must have engines ready with full power for immediate use. Masters cautioned to use adequate scope of chain while anchored awaiting berth.

RESTRICTIONS: None. Terminal operates 24 hours per day, 7 days a week. Ships moored, loaded and unmoored at any hour, weather and other circumstances permitting. Terminal will never be closed due to religious holidays.

MAX. SIZE: Ship loaded by means of submarine pipe-line and 1 hose at 1 loading berth, located in approximately 140 ft. of water. Mooring buoys numbered 1, 2, 3, 4, 5 and 6. Starting with No. 1 East of mooring and numbered consecutively in clockwise direction. Max. capacity 70,000 d.w.t., max. length 950 ft.

HEALTH: The rules governing quarantine are the same as found in other ports of the world. Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for Crew members.

RADIO: *Advice of Arrival:* Incoming tankers must send incoming ETA at least 3 days before arrival. The OSCO main radio station at Abadan will handle IPAC's radio traffic, pre-arrival messages, etc., for vessels calling Cyrus Terminal. The station call sign is EQZ. Messages for IPAC should be prefixed "Cyrusiran IPAC" with copy to Agent. Further ETA messages should be sent when vessel 24 and 12 hours distant from Cyrus Terminal and at any other time any appreciable change occurs in original ETA or those subsequent thereto. The 12 hours ETA should include a positive statement regarding "ship's readiness to load" on arrival and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring.

Radio Watches: While at the anchorage off Cyrus Terminal, vessels should maintain normal listening watches on both HF and WT.

VHF: Cyrus Terminal base (*Pazargad*) is equipped with VHF radio telephone and maintains a radio watch. Vessels arriving at Cyrus Terminal may communicate with the *Pazargad* on Channel 6.

TUGS: A charge for each tug movement will be made in accordance with rates established by IPAC. When tug/tugs are standing-by vessel mooring/unmooring, for use if required, the full fee will be charged. IPAC maintains launches to assist in mooring and unmooring.

BERTHING: (Also see "Max. Size"). Tankers to have ready: *(a)* Windlass and deck winches fore and aft. *(b)* 12 good manila or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line. *(c)* On port or starboard side as directed, opposite ship's manifold, equipment capable of lifting submarine hose safely and expeditiously. Weight of lift 5.5 tons. *(d)* 1 bower anchor ready for immediate use, with minimum of 120 fathoms of chain. Anchors, chains and anchor windlass must be in good condition. *(e)* Equipped to fit flanges on submarine hoses, which are of ASA standards.

Permanent moorings in the berth consist of 6 steel cylindrical buoys each fitted with a quick release hook to which ship's mooring lines attached by mooring launches. The berth is laid out on a 2 heading basis, using 12 mooring ropes (4 bow, 4 beam, and 4 quarter).

LOADING: Maximum crude oil loading rates for a tanker using one 12-in. deck hose and 20 p.s.i. at ship's rail is approximately 12,000 b.p.h. Requested that ships receive oil as fast as it can be delivered, with due regard for safety, also that any fittings on manifold such as "Y's", strainers, or mud boxes, which tend to restrict flow of crude oil into the ships, be removed before arrival at terminal. Preferable that connections be provided so that a 12-in. deck hose can be used.

BALLAST: It is the ship Master's responsibility to see that no oil (crude, bunker, diesel or bilge water) is pumped or spilled overboard from the ship. Drip pans, etc. should be used at all times, especially when disconnecting hoses in order to prevent any loss of oil overboard. The waters in and adjacent to the Cyrus Terminal must not be polluted, and only clean, oil-free ballast (and/or bilge water) may be discharged inside of a circle 50 miles radius around the Cyrus installations.

Discharge of oil mixture from tankers while enroute is prohibited except when the following conditions are all satisfied.

1. The instantaneous rate of discharge of oil content of the oily mixture does not exceed 60 litres per mile.
2. The total quantity of oil discharged on ballast voyage does not exceed 1/15,000 of the total cargo carrying capacity.
3. The tanker is more than 50 miles from the nearest point on the Iranian coast.

Masters are warned that when disposing of dirty ballast or bilge waters (50 miles or more off Cyrus), all pipe-lines, sea suctions, strainers and pumps that are later to be used to discharge clean ballast, must be flushed clean, so that there will be no chance of even a small amount of pollution when the clean ballast is pumped overboard.

A vessel must have sufficient ballast for safe manoeuvring. However, by a careful watch of the weather, especially in the Summer months, by frequent interchange of weather information and berthing instructions and by a knowledge of the behaviour of his own vessel, a Master may desire to come to the Terminal with minimum ballast, thereby lessening any possibility of infringement of the pollution restrictions of the area.

As soon as practicable, after arrival all vessels' tanks will be inspected for evidence of oil in ballast, and during discharge of ballast similar inspection will be continued. In order to ensure the cleanliness of the ballast during or after the berthing of tankers, a sample of the said ballast will be tested before discharging. Ballast water so tested should prove that the oil content of the discharge is less than 30 parts per million of the mixture. If evidence of oil appears at either of these inspections, the ship must return at once to a point not less than 50 miles from the Cyrus installations and there, completely discharge all oily or dirty ballast.

The above rules also apply to bilge water discharged from the vessels.

Any vessel required to return to a position at least 50 miles off Cyrus, for the purpose of discharging dirty ballast, cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered, and at the same time, loses any priority held for loading.

Upon return from the sea, the vessel will be entered for loading at the time of the second arrival, when a new Notice of Readiness will be tendered.

The contamination with oil, when discharged at Cyrus Terminal or at anchorage must be such that even on a clear sunny day no oil could be traced on the surface of water.

If, during the first inspection or during progress of loading, it is revealed that a ship's tanks are not oil-tight, the ship will be rejected, or refused further loading. Ship will not be accepted for loading later, unless satisfactory evidence, duly certified by Lloyds or American Bureau of Shipping Surveyors, or any other recognized survey agency, of effective repairs is submitted.

In addition to the lights usually displayed, vessels discharging ballast or loading cargo during darkness, will illuminate the area round the ship, to the satisfaction of the Mooring Master, in order to readily detect any oil on the surface of the sea and take appropriate

action. Vessels unable to illuminate the sea satisfactorily, may not discharge ballast during darkness. Vessels should provide suitable flood lights for working on deck during night operations.

Loading and Deballasting Simultaneously: Vessels equipped with a separate system of ballast tanks will be allowed to discharge clean ballast and load oil simultaneously, providing approval of both Terminal Superintendent and Petroleum Inspector is secured.

MEDICAL: Neither medical nor hospital facilities provided by IPAC. Private doctors and hospital facilities available at Tehran or Abadan. Emergency hospital cases only can be handled on Kharg Island, approximately 53 miles from Cyrus Terminal.

DENSITY: Salinity approximately 20% more than normal sea water.

TIDE/CURRENT: Tidal range between 6 and 8 ft. Currents generally on axis of ship berthed in mooring; however, rotary currents can be expected.

FRESH WATER: No fresh water available.

FUEL: No bunkers or lubricants available.

FIRE PRECAUTIONS: A continuous and efficient fire watch must be kept on deck and in engine room. In event of fire breaking out in any part of a vessel, however minor it may be, fire alarm must be given immediately. This will consist of a succession of long blasts on ship's whistle, together with a rapid continuous ringing of ship's bell.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain a maximum of 50 cigarettes or 1 oz. of tobacco or 5 cigars. The balance of all smoking items must be collected and carefully listed prior to arrival. This list will be checked by Customs before sealing locker. If any discrepancies, vessel is subject to a fine.

CONSULS: No consulates at Cyrus Terminal; consular or diplomatic representatives for most nations maintain offices in Tehran and some in Khorramshahr.

REPAIRS/STORES: Port is considered an "open roadstead", and under no circumstances may engines be shut down for repairs while ships are moored in submarine berth. No facilities for making vessel repairs. No spare parts, stores or supplies should be sent to Cyrus Terminal for delivery to a ship.

REPATRIATION: No facilities.

TIME: GMT plus 3.5 hours.

SHORE LEAVE: There is no shore leave permitted due to lack of facilities. No visitors permitted on tankers loading.

INSPECTION SERVICE AND MARINE SURVEYS:

Petroleum inspection services available at Cyrus Terminal from Saybolt. IPAC also inspects cargoes on specific request of off-taker companies.

Classification agencies: Lloyds Register of Shipping (maintain office with Surveyor in Khorramshahr). American Bureau of Shipping (to be arranged from Bahrain where nearest ABS office available, with at least 5 days advance notice. A Surveyor available in Tehran and Khorramshahr). Bureau Veritas (Agents and Surveyor in Khorramshahr). Norske Veritas (Agents in Khorramshahr). German Lloyd (Agents and Surveyor in Khorramshahr).

GOVERNMENT OFFICIALS: Iranian officials, such as the Customs Officers, Immigration Officer and Quarantine Officer, are available on the barge *Pazargad*. Should Customs Guards be stationed on board vessels while in the moorings, it is expected that ships will provide food for these guards and other officials. All vessels calling at Cyrus Terminal must provide an accommodation ladder, rigged for Iranian officials.

AUTHORITY: Iran Pan American Oil Co.

AGENT: Gulf Agency Co. (Iran) Ltd., POB 110, Khorramshahr, Iran. Tel. 2278, 2280, 4755/58. Cable "Confidence", Khorramshahr. Telex 654033 654000 and 654051. (answer back: "GAC IR").

Due difficulty reaching Khorramshahr with international telex, communicate via Tehran office, telex no. 212507, 212856, 213043 and 213044. Tehran (answer back "GAC IR"), stating "For Khorramshahr".

Ships' mail for vessels calling Cyrus Terminal to be addressed to: Gulf Agency Co. (Iran) Ltd., POB 62, Abadan, Iran.

KHARG ISLAND: 29.14 N. 50.19 E. (See Plan)

A. DARIUS TERMINAL. Oil-loading terminal of the Iran Pan American Oil Company.

B. KHARG TERMINAL. Oil-loading terminal of the Iranian Oil Exploration and Producing Company. Including Sea Island Terminal.

C. KHEMCO TERMINAL. Loading terminal of Kharg Chemical Co.

GENERAL: (Items common to all Terminals): There are no ballast disposal facilities at Kharg and it is of the utmost importance that all vessels arriving at the anchorage should ensure that all water ballast and pipe-lines are completely clean.

FLAG: All vessels required to fly Iranian Ensign on foremast during daylight hours in Iranian waters. Iranian territorial waters extend 12 miles seaward from mainland and adjacent islands. Iranian flags may be obtained from Agent.

DOCUMENTS:

Bill of Health (certified by Iranian Consulate at port of origin or port of call. If no Iranian Consul available, the legalisation fees are payable at Kharg Island).
Health Declaration (International Health Form to be filled out by Master on arrival).
Manifest (if with cargo certified by Iranian Consul (see "Bill of Health" above). If vessel is in ballast, no legalisation fees due).
Clearance (from last port).
Register.
Crew List.
Passenger Manifest (if any passengers are on board).
Store List.
Bonded Store List.

APPROACHES: Vessels approaching Kharg from South, should keep at least 2 miles to East of Island. Vessels approaching Kharg from North should keep to West of Island, as Khargu Island to the North is very low lying and difficult to see at night until dangerously close-to.

Landfall. 3 high gas flare towers, 2 in the South and 1 to the North of the Island, make a most conspicuous landfall. At night, from a distance, the light from these flares tends to obliterate the various navigation lights. At night the glow from the 3 gas flares is visible from great distance, far beyond the range of any navigation lights. However on occasions, 1 or more or all of the flares may not be burning, making the main navigation lights more readily visible.

Navigational Dangers. Eastern coast is open and free from navigational dangers, except for coral reef, which extends for about 0.25 mile seawards along whole coast line. To S.W. of Island, numerous oil platforms in positions up to 5 miles offshore.

Kharg South Beacon. 29° 12′ 46″ N., 50° 19′ 15″ E. At Southern end of Island, rotating white light, on steel tower, 295 ft. above MHHW, 2 flashes every 12 seconds, visibility 24 miles. Obscured by high ground and oil tanks between 151° and 160° from seaward. Light beam partly diverged upwards for aircraft. This is the main navigation light for Kharg area.

Kharg North Beacon. 20° 15′ 02″ N., 50° 18′ 18″ E. At Northern end of Island, white light on steel tower, 261 ft. above MHHW, 2 flashes every 6 seconds, visibility 12 miles. Obscured by high ground and oil installations between 330° and 352° from seaward.

Khargu Beacon. 29° 20′ 20″ N., 50° 21′ 18″ E. At Northern end of Khargu Island, on a steel tower 59 ft. above MHHW, a white light with 10° red sectors towards Ganaveh and Kharg Island to indicate general directions of submarine pipe-lines, 3 flashes every 8 seconds, visibility, 10 miles red sector, 15 miles white sector. Obscured between 011° and 041° from seaward by Kharg Island. Radar reflectors fitted to North and East sides of tower top.

Ganaveh Beacon, 29° 35′ 20″ N., 50° 29′ 50″ E. On mainland, at start of submarine pipe-lines to Island, 2 miles N.W. of Ganaveh village, on steel tower, white light with 10° red sector along general direction of submarine pipe-lines, 1 flash every 5 seconds, visibility 10 miles red sector, 15 miles white sector. Light beam partly diverged upwards for aircraft.

South-east Buoy. 29° 12′ 22″ N., 50° 20′ 02″ E. Red can buoy, white light, 1 flash every 2 seconds. Near edge of reef, S.E. Kharg Island in 54 ft. of water.

North-east Buoy. 29° 14′ 54″ N., 50° 20′ 18″ E. Red conical buoy, white light, 1 flash every 6 seconds. On Northern boundary of port limits.

Channel Buoy. 29° 16′ 42″ N., 50° 20′ 30″ E. Red conical buoy, white light, 1 flash every 3 seconds. In Eastern end of channel between Kharg and Khargu Island.

Radio Masts. At South end of Kharg Island a high radio mast painted red and white positioned at 29° 12′ 47″ N., 50° 19′ 15″ E., approximate elevation 510 ft. Fitted with fixed red lights. Another radio mast, also painted red and white, positioned at 29° 14′ 10″ N., 50° 18′ 26″ E., approximate elevation 367 ft., fitted with fixed red light.

Dideban Tomb. On highest point of Kharg Island, 29° 14′ 57″ N., 50° 18′ 29″ E., a small domed building located, elevation 290 ft.

Mir Muhammad Tomb. On N.E. part of Kharg Island at 29° 15′ 10″ N., 50° 18′ 46″ E., conical shaped tower surmounted by small dome, elevation 165 ft.

Khargu Trees. On Khargu Island, at 29° 18′ 45″ N., 50° 20′ 30″ E., a small group of trees, only ones on island, visible from long distances.

Notice Boards. On North, S.E. coast and S.W. of Kharg Island and along coasts of Khargu Island, large white notice boards indicating prohibited anchorages surrounding submarine pipe-lines.

Port Area. The area within:

29° 12′ 23″ N.	29° 14′ 53″ N.
50° 18′ 36″ E.	50° 21′ 17″ E.
29° 12′ 21″ N.	29° 14′ 53″ N.
50° 21′ 40″ E.	50° 20′ 20″ E.

offshore from Kharg Island has been proclaimed a port area. Port area used by vessels manoeuvring to and from oil-loading terminals. The whole of area within port limits declared a Prohibited Anchorage, and, a Restricted Manoeuvring Area. Vessels must not enter within port limits unless Berthing Master is on Board.

PILOTAGE: Vessels should proceed to Eastern Anchorage, outside port limits (Prohibited Anchorage and Manoeuvring Area) approximately 1.5 miles East of Terminals, and await arrival of Berthing/Mooring Master.

ANCHORAGE: The approved Anchorage Area is to East of Eastern boundary of Port Limits, where holding ground is good. All vessels on arrival at Kharg must proceed to anchorage area and await instructions.

Prohibited Anchorages. 3 Prohibited Anchorages in the Kharg Area:

(a) Submarine Pipe-lines. Anchorage prohibited in vicinity of submarine oil pipe-lines laid between North coast of Kharg Island and mainland near Ganaveh.

(b) Offshore Oil Platforms. Anchorage prohibited to S.W. of Kharg Island in vicinity of numerous oil wells and drilling platforms extending 5 miles or more out to sea.' *(c)* Port Area. Area within 1.5 to 1.75 miles offshore from East coast of Kharg Island generally, has been proclaimed a Port Area. Anchorage within Port Area prohibited.

Cautions. (a) Unlit mooring buoys at S.E. of Kharg Island (see

Darius Terminal). *(b)* Oil Platforms to S.W. of Kharg Island. *(c)* Aircraft approach lane S.E. of a point mid-way between Naval Boat Harbour and Kharg North Buoy, in N.W. corner of Port Area.

RADIO: OSCO main radio station at Abadan will handle radio traffic. Call sign EQZ. Vessels bound for Kharg Terminal should prefix messages with "Khargiran", and vessels bound Darius terminal should prefix with "Khargiran IPAC", in both cases with copy to Agents.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches on station EQZ on WT, and Kharg Terminal on VHF. Use of the ship's radio station and/or battery-charging equipment prohibited during cargo transfer operations.

Schedule of watch (GMT) (Hours)	*Listening watch frequencies* kHz	*Transmitting frequencies* kHz	*Receiving frequencies* kHz	*Remarks*
Continuous	500	500	500	Distress: Station is equipped with international Auto-Alarm receiver on 500 kHz.
Continuous	500	428	405–535	Traffic list every 2 hours from 0105 to 2305 hrs. GMT.
0400–0700	8356–8374	8471	8374–8460	
0700–0900	12534–12561	13069.5	12561–12689	*Traffic lists every 2 hours from 0405 hrs. GMT.
1000–1300	12534–12561	13069.5	12561–12689	
1400–1700	8356–8374	8471	8374–8460	
1700–1830	4178–4187	4294	4187–4231	

*During scheduled watches on HF while station/EQZ is not actually working with ships, traffic lists are transmitted automatically and continuously on frequencies 4294, 8471 and 13069.5 kHz according their schedules of watch.

VHF: Kharg Terminal equipped with VHF radio telephone, using international frequencies. Continuous watch kept on international calling and emergency Channel 16, frequency 156.80 mc/s. Other channels, available after contact has been established are: No. 12, 11 and 10. Masters recommended use this facility when within range, particularly when approaching port. In poor visibility, when vessel's approach may not be observed from shore, VHF communication may be the means of avoiding delay in mooring/berthing.

HEALTH: Tankers calling at Kharg Island and requiring radio pratique should cable Agents 48 hours prior to arrival advising the following details:

(a) Number of persons on board, including Master and passengers.
(b) Last port of call.
(c) Ports of call during the voyage.
(d) Duration of voyage.
(e) If any person on board requires vaccination against smallpox or cholera.
(f) If there has been any case of illness of contagious nature.

If approved, the Master will be notified and the vessel will be allowed to enter port without yellow flag or night quarantine signal.

MEDICAL: Small hospital with clinic on Kharg operated by National Iranian Oil Company for minor medical treatment. More serious cases may have to be sent by air to Abadan Hospital. Any medical services required should be brought to attention of Medical Officer when he boards vessel to grant pratique.

DENSITY/TIDE/WINDS: Salinity of sea approximately 20% more than normal sea water. Surface temperature of sea ranges from 63° to 97° F depending on season. The extreme tidal range between 7 and 8 ft. with maximum rate of about 1.5 knots. Wind directions and velocity subject rapid change without warning and precautions necessary to avoid difficulties. Heaviest seas and swells while in port are from N.E. through S.E.

Tidal heights		*Tidal streams*		
L.A.T.	=+0.4 ft.	Slack water	10.75 hrs. before	HHW
MLLW	=+1.8 ft.	Ebb (full)	7.75 hrs. before	HHW
MHLW	=+3.6 ft.	Slack water	4.50 hrs. before	HHW
MSL	=+4.1 ft.	Flood (full)	1.50 hrs. before	HHW
LLHW	=+4.7 ft.	Slack water	1.00 hr. after	HHW
MHHW	=+6.5 ft.	Ebb (max.)	3.75 hrs. after	HHW
H.A.T.	=+8.2 ft.	Slack water	6.50 hrs. after	HHW
		Flood (max.)	9.50 hrs. after	HHW
Heights in feet above Chart Datum		*Times are approximate only*		

FRESH WATER: Not available.

STORES: Commissary supplies, as well as steward's stores, in limited quantities, can be arranged through Agent with at least 5 days advance notice.

Not allowed to be placed on board while vessel is berthed, can be taken at anchor or boat comes alongside immediately after leaving jetty. Transfer of bonded stores is permitted, with Customs in attendance, while alongside.

LAUNDRY: No laundry services available.

IDENTIFICATION CARDS: Each seaman will be issued with a pass which will be punched when crossing the jetty limits going out and in, and may be used once only. In addition to this pass, seamen should carry an Identification Card or Vaccination Certificate, bearing the owner's photograph.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain maximum 50 cigarettes or 1 ounce of tobacco or 5 cigars. The balance of all smoking items must be collected and carefully listed prior to arrival. This list will be checked by Customs before sealing locker. If any discrepancies, vessel subject to fine.

CONSULS: No consulates at Kharg Island; however, consular or diplomatic representatives, for most nations, maintain offices in Teheran, and some in Khorramshahr.

REPAIRS: Masters of vessels loading or discharging at Darius Terminal are advised that this port is considered an "open roadstead" and, under no circumstances may engines be shut down for repairs while ships are moored in submarine berth. No facilities at Darius Terminal for making vessels repairs, and it is emphasised that all vessels in submarine moorings must be in condition to clear immediately on instructions to do so. No repairs allowed alongside the Oil Loading Jetty at Kharg Terminal. Ship's main engines must be available at all times while alongside jetty.

REPATRIATION: The following is part of a letter from Oil Services Company of Iran to all shipping agencies Kharg Island.

"You are well acquainted with the fact that under normal operating circumstances only a very limited amount of sleeping accommodation is available at the Kharg United Seamen's Services Centre, which is the only, repeat, only available premises at Kharg for overnight lodgings. At present the United Seamen's Services Centre is undergoing modification, and when this is completed there will be only 18 beds available. It is not O.S.C.O. policy to permit building of any additional sleeping accommodation.

"Due to the above limitation it will now be our policy to limit the number of people sleeping overnight in the United Seamen's Services Centre to 18 and no other Crew members will be accepted for overnight accommodation.

"It will be the responsibility of agencies to co-ordinate crew changes so that no overload is imposed on U.S.S. Centre.

"In order to ensure this, all crews arriving from abroad will have to travel via Abadan where ample overnight accommodation is available and where they can be retained until required at Kharg. Ship's crew leaving their ships should be retained aboard until a suitable commercial or charter flight is arranged.

"Any Crew members arriving on Kharg direct from Teheran will not be allowed to land at Kharg unless

1. The vessel they are joining is at Kharg, or will be at Kharg before 0100 hrs. next day.
2. The Agent has a written agreement from the manager of the U.S.S. that sleeping accommodation is available.

"If neither provisos 1 or 2 are complied with the Crew members will be oncarried and accommodated in Abadan at the Agent's expense.

"To summarise: no sleeping accommodation is available at U.S.S. Centre unless the Agent obtains written agreement to that effect from U.S.S. Centre manager. Agents not having written agreement for sleeping accommodation will either have to return Crew members to their respective ships or arrange commercial or charter flights for them to stay in Abadan.

AIRPORT: Small airport used by Oil Company aircraft and Iranair flights to and from Abadan. Due security arrangements movement of crew must be programmed through Agent.

TIME: GMT plus 3.5 hours.

A. DARIUS TERMINAL (Additional requirements and details).

Terminal operates 24 hours per day, 7 days a week. Ships moored, loaded and unmoored at any hour, weather and other circumstances permitting. Terminal will never be closed due to religious holidays.

LOCATION: A submarine terminal at S.E. corner off Kharg Island 29° 12′ 40″ N. 50° 20′ 40″ E.

LANDMARKS: *OSCO (Iranian Oil Services Company) Jetty:* Approximately half a mile North of the mooring is a "T" shaped wharf for the berthing of Supertankers.

Khemco Jetty: Approximately quarter mile West of the terminal is a dolphin type jetty for berthing LPG and sulphur ships.

South Gas Flares: At the South end of Kharg Island, 2 very conspicuous gas flares bearing 277°, 1,900 ft. and 271°, 2,150 ft. from Kharg South Beacon. Approximate elevations: 400 ft.

North Gas Flares: In the centre of Kharg Island 2 very conspicuous gas flares bearing 191°, 3,050 ft. from Kharg North Beacon, elevation 435 ft.

Khemco Gas Flares: On the S.E. of Kharg Island 2 small gas flares burning in the Kharg Chemical Plant.

Note: At night, the glow from the 4 gas flares is visible at great distances. However, on occasions, 1 or more or all of the flares may not be burning.

Also see "Approaches" at beginning of Kharg Island.

RADIO: *Arrival Advice:* It is important that ships establish radio contact with IPAC when 3 days distant from Kharg Island and maintain this contact until just prior to arrival at the Terminal. All ships should send a 72 hour ETA message to IPAC, giving the best estimate of ship's arrival time at the Terminal. This first ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to IPAC when the vessel is 24 hours and 12 hours distant from Kharg Island and at any other time when an appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding "ship's readiness to load" on arrival, and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring.

Ship-to-shore communication: Kharg Terminal (IPAC & OSCO) is equipped with VHF radio-telephone, using international frequencies. A continuous watch is kept on the international calling and emergency Channel No. 16, frequency 156.80 mc/s. Other

Channels which are available after contact has been established are:

Channel	*Frequency in mc/secs.*	*Call sign*
IPAC 14	156,700	IPAC Marine
IPAC 6	156,300	IPAC Marine
OSCO 12	156,600	Kharg Pilot
OSCO 20	157,000	Kharg Pilot

Masters are recommended to use this facility when within range, particularly when approaching the port. In poor visibility, when a vessel's approach may not be observed from the shore, VHF communication may be the means of avoiding delay in mooring. While a ship is in mooring, communication will be by portable VHF radiotelephone units. The Mooring Master will advise Masters and Officers regarding the emergency whistle signals set up for use in event VHF radiotelephone units becoming inoperative. The use of the ship's radio station and/or battery charging equipment is prohibited during cargo transfer operations.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches with station EQZ on W/T and Kharg Terminal on VHF.

MOORING: Vessel requested to have Pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. Mooring Master will board 2 miles seaward of the Terminal sea-buoy. Adequate searchlights should be rigged on both wings of bridge, when mooring at night, to assist in running lines to buoys.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by IPAC line handling crew as advised by Mooring Master, who will remain on board while ship in moorings. A capable winchman to be provided by ship.

Mooring buoys for Darius Terminal not lighted. Permanent moorings in berth consist of 5 steel cylindrical buoys each fitted with quick release hook, to which ship's mooring lines are attached by IPAC's mooring launches. The berth is laid out on the one heading basis, using both ship's bower anchors with 9 mooring ropes (4 beam, 4 quarter and 1 stern). Mooring buoys numbered 1, 2, 3, 4 and 5. Starting with No. 1. East of the mooring and numbers running consecutively in a clockwise direction.

Tankers to have ready: *(a)* Windlass and both bower anchors, each with not less than 120 fathoms of chain. *(b)* 9 good manila or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line. *(c)* On port side opposite ship's manifold, equipment capable of lifting submarine hose safely and expeditiously. Weight of lift 5 tons.

LOADING: Ship loaded by means of submarine pipe-line and 2 hoses at 1 loading berth, located approximately 1 mile offshore in over 65 ft. of water. Crude oil loading hoses lifted on port side. Maximum crude oil loading rate for tanker using two 12-in. deck hoses and 20 p.s.i. at ship's rail is approximately 5,000 t.p.h.

Order save ship time as well as to make berth available for others, requested that ships receive oil as fast as it can be delivered, with due regard for safety. Also requested that any fittings on ship's manifold such as "Y's", strainers, or mud boxes, which tend to restrict flow of crude oil into ship, be removed before arrival at terminal. It is preferable that connections be provided so that a 12-in. deck hose can be used. Vessels must be equipped to fit flanges on submarine hoses, which are of ASA standards.

FIRE PRECAUTIONS AND SAFETY: Full instructions will be given by Mooring Master, but vessel's personnel responsible for safety of vessel and must take all necessary precautions, whether or not so advised by Mooring Master.

During time vessel moored in Darius Terminal, a continuous and efficient fire watch must be kept on deck and in the engine room. In the event of fire breaking out in any part of vessel, however minor it may be, fire alarm must be given immediately. This will consist of a succession of long blasts on ship's whistle, together with a rapid and continuous ringing of ship's bell.

EMERGENCY MEDICAL ASSISTANCE: Vessels requiring emergency medical assistance should hoist international code flag "W" in daylight, and at night send "W" (. – –) on blinker light. To attract immediate attention, the same signal "W" (. – –) should be given on ship's whistle in either day or night hours. The signal should be repeated until acknowledged visually by either another ship in the moorings, or from IPAC launch. As soon as signal is received. Terminal officials will advise Agent as soon as possible of the emergency medical aid required.

FUEL: No bunkers available at submarine mooring. Bunkers may be loaded at OSCO main jetty having obtained nomination through Iranian Oil participants in London. Tankers loading crude oil at OSCO "T"-head jetties have at all times priority for berth, over the vessels lifting bunkers only. Marine lubricants not available, except through marketing representatives by arrangement through Agent.

CURRENTS: Generally on the axis of the ship berthed in the mooring; however, rotary currents can be expected.

SHORE LEAVE: For personnel of vessels loading or unloading at the Terminal is arranged between Agent and Iranian Security Officer aboard vessel. Ship's personnel (other than medical or emergency cases) not allowed to disembark or embark at Terminal. Sufficient personnel must be aboard at all times for letting go lines and clearing moorings immediately.

B. KHARG TERMINAL (Additional requirements and details)

OIL LOADING JETTY: "Tee" head with overall length of 6,038 ft. between fender faces. The fender to fender width is 138 ft., for the section South of trestle approach, and 124 ft. for North section. Jetty face is aligned in direction 172° 35′ – 352° 35′. Deck level 22.0 ft. above chart datum. The jetty, being on Eastern side of Island, is sheltered from prevailing N.W. winds, but exposed to S.E., when during Winter storms, waves of 8 to 10 ft. often occur. A maximum wave height of 15 ft. has been recorded at Southern end of jetty, under such conditions.

Berth	*Least Depth water (in feet)*	*Maximum capacity D.W.T.**	*Loading and bunker arms†*	*Height limits ship's manifold in feet above chart datum*
1	64	200,000	3×16 in. 2×12 in.	11 to 73
2	65	38,000	4×12 in.	11 to 62
3	66	200,000	3×16 in. 2×12 in.	11 to 73
4	66	65,000	5×12 in.	11 to 62
5	70	200,000	3×16 in. 2×12 in.	16 to 78
6	67	85,000	3×16 in. 2×12 in.	11 to 73
7	62	200,000	5×12 in.	11 to 73
8	63	45,000	5×12 in.	11 to 62
9	57	200,000	3×16 in. 2×12 in.	11 to 73
10	58	76,000	5×12 in.	11 to 62

* Subject to weather, tidal conditions and lengths of vessels adjacent berths.

† 12 in. Bunker arms at all berths. All Chiksan arm flanges are series 150 API.

Outer Berths: 9, 7, 1, 3, 5. Inner Berths: 10, 8, 2, 4, 6. Berths Nos. 7, 8, 9 and 10 located North of trestle approach.

SEA ISLAND TERMINAL: A 2 berth Sea Island Loading Terminal is in operation on the West side of Kharg Island.

The structure, 1,800 ft. long, is centred in 29° 13′ 29″ N., 50° 17′ 10″ E., and is aligned in a direction 154°/334°. It is designed to accommodate vessels of approximately 150,000/500,000 tons at No. 11 Berth on the West side, and vessels of approximately 150,000/300,000 tons at No. 12 Berth on the East side.

Unless advised to the contrary, all vessels should proceed to the anchorage East of the Main Jetty.

Vessels instructed to load at the Sea Island are required to rig an accommodation ladder to facilitate the boarding of Customs, Health, and Port Authorities. Agency work and crew changes must also be effected at the anchorage. There is no shore leave from the Sea Island.

The comparatively exposed position of the Sea Island makes additional moorings advisable and vessels should be prepared to use their maximum number of mooring lines. Quick-release hooks are provided for all mooring lines.

Minimum size vessel, about 150,000 d.w.t.

Loading rates of up to 30,000 t.p.h. to one berth can be achieved at the Sea Island.

Only fuel-oil bunkers are available.

Vessels may, if considered necessary, be required to retain on board sufficient ballast while loading cargo to ensure that the loading arms do not exceed their maximum designed elevation.

Berth	*Least depth water (in feet)*	*Maximum capacity D.W.T.*	*Loading and bunker arms*	*Height limits ship's manifold in feet above chart datum*
11	106	500,000	4×24 in. 2×16 in.	22 to 110
12	97	300,000	4×16 in. 2×12 in.	22 to 93

TUGS: Vessel normally berthed with assistance of tugs which, together with Berthing Master, meet vessel at port limits. The tugs will come alongside, normally 1 to the bow and 1 to the stern, as far forward and aft as is safe and practical. Tugs' towing equipment will be used on all occasions.

BERTHING: Approaching berth, 2 fibre-rope headlines should be lowered to mooring launch, for transfer to jetty. 2 stern lines are then handled, preferably one at a time, to avoid possible fouling of vessel's propeller. Positioning of vessel's loading manifold in relation to Chiksan loading arms on jetty has to be carried out to a close tolerance, as directed by Berthing Master, to requirements of jetty operator. On inner berths, particularly Nos. 2, 4 and 8, vessels are berthed head outwards, i.e. stern to trestle. In these cases, vessels are towed stern first by after tug's hook wire, with forward tug either alongside or on towing hook, depending on tidal and weather conditions.

Mooring System. Under normal conditions, 12 lines are used to moor a vessel as follows: Forward: 3 headlines, 2 breast lines and 1 spring. Aft.: 3 stern lines, 2 breast lines and 1 spring.

During Winter S.E. storm period, it is usual to use 1 each additional headline and breast line, at each end making a total of 16 mooring lines. Breast lines and springs of wire rope are acceptable.

Berthing Limitations. Various combinations of wind, sea and tidal conditions, also size, length, ballasted trim and handling qualities of a vessel and available berth space, can effect decision to berth a vessel at Kharg. All these factors have to be evaluated before a final berthing decision is made.

Manifold Position. No berthing where manifold of vessel cannot be positioned, within horizontal limits of Chiksan loading unit arms, due to adjacent occupied berths.

Note: On outside berths, very large vessels of light free board in excess of 70 ft., may be required to retain sufficient ballast, to ensure that their manifolds remain within the vertical range of the Chiksan loading arms, until sufficient cargo is loaded.

LOADING: Both Iranian light and heavy crude oils available at all jetty berths. Crude oil is delivered to jetty from Tank Farm, situated on central plateau of sand, by gravity flow through four 48-in. diameter pipe-lines. Loading rates of up to 11,500 t.p.h. to one berth can be achieved at Kharg Terminal. Up to 45,000 t.p.h. can be delivered to all 10 berths simultaneously.

FUEL: Bunkering facilities at each berth. 2 grades available, marine fuel oil and marine diesel oil. Bunkers may be loaded up to a maximum rate of 1,000 t.p.h., and bunkering will normally commence before loading cargo. Only fuel oil available at Sea Island berths.

FIRE PRECAUTIONS: A copy of the "Fire and Safety Regulations" notice is given to Master of every vessel by Berthing Master, at Anchorage. 5 additional copies are passed aboard vessel when it arrives alongside jetty. These extra copies must be posted in conspicuous places throughout the vessel. While a vessel is within Port Area a continuous and efficient Fire Watch shall be maintained on deck and in the engine room. In event of fire, however minor it may be, the Fire Alarm shall be given immediately as follows:

On Board Vessel: Rapid and continuous ringing of ship's bell, together with a succession of long blasts on the ship's whistle or siren.

On Jetty or elsewhere in Port Area: Rapid and continuous ringing of the gongs on the jetty. A push-button alarm system is provided at each berth.

SHORE LEAVE: Fully air-conditioned Recreation Centre operated by United Seamen's Services, situated close to shore end of the trestle to the Oil Loading Jetty. Facilities include: cinema, film exchange, restaurant, dining-room and bar, library and waiting-room, PX gift shop, 2 billiards and snooker tables, 2 table tennis tables, darts, chess, etc., official money exchange.

Note: Shore leave restricted to grounds and buildings of Recreation Centre only.

C. KHEMCO TERMINAL: (Additional requirements and details)

OPERATOR: Kharg Chemical Company, Ltd. (Khemco), The Pahlavi Foundation Building 178 Pahlavi Avenue, Tehran, Iran. Cable Address: "Chemkharg" Tehran. Telex: 2402 Khemco Tn.

LOCATION: Khemco Terminal dolphin jetty is located at the S.E. corner of Kharg Island 29° 12′ 45″ N. 50° 20′ 05″ E.

APPROACHES: Vessels entering Kharg Island road must not approach or anchor West of Long. 50° 21′ 30″ E. (being approximately 1 mile East of Khemco Terminal), unless a company's Berthing Master is on board.

PILOTAGE: Company has own Berthing Masters, who will board vessels outside the port area and will pilot and berth the vessel alongside Khemco jetty. Berthing Masters will also carry out the duties of safety officer.

Vessels with the Berthing Master on board shall display the international flag "H" in a prominent position while manoeuvring under his advice. This flag will be in addition to the "Q" flag, being already hoisted for quarantine purposes.

Vessels are requested to have a clean pilot ladder safely secured on the leeside of the ship for the Berthing Master. The pilot ladder should be long enough to reach the pilot tug or launch. At night adequate lighting for the pilot ladder shall be installed.

Pilotage, berthing, mooring and sailing of vessels will be carried out in accordance with instructions of the Mooring Masters, subject to the understanding that in all circumstances the Master of the vessel being manoeuvred shall remain solely responsible for the safety, proper navigation and manoeuvring of his vessel. The Master or a qualified ship's deck officer must be on the bridge at all times while the vessel is underway or unmoored.

NOTICE OF READINESS: Notice of readiness will not be accepted at the time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered as the time the berthing Master boards the vessel or the time that the vessel anchors, whichever occurs first.

RESTRICTIONS: Vessels can be berthed day or night in 2 directions using ship's moorings. Occasionally bow anchor will be used during berthing operation.

MAX. SIZE: Length of pier is 1180 ft. with maximum of 42 ft. water alongside at MLLW.

RADIO: The OSCO main radio station at Abadan will handle Khemco's radio traffic. The station call sign is EQZ. Messages for Khemco should be prefixed with "Khargiran Khemco", with copy to Agent.

Advice of Arrival: It is important that ships establish radio contact with Khemco, when 3 days distance from Kharg Island, and maintain this contact until just prior to arrival at the terminal. All ships should send a 72 hours ETA message to Khemco, giving the best estimate of the ship's arrival time at Kharg anchorage. The first ETA message should also include a definite statement of the details of manifold dimensions, cargo requirement, Agent and any other necessary information. Further ETA messages should be sent to Khemco when the vessel is 24 hours and 12 hours distant from Kharg Island and at any other time if any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding ship's readiness to load on arrival, and the number of hours required to discharge clean ballast after ship has berthed.

TUGS: Two 2,000 h.p. and one 1,000 h.p. diesel tugs are provided by the Company. Normally 2 tugs are used for berthing and 1 for unberthing, depending on the Berthing Master's discretion. Tugs moorings are provided by the company and vessels are requested to have good heaving lines handy on the deck for picking up the tug lines. All tugs are equipped with fire-fighting equipment, including a foam system, which can be used when required.

MOORING: If, in the opinion of the Berthing Master, the vessel is not equipped with adequate mooring facilities, lines or gear, he will so inform vessel's Master, and in such event shall not be brought into berth until such facilities, lines or gear are deemed satisfactory.

Mooring Launches. 4 powerful mooring launches are provided by the Company and normally 1 is used during berthing and unberthing operations.

Mooring Lines. Under normal weather conditions the following mooring lines are required: forward: 3 head lines, 2 breast lines, 1 spring; aft.: 3 stern lines, 2 breast lines, 1 spring.

All lines to be of 120 fathoms, with the exception of the breast lines, being of shorter length. No wire lines are to be used at Khemco jetty.

During abnormal conditions, especially during Winter periods, some additional 4 lines are required for extra moorings.

In most cases it might be necessary to pass all forward lines from the bow and all stern lines from the poop.

Dolphins. The jetty consists of 1 main and 8 smaller dolphins. 4 on either side of the main dolphin are for ships mooring. The main dolphin is connected to the shore via a trestle and causeway. Head and stern lines are passed to the dolphins by means of line handling launches and others by heaving lines. All mooring dolphins are fitted with quick-release hooks.

BERTHING: A. Berthing Masters. Vessels to be berthed at Khemco jetty will be boarded by a company's Berthing Master at Kharg anchorage and after advising the ship's Master of all port formalities, will normally take 2 tugs (1 to the bow and 1 to the stern), alongside while proceeding to the jetty.

B. Berth Turn. Vessels to load at Khemco jetty will normally be accepted and the berth will be assigned to the vessel in order of arrival and nomination. In the event the berthing is delayed by weather or other reasons, vessels will keep their positions in line. Vessels leaving the port area on account of weather or other reasons should keep in contact with the terminal in order that they will be available when weather moderates. Khemco reserves the right to load vessels out of turn following the return of good weather, to the extent that such loading out of turn does not materially delay the loading of other vessels in line. For example, in the event that weather or other reasons make it necessary for vessels awaiting berth to leave the terminal and put to sea, Khemco may load another vessel after the port opens, but before the return of the vessels waiting in line ahead of it. And further, Khemco reserves the right to decline to berth a specific vessel if its condition or facilities are unsafe for berthing or loading, but berths other vessels "out of turn".

C. Gangway. When alongside the jetty, vessels shall provide an efficient gangway with a net rigged underneath. During the hours of darkness, they shall install adequate safe lighting for the gangway. These lights are in addition to those used for the deck illumination.

D. Sailing. All lines are dropped by means of quick-release hooks, fitted on all dolphins and under normal conditions 1 tug is used on the hook at the bow of the vessel in order to clear her off the berth. Usually the documents are signed before departure, unless the berth is needed for another ship.

BALLAST: A. Rules and Regulations. Vessels arriving at Kharg should maintain a reasonable draft fore and aft for safe manoeuvring and berthing. When conditions permit, the Berthing Master will advise the Master to commence discharging ballast. It is the Master's responsibility to see that dirty ballast, whatsoever, is not pumped or spilled overboard. Only clean ballast or bilge water may be discharged within 50 miles of the coast-line. In the event of contaminated ballast or bilge water, the vessel will be required to divert this material to a ship's slop tank. Otherwise, the vessel may be unberthed and returned to a point not less than 50 miles from the coast line to discharge contaminated ballast.

There are no ballast disposal facilities at Kharg Island.

Masters are requested to arrive at Kharg with clean tanks, pipe-lines, sea suctions, strainers and pumps. Ships will not be accepted for loading if evidence of any dirty ballast is observed.

Any vessel returned to a position at least 50 miles off-shore to discharge dirty ballast, or for any similar reason, automatically nullifies any "Notice of Readiness" already tendered and loses any priority held for loading. The vessel will be entered for loading at the time of second arrival when a new "Notice of Readiness" will be tendered.

B. Loading and Deballasting Simultaneously. Vessels are permitted to load cargo and discharge clean ballast at the same time provided all safety and other aspects are observed.

C. Tank Cleaning. Ship-tank cleaning will not be allowed at the pier. Ships will be allowed to draw sea water ballast while alongside.

LOADING: A. Ship's Gear. Although the jetty is equipped with a boom to handle loading hoses, ships are requested to rig jetty side boom in a proper and safe manner for possible use. Masters will be responsible for ensuring that the ships gear or fittings are in good working order and will not in any way interfere with or hamper the working of the facilities.

B. Inspection. After the vessel has been berthed and all formalities carried out the vessel will be boarded by the loading Master. A joint inspection will be made by an authorised ship's officer and the loading Master after the exchange of information and documents. If the ship's tanks, piping or equipment are in such condition that a potential hazard exists, the ships will be refused permission to load until such hazards are corrected. In any case, the owners or charterers of the ship will be notified of any delay or refusal to load because of hazardous conditions and any expense due to such delay or refusal to load will be borne by owners.

If the ship does not arrive with tanks and/or piping sufficiently

cooled to permit loading, the time required to cool down shall not be counted as lay time. Any expenses, including LPG furnished by company, demurrage, etc., involved with the cool-down period and operation shall be borne by the owners or charterers of the vessel.

Should the vessel arrive at the loading terminal with inert gas in its tanks, after purging from a previous cargo of ammonia or other gas to prevent contamination of shore lines and facilities, the inert gas should be vented if possible before ship is moored. If the ship's tanks to be loaded previously contained a product different from what is to be loaded, the Master shall verify that the tanks are clean and ready to receive Kharg Chemical cargo.

C. Loading Propane and/or Butane. 1. General Information. No loading will begin until the ship is safely moored with fibre mooring lines, gangway lowered and secured, the ship grounded and ground tested, ship's and shore emergency fire hose pressurised and ready for use, fire wire in place, and ship/shore communications tested and in good working order.

All loading personnel will wear fibreglass hard hats, leather-palmed gloves, cotton long-sleeved shirts, long cotton trousers, cotton socks, and sandals or shoes that do not have spark-generating material, such as steel nails, cleats, toe or heel plates. Non-sparking tools will be used in making hose and ground connections. Silk clothing or headgear will not be permitted due to its affinity for collecting static electricity. Ship's grounds will be tested for continuity to shore before product or vapours pass through hoses.

Since the LPG may not contain an odorant, particular care shall be taken that the atmosphere does not become explosive. If there is no air movement, explosimeter readings will be taken hourly, and if an explosive atmosphere exists, loading shall stop until conditions change. Prior to loading the main cargo a small quantity of propane and/or butane will be loaded or circulated initially for cooling down purposes. The amount set aside for cooling down will depend on whether the cool down is for the ship's lines or ship's tanks. Generally, the ship's lines will be cooled down before loading each parcel.

Although a small amount of refrigerated LPG is normally retained in the bottoms of the ship's cargo tank during the trip to Kharg Island, the tank vapour space and tank walls are warmer. For a period of about an hour while low temperature circulation of the shore lines continues, a small amount of propane may be taken by the ship from cargo holds and sprayed into ship's tanks. This method cools the upper parts of the ship's tanks and vapour spaces. If propane is taken from shore lines, this is replaced from shore tankage as the circulating pump suction is "floating" on the shore tank outlet line.

The enclosed spaces around ship cargo tanks and double bulkheads should be frequently monitored by ship's personnel for cargo leakage.

The measures for dealing with any leakage to prevent the temperature of the hull structure from falling below a safe level depends upon the ship's design. The Master shall have standing orders for dealing with any leakage observed on the ship and shall so inform the Loading Master.

2. Loading Master and Jetty Operator. Once the vessel has been berthed, berth will be manned at all times by an operator, who will be stationed in the immediate vicinity of the berth loading bay. All information and forms will be passed by the Loading Master prior to commencement of loading.

3. Alarms. All alarm systems on vessel and communications between the jetty and control room shall be checked before loading is begun. Masters are requested to make the Loading Master fully familiar with the vessel's alarm systems. Otherwise, confusion may occur between loading alarms and fire alarms.

4. Connecting Loading Hoses. The loading and vapour-return hoses will be well supported and laid along the pier. Each hose and hose valve will be supported by jacks on ship's deck. Hoses will be protected by rope mesh. Once the loading hoses are connected they will be adjusted during loading operations. The shore and ship personnel shall be careful not to kink, stretch or damage hoses. Hoses not used will be blanked. Hose flanges will be completely bolted and shrouded.

Size of Hoses; propane 8 in. (with 8 in. ASA 150 flanges); butane 8 in. (with 8 in. ASA 150 flanges); vapour 6 in. (6 in. ASA flanges).

5. Air. It is most important that no air is allowed to enter either the ship or shore loading lines. All hoses and spools must be purged free of air after being connected.

Provision is made on shore for purging air from LPG and vent hoses on completion of hose connection to ship and for purging LPG vapour from hoses before disconnecting when loading is finished. Provision is made to supply inert gas for this purpose. Provision is also made for disposal of remaining liquid in hoses safely and effectively from shore connection of hoses before disconnecting and gas purging of hoses when loading is finished. Valves and connections are provided for this purpose on the shore end. All ice must be removed from around hose insulating gasket prior to hose disconnection. Cargo hoses shall be blanked and be removed from ship. Ground wires will remain connected until ship's gangway is removed and ship is ready to depart.

6. Loading Pressure. Loading pressure should not exceed 50 psi at any time.

7. Ship's Compressor. During loading, the ship may pump vapours ashore via the ship's compressor. The Loading Master should be advised before the compressor is started or stopped.

8. Loading Rates. Maximum loading rates for LPG products are as follows:

Propane (2 lines)	10,900 barrels per hour
Butane (2 lines)	7,800 ,, ,, ,,
Propane (1 line, pumping)	7,000 ,, ,, ,,
Butane (1 line gravitating)	3,900 ,, ,, ,,

It is more important that the Loading Master be informed before any changes are made by the ship in the vapour compression operation. He then will inform the shore loading area. Starting and stopping compressors on the ship affect the shore tank pressures and can result in damage to tanks and pumps. Ship's valves should under no circumstances be partially or completely closed against LPG flow without first informing the Loading Master. Pumping rates will normally be adjusted from the shore loading area.

The ship's Master is responsible for his ship at all times. The company Loading Master will advise the Master in respect to loading pressures and hazards, but will not direct the loading except as may be necessary to protect their terminal's facilities or to prevent any hazards. Manipulation of ship's valves is the direct responsibility of ship's personnel.

LPG loading will be done on a 24-hours basis; hence the Master of the vessel, while alongside the LPG loading pier, will be responsible for the provision of adequate explosion proof lights, fittings and switches in all parts of the vessel where work is being carried out in any way connected with loading of LPG.

The ship's pipe-lines/vent system and/or liquification system shall be manifolded so that only those pipe-lines connected to the ship's tank being loaded will be open. All other pipe-lines' lines shall be closed and outlets blinded.

All doorways, vents, ports, air-conditioner intakes and other openings into which gaseous vapours could enter shall be closed.

During loading, there shall be no smoking, no open lights and no galley fire on the ship or in the vicinity of the pier.

Packaged goods, bunkers, water, freight and ship stores shall not be loaded or discharged during loading. Visitors will not be permitted on the ship during loading.

Loading of LPG shall be stopped whenever weather or sea conditions are hazardous to the ship, dolphins, LPG hose and manifold, adjacent vessels or personnel. The Senior Terminal Representative and authorised Ship's Officer shall jointly judge if such conditions exist. In case of dispute, the Senior Terminal Representative's judgement shall be followed.

During severe thunder storms, sand storms and electrical storms in the vicinity of the ship, loading shall cease until the storm subsides.

9. Strainer Boxes. It is important that no ice, pipe scale, etc., be allowed into the vessels' tanks. The ship should have strainers placed immediately upstream of the manifold valves. A careful watch must be kept on the pressure to prevent the strainers being blocked and periodically the strainers should be cleaned by using the built-in wiper, which should be turned clockwise only. In case of an absolute blockage loading will have to be suspended and the strainer cleaned, if necessary by removal. If one of the vessel's strainers is blocked, it may be possible to continue on the other hose.

10. Completion of Loading. A reduction in loading rate before topping of the final tank or tanks may be arranged through the Loading Master by the ship's officer in charge. When the vessel asks for a slow rate, the loading pump will be shut-down and valves re-aligned for circulation. The vessel should then complete loading at its own controlled rate off the circulation flow. The terminal might ask for a suspension of loading while re-aligning the circulation pump. When required to stop completely, the Loading Master should be advised.

11. Hose Disconnection. When disconnecting hoses in order to change or clean a strainer at the time of completion of loading, the following points must be remembered:

(a) All ice must be removed from around the hose insulating gaskets prior to disconnecting.
(b) The hoses and hose valves must be secured to the vessel to avoid slipping or twisting. This is best done with rope and/or pulleys.
(c) The hose valves and ship's manifold valves must be shut.
(d) The vessel's vent valves must be open either to the atmosphere or to the vapour return hoses.
(e) The ship's strainer and all pipes and flanges between the hose and manifold valves must be de-iced.
(f) The hose can then be disconnected, but the ship's manifold valves, vapour return valves and hose valves must be shut.

D. Loading of Bulk Sulphur. All rules and regulations concerning LPG loading also apply to sulphur.

1. Inspection. The joint inspection of the ship and the ship's holds to be loaded with sulphur will be made by the Loading Master and authorised ship's officer. If the condition of the ship's holds presents a potential hazard to personnel, sea or shore facilities, the ship will be refused permission to load until conditions are corrected. The Master shall bear the responsibility for notifying the owners or charterers of the ship of any delay or refusal to load because of hazardous conditions and any expenses due to such delay or refusal to load shall be borne by them. The company reserves the right to refuse loading and their decision is final.

If the ship's cargo holds are not clean or are so hot and/or contain residue (such as excessive rust, sand-scrap iron, minerals, or mineral dust) that alone or in combination with sulphur or sulphur dust would contaminate sulphur being loaded, oxidise with sulphur, or cause a fire or explosion of the sulphur cargo, permission to load sulphur will be withheld until this condition is corrected.

2. General Information. Bulk Sulphur is loaded at 500 t.p.h. via a conveyor. The conveyor extends from the shore storage area along the causeway, trestle and finally to the main dolphin close to the ship's holds.

No loading will begin until the ship is safely grounded, moored with fibre lines, fire hoses pressurised, ship-to-shore communications operable and the chute grounded.

In order to minimise movement of fine sulphur dust, cowl ventilators serving hold into which sulphur is being loaded shall be blanked off to prevent circulation of air. Package goods, bunkers, water, freight, ship stores shall not be loaded or discharged during or after sulphur loading.

When sulphur is loaded in a deep hold with general cargo in the tween deck hold above the sulphur, the ship's Master will be responsible for installing a dust proof wooden bulk head enclosure in the hatchways from the over deck of the lower hold to the weather deck forming a tight enclosure to prevent sulphur dust from entering the tween decks during loading. Ceilings shall be tight to prevent sulphur dust from entering bilges. Any chinking at tank tops or bilge will be of non-combustible material.

Masters to maintain sufficient personnel to adjust and maintain chute position, gangways and keep mooring lines taut as ship is loaded.

If sulphur is loaded into a hatch already containing sulphur, representative samples may be requested by the terminal to determine quality.

Since the sulphur loading facility at the pier is fixed the ship will be warped and moored so that various ships holds that will receive sulphur can be loaded.

After each warping the ship will be moored and grounded and chute grounded. The hold to be loaded will be checked with an explosimeter to be certain that the hold is not in the explosive range. Personnel entering cargo holds for inspection must be equipped with life-lines and belts with non-sparking hardware, goggles with green tinted lenses, and self-contained breathing apparatus with a mask covering eyes and nose. The life-lines shall be of sufficient length and strength that 1 line could be used to pull a man out of a hatch. For each man working in the hold 1 man on deck must attend his life-lines. Personnel in the hold must wear gauntlet gloves, high-top shoes, long cotton socks, a fibre glass hard hat with a cotton cap ear flaps covering the head and ears, pants fastened at the cuff and long-sleeve shirts buttoned at the neck and wrists. Silk clothing or headgear will not be permitted due to its affinity for collecting static. Cotton clothing material is preferred.

Only the hatch being loaded with sulphur will be open. All other ship hold hatches must be closed. All doorways, vents, ports, air scoops, air conditioner intakes and other openings into which sulphur dust could enter should be closed during loading. After loading and trimming a hold, the hold hatch cover shall be closed and the next hatch to receive sulphur will be opened. The pier sulphur loading tower can be raised and lowered as well as rotated in order that the cargo hold being loaded can be evenly trimmed with little or no manual trimming. Each time the tower is moved the chute shall be grounded. No hand cargo load trimming will be allowed while the pier loading sulphur tower is in operation. The tower down-spout drop distance will be adjusted to minimise sulphur dusting.

The loading-tower operator will be advised by authorised ship's personnel on the deck by use of agreed hand signals of any hazards such as deck cargo, life boats, aerial guy wires, etc., that can do damage to loading tower. Personnel will work upwind as much as possible to minimise sulphur dust inhalation or sulphur on skin. Eye baths and showers are located at the dock and will be ready for use if needed.

No loading will be done until all personnel are out of ship's cargo holds. The ship's authorised officer shall assign personnel to sweep sulphur dust into cargo holds to minimise pollution of the adjacent sea water. If shovels or scoops are used the shovels must be of a non-sparking material such as monel. Personnel working cargo holds or on deck shall not be permitted to wear shoes with steel nails, or metal heels or toe plates that could cause sparking.

Loading of sulphur will be stopped whenever weather or sea conditions are hazardous to the ship, pier, dolphins, sulphur loading tower, pier equipment, adjacent vessels or personnel.

Sulphur dust, like most poor electrical conductors rapidly acquires a static charge under dry atmospheric conditions. To minimise this hazard the loading tower is equipped with water spray nozzles to humidify the sulphur and reduce dusting. Conveyor hoppers are also equipped with sprays.

During severe weather conditions loading will cease and cargo hold hatches shall be closed until the storm or seas subside.

Sulphur loading will be done on a 24-hour basis. The Master of the vessel while alongside the sulphur loading pier will be responsible for the provision of adequate explosion proof lights, fittings and switches in all parts of the vessel where work is being carried out in any way connected with loading. The Master of the vessel will assign authorised ship's officers and men as deemed necessary for the safe loading of the ship and to adjust mooring lines and keep sulphur dusting to a minimum.

FUEL: Presently no bunker facilities are available at Khemco jetty. However, 2 grades (marine fuel oil and marine diesel oil) are available at OSCO main jetty. This is supplied to vessels having made previous arrangements and obtained nomination.

WEATHER: A. Climate. The climate along the coast of Kharg Island is generally mild. The days in mid-Summer are extremely warm and humid with the temperature reaching 117°F. (47°C.) and a relative humidity ranging from 10% to 98%. The Winter months, from November to March, are pleasant with a minimum temperature of about 39°F. (4°C.). Freezing weather is uncommon.

B. Weather Data and Summary.

Average annual rainfall	8 in.
Mean maximum temperature	87°F.
Mean minimum temperature	66°F.
Extreme maximum temperature	117°F.
Extreme minimum temperature	39°F.
Average relative humidity	59%

C. Winds. Wind directions and velocity are subject to rapid change without warning and precautions are necessary to avoid difficulties. The heaviest seas and swells are from the N.E. through S.E. The prevailing wind for most of the year is from the N.W., but during the Winter period strong S.E. storms occur with very little warning. The Khemco jetty is sheltered from the N.W. winds.

D. Tides. The tidal range is between 7 and 8 ft., with a maximum rate of about 1.5 knots. The tidal streams run approximately parallel to the line of the jetty, with occasional cross currents.

E. Sea Temperatures. The surface temperature of the sea ranges from 63°F. to 97°F., depending on the season.

SAFETY: Masters of vessels are responsible for the safety of their vessels including, but not limited to compliance with official precautions, and must take all necessary precautions while the vessels are alongside the Khemco jetty. While the vessels are alongside the jetty, all personnel must comply with all port's safety rules and regulations.

GENERAL: *(a)* Shore Leave. Shore leave at the terminal must be arranged between Master and ship's Agent. Sufficient personnel must be on board at all times for emergencies.

(b) Visitors. Due to hazards involved, no visitors are allowed while the vessel is alongside the Khemco jetty.

(c) Light Dues. A charge of half a Rial per g.r.t. is levied on each vessel for light dues by the Iranian Government. This is in addition to light dues for Middle East navigation. The company shall have no responsibility in respect of any taxes, dues, or other charges levied by the Iranian Government or any of its departments or agencies.

(d) Painting and Scaling. Painting, chipping, scaling and any repairs on deck or overside is strictly prohibited while vessel is alongside the Khemco jetty.

(e) Garbage. Dumping of garbage and refuse strictly prohibited in port area.

(f) Repairs. No workshops or other facilities for repairs at Kharg Island.

(g) Customs. There are customs and other offical offices on the Island. Vessel will normally be boarded by a custom director, immigration officer and director of Ports and Shipping.

(h) Consulates. No consulates on Kharg Island. Nearest consulates or diplomatic representatives are at Khorramshahr.

(i) Marine Surveyor. No marine surveyor on the Island, but can be available at 48 hours notice through ship's Agent.

(j) Recreation Centre. Use of Seamen's Club will be cleared through NIOC and Consortium. If used, transportation to and from Club will be provided by the Agent.

(k) Supplies. No provision of any kind is available at Kharg Island. No fresh water is available for delivery to the ships. No laundry services are available at Kharg Island.

(l) Mail. Regular plane services between Kharg Island and the mainland and mail receiving and dispatching can be arranged through ship's Agent.

AGENTS: Gulf Agency Co. (Iran) Ltd., POB 110, Khorramshahr, Iran. Tel. 2280, 2278, 4755/58. Cables: "Confidence", Khorramshahr. Telex. 654033, 65400, 654051 (answerback: "GAC IR").

Due to the difficulty in reaching Khorramshahr with international telex messages recommend you to communicate via our Tehran office, Telex No. 212507, 212856, 213043 and 213044. Tehran, (answerback: "GAC IR"), stating in your message "For Khorramshahr".

Recommend that all urgent communications be sent by Cable directly to Khorramshahr.

Ships' mail and spare-parts for vessels calling at Khemco Terminal are to be routed by flights arriving directly to Abadan Airport without transhipment at Tehran, and addressed to: Gulf Agency Co. (Iran) Ltd., POB 62, Abadan, Iran.

KHORRAMSHAHR: 30.26 N. 48.10 E.

Khorramshahr is in Province of Khuzistan. Town is the seat of a Governor and a base for Imperial Iranian Navy with an admiral permanently stationed in command.

Khorramshahr lies at confluence of Karoon and Shatt-el-Arab Rivers and is principal commercial port of Iran. Khorramshahr is terminus for Imperial Iranian Railway system and regular train service to rest of country is available. Good asphalt road connecting Khorramshahr to other major cities in country.

DOCUMENTS:

(a) Iraqi Quarantine Officer. Vessels arriving Outer Bar (Shatt-el-Arab Pilot station) will be boarded by Iraqi Quarantine Officer who will check all crew vaccination cards. Masters requested notify Fao Quarantine Office at least 18 hours prior vessel's arrival Outer Bar giving exact arrival time Outer Bar enabling Quarantine personnel board vessel immediately. Upon arrival Outer Bar, Master should have ready a copy of Crew List and crew vaccination certificates for presentation to Quarantine Officer.

(b) Iranian Quarantine Officer. Upon arrival Khorramshahr anchorage and prior berthing, the Iranian Quarantine Officer will board vessel. He requires 1 copy Crew List, and all vaccination cards should be available for inspection.

(c) Customs Officer. Customs officer boards ship at anchorage or

alongside Khorramshahr jetty (in case of immediate berthing) and requires following documents:

Crew List (2 copies).
Stores List (2 copies).
(d) Port Authorities.
Crew List plus (1 copy).

Arrival information form of the port Administration will be supplied to the Master in duplicate upon arrival, by a port representative. This form should be filled in and returned to the port Berthing Master.

(e) Agents.
Crew List (2 copies, for arranging shore passes).

Order avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Khorramshahr Agents as far in advance of vessel's arrival as possible:

Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies each).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions etc. (if any) be reported early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch Lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

PILOTAGE: With exception of ships of Government of Iran or Iraq and sailing craft, pilotage compulsory for all vessels entering, leaving or navigating in the Shatt-el-Arab. Pilotage in river outside harbour limits of Khorramshahr conducted by River pilot; within limits of Port by Harbour Master.

Vessels entering Shatt-el-Arab boarded by river Pilot from Pilot vessel situated in proximity of Rooka Buoy (29° 49′ N. and 48° 47′ E.), showing a white flash every 6 seconds and equipped with Radar Reflector.

Vessels bound for Khorramshahr are conducted by River Pilot as far as Khorramshahr Anchorage, from where a Harbour Master (Iranian) will board vessel and berth her as necessary.

Pilotage, dredging and other navigational dues are collected by Basrah Port Authorities and must be settled directly with Iraqi Maritime Transport Co. Ltd., Basrah, Iraq.

N.B. Owners having vessels bound for Khorramshahr or Abadan should contact Iraqi Maritime Transport Co. Ltd., Basrah, cables "Bawakhir", Basrah, about arranging of Shatt-el-Arab pilotage. Owners should also put Messrs. Iraqi Maritime Transport Co. Ltd. in funds by remittance well in time before vessel reaches the Outer Bar of Shatt-el-Arab in order to cover port tonnage dues, pilotage and dredging dues for sailing from Outer Bar to Abadan or Khorramshahr and return.

ANCHORAGES: On arrival off the pilot boat vessel can anchor with no depth restriction. On entering the Shatt-el-Arab River the following are the recognised anchorages:

Kasba Anchorage, position about 2 miles above Fao with a max. depth of 35 ft. in fresh water.

Bawarda Anchorage, position about 2 miles above Abadan with a max. depth of 31 ft. in fresh water.

Hartha Point, position about 20 miles above Abadan and 15 miles below Khorramshahr with a max. depth of 35 ft. in fresh water. Hartha Point is the anchorage to enable vessels to lighten to 29 ft. in fresh water to enable them to cross the Karun Bar.

Abu Flus, position about 16 miles above Hartha Point and about 14 miles below Basrah (Khora Anchorage) with a max. depth of 29 ft. in fresh water.

MAX. SIZE: Maximum permissible length for vessels calling Khorramshahr is 525 ft. max. draft for crossing Karun Bar and also at Khorramshahr (Failieth) anchorage is 29 ft., fresh water. Max. draft at Karun Bar in December 1976 was 26 ft. so it is advisable to check before vessel proceeds to the port. The depth alongside Berth Nos. 1 to 3 is 27 ft., Berth Nos. 4 to 7 is 26 ft., and Berth Nos. 8 and 9 is 29 ft.

SPEED RESTRICTIONS: Engine speed must be reduced well in advance so that the vessel's speed when passing jetties at Khorramshahr and Abadan will not exceed 3.5 knots for vessels with more than 20 ft. draft, and 5 knots for all other vessels of over 100 g.r.t.

The same speed restrictions will apply in the Arbandud when passing ships at anchor with barges or other vessels moored alongside, tugs with barges or other vessels in tow, and vessels engaged in dredging or other salvage work.

SHIP'S REGISTRATION: Ships have to register upon arrival at outer bar by sending telegram to Port Director Khorramshahr via EQK Khorramshahr Port Radio. At present the vessel, after registering her turn should wait at outer bar. If vessel proceeds to another port for discharging, her registration will not be valid. Vessel after registration of berthing turn for Khorramshahr can however call at Abadan Port during waiting period without losing her turn.

HEALTH: See "Documents". Inward clearance is effected on board after receiving free pratique.

RADIO: Khorramshahr Port Radio, call sign EQK, 500 kHz, 1282 mHz.

Khorramshahr Harbour Master can be contacted on VHF Channels 13 and 16, 18 and 25.

Vessels destined for Khorramshahr should send a radio message to the Port Director Khorramshahr and to the ship's Agent 24 hours prior arrival at the Arvandrud Pilot Station (Outer Bar). Times should be quoted in GMT. Also see "Ship's Registration".

TUGS: The Port Organisation of Khorramshahr owns 2 tug-boats which are used for assisting berthing and unberthing whenever necessary. No tug boats which could be used for long-distance towage. Employment of tug-boats is not compulsory.

BERTHING: See "Ship's Registration". Berthing and unberthing performed by Iranian Harbour Masters supplied by Iranian Port Administration, Khorramshahr. Berthing turn, allocation of berth and anchorage space is under the control of Iranian Port Administration, Khorramshahr.

The Port consists of 3,199 ft. long jetty constructed with wooden piles (Berths 1 to 7) plus the new extension covering 1,000 ft., built by steel/concrete piles (Berths 8 and 9) running parallel with river bank. Jetty can receive 9 ocean-going vessels at a time.

CARGO HANDLING: *(a) Jetty.* All cargo handling/operations on shore, under control of Khorramshahr Port Administration. General cargo discharged from ships alongside jetty is received on domestic railway wagons and trailers controlled by Port Administration, and transported to Port Warehouses or open yards. Port Warehouse/Store keepers will later deliver cargo to consignees against clearance papers issued by Customs. There are no shore cranes and no floating cranes available for the purpose of discharging cargo. All cargo must be discharged by ship's own gear, and vessels calling at Khorramshahr should not accept cargo beyond their gear capacity to discharge.

(b) Barges. (i) General Cargo: Vessels carrying less than 500 tons cargo are permitted to discharge their cargo into barges, in which case all extra expenses and costs of barging, discharging ex barges, etc., are to be borne by the carriers and such operation is entirely at the risk and responsibility of the respective carrier.

(ii) Structural Iron/Steel: Structural iron/steel is always to be discharged in barges for unloading at Failieh Creek. Barges must be arranged by vessel's Agents, who also have to arrange labour for discharging the cargo ex barge at Failieh, sorting of the iron, and delivery to consignees. Agents should also employ watchmen for protecting the cargo while awaiting delivery to consignees, also tally clerk for supervising sorting and delivery of iron to the respective consignees. Against these services Agents are presently collecting Rials 110 per ton of 1,000 kilos as a landing charge from the consignees. This rate has been agreed upon between the Agents and the Chamber of Commerce of Khorramshahr.

(c) Cranes. For use in loading/unloading cargo *in the storage areas,* cranes are all used in the port yard *for unloading cargo ex rail wagons* and loading on to merchants' trucks.

There is 1 electric crane permanently installed at Failieh Creek with lifting capacity said to be 100/120 tons. This crane can be used for discharging cargo from barges at Failieh barge jetty.

(d) Storage. 19 warehouses (goods sheds), plus an open yard between the warehouses used for storing iron goods, as well as cargoes which can be stored in the open.

(e) Wagons/Trailers. For receiving cargo ex-vessels alongside jetty the Authorities have 160 rail wagons and 77 trailers with average capacity of 10 tons, but number of wagons/trailers provided to each vessel not sufficient to last 24 hours work at jetty. Although 24-hours working alongside jetty is compulsory, due to shortage of wagons hardly 12/18 hours work can be accomplished efficiently. A stand-by of 6/7 hours in Summer and of 9/11 hours in Winter is unavoidable.

(f) Delivery of cargo discharged at jetty. Port Authorities considered as direct receivers of the cargo discharged, who in turn deliver same to ultimate consignees against presentation of the carrier's agents' Delivery Order.

Carrier's responsibility for cargoes discharged in good condition cease under tackle; slings are opened by labourers provided on wagons alongside each vessel. Broken packages are not permitted (by Customs) to be discharged on the wagons, and are therefore collected on board. Once daily, under full control of ship's officer, port supervisor and carrier's supervisor, the broken packages are delivered to Port Authorities and an official Process-verbal will be drawn by respective warehouse-keeper corresponding to remarks noted at the time. This arrangement is to prevent any delay to operations of the vessel.

(g) Overtime Costs. Wages of port staff on board for official hours are borne by port Authorities but overtime and food allowance are paid by carriers.

(h) Port Working Hours (Ordinary). Summer 0600 to 1400 hrs.; 1700 to 0100 hrs.; Winter 0700 to 1500 hrs.; 1700 to 0100 hrs. (Overtime) 0100 to 0500 hrs.

24 hour discharging at jetty is compulsory. The only stoppages are for lunch and dinner, 1 hour each. In Summer season, however, due to heat, discharging at jetty is stopped from 1400 to 1700 hrs.

(i) Liquid Cargo. Due to non availability of tank barges as well as storage area at Bandar Shahpour, vessels carrying liquid cargo are bound to call at Khorramshahr, where consignees have their own tank-barges and storage tanks. This being the case, the Port Authorities do not divert vessels carrying liquid cargo, to Bandar Shahpour.

In the port of Khorramshahr, importers of vegetable oil and other liquid commodities, have arranged their own storage area outside Customs yard, and liquid consignments will be received directly ex-vessel into consignees' barges without any expenses to carrier. (Discharging performed at anchorage.)

Vessels carrying part-liquid cargo can discharge their cargo while awaiting a berth or alongside jetty, whilst unloading other cargo on the pier.

Further to above, whenever Port Authorities divert any vessel to Bandar Shahpour, in the diversion order they indicate "Subject no liquid cargo on board", as vessels with liquid cargo will have to be accepted in the port of Khorramshahr.

Notice of Readiness for vessels carrying liquid cargo, has to be

tendered after vessel has anchored at Khorramshahr anchorage (within Khorramshahr port limits). If, due to congestion, there is no space at Khorramshahr anchorage, vessels may have to remain at Arvandrud Pilot station for 1 or 2 days before entering the river.

(j) *Dangerous Cargo.* Dangerous cargoes are divided in two categories:

1. Acid and flammable cargoes.
2. Explosives such as dynamite, etc.

Vessels carrying acid and flammable cargoes are accepted alongside Khorramshahr berths to unload their general cargo plus dangerous cargo, and Port Authorities unload the dangerous cargo in a yard at Failieh, which yard is mainly used for storing iron joists, but a part is allocated for dangerous cargo.

Vessels carrying explosives are not allowed to berth at Khorramshahr. Recently the Port Authorities have stopped accepting any vessel with explosive cargo on board into the port of Khorramshahr, and those vessels have to proceed directly to Bandar Shahpour before calling Khorramshahr for discharging general cargo, if any. The main port for discharging explosive and special cargoes consigned to Iranian Army is Bandar Shahpour, where the Army have an agreement with the Port Authorities for 1 berth out of the 6 berths. Berth No. 3 is allocated for vessels carrying cargo consigned to Iranian Army, and whenever such vessel arrives at Bandar Shahpour it will be berthed immediately, even if the port is congested; in other words, vessels with Army cargo have priority for berthing.

FREIGHT TAX: Freight tax is payable on any freight earned in Iran for any export cargo loaded at any Iranian port. Per article 90 of Tax Law, freight tax is payable at the rate of 5 per cent on gross freight, regardless of whether freight is collected in Iran or elsewhere. There is no tax on import cargo freight regardless of where the freight is paid. In other words, for cargo discharged in Iranian ports, even if freight is payable at destination to be collected in Iran, there is no tax applicable.

MEDICAL: Private doctors and hospitals located in the town for medical and dental treatment and hospitalisation. Arrangements for patients' visits to the doctors, dentists and hospital will be made by Agents upon request. In case of emergency special medical attendance on board can also be arranged. X-Rays, radiographies, blood and urine tests can also be conducted by equipped hospitals existing in Khorramshahr and Abadan.

DENSITY: Fresh.

FRESH WATER: Fresh water supply alongside berth available by pipe-lines and at anchorage by barges, capacity 100 tons.

FUEL: Bunkers are not available at Khorramshahr Jetty, and cannot be supplied by barge. All classes of bunkers are supplied at Abadan jetties only. Bunkers could be obtained from Abadan provided arrangement for supply has been made beforehand with Iranian Oil Participants, London (Iranop London).

DEVELOPMENT: Intention to extend use of trailers and tractors and to eliminate use of railway wagons.

CUSTOMS ALLOWANCES: After receipt of documents, the Customs Officer will seal the store room. All liquor and cigarette stocks will be sealed and reasonable ship's requirements while in port should be taken from store before sealing. This amount recommended to be assessed and be ready for removal from the stores prior to the vessel's arrival in port. During the stay at the port, and upon request and giving prior notice to the Agents' supervisor on board, arrangements may be made to have the Customs officials open the stores to issue further quantities of stores for crew consumption.

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photograph ready on arrival at the port to facilitate obtaining shore passes.

All officers and crew of ships lying at jetties or anchorage of the Port of Khorramshahr to carry their Seamen's Books with them when going ashore. At the gate, the Seamen's Books will be checked by the Police against the shore pass of each crew member, the Seamen's Book will then be kept by the Police and will be returned to the holder when returning through the gate.

CONSULS:

Denmark	Tel. 2203	Norway	Tel. 2616
France	Tel. 3656	Sweden	Tel. 2280
India	Tel. 3056	U.S.A.	Tel. 2196
Netherlands	Tel. 3628		

REPAIRS: Minor repairs can be carried out to a limited extent by private workshops existing at Khorramshahr. However due to lack of skilled workers the workshops in question do not undertake any responsibility or guarantee for the jobs performed, and charges are high.

For radar, wireless, echo-sounders, etc. as well as refrigerator and air condition service there are a few engineering groups at Khorramshahr as well as Abadan, and technicians of these groups will attend to the repairs on board both at Khorramshahr and Abadan jetties or at anchorage, upon request.

Ships moored to the jetty are not permitted to disable main power-plants for repairs without prior approval of Marine Department. A port tug will be assigned to stand by alongside ship with tow line attached during entire period while plant is disabled.

DRY DOCKS: None.

SURVEYORS: Lloyd's Register; Det Norsk Veritas; Bureau Veritas. Surveyors for ordinary damage to cargo and/or ship as well as for on-hire/off-hire survey can be arranged by Agents.

AIRPORT: Abadan International Airport about 10 minutes by car.

TIME: GMT plus 3.5 hours.

TELEPHONES: May be placed on board.

SHORE LEAVE: See "Identification Cards".

DELAYS: The port of Khorramshahr is generally congested, with a waiting time of about 2/5 days. Port Administration sometimes orders vessels to discharge their Khorramshahr manifested cargo in Bandar Shahpour to ease the congestion at Khorramshahr.

PROVISIONS: Fresh provisions in limited quantity can be obtained but large quantities of provisions sometimes may not be possible to arrange due to the fact that the Municipality is controlling the market and sometimes may prohibit the supply of the items which are in short supply. Due to certain formalities involved in supplying provisions to vessels, it is requested that 24-hour notice be given to the shipchandler.

STORES: Local commodities only available. Bonded stores not available.

LAUNDRY: Laundryman can be arranged upon request.

DEVELOPMENTS: As additions to the existing 9 jetties, 4 new jetties are under construction suitable for vessels of up to 10,000 d.w.t. and are expected to be completed early 1977. Length of jetties will be 720 m., and construction will include sheds of 20,000 sq.m. and an open area of 31,500 sq.m.

In the Failieh Canal, where steel cargo is discharged from barges, the existing jetty has been extended 500 m. This jetty can accommodate 15 barges, and has an open area of 15,000 sq.m. Construction of the extension has been completed, and dredging is taking place to increase the depth available to the barges.

AUTHORITY: Ports and Shipping Organisation, Koutcheh Simorgh No. 24 Tehran, Iran.

Khorramshahr Port Doctor. Ministry of Finance – Ports and Shipping Organisation Port Administration of Khorramshahr.

AGENTS: Gulf Agency Co. (Iran) Ltd., serving: Khorramshahr, Abadan, Bandar Shahpour, Bandar Mahshahr, Ras Bahregan, Kharg Island (Kharg, Darius and Cyrus Terminals), Bushire, Lavan Island and Bandar Abbas. Freight Booking Office: Tehran.

Head Office: Khorramshahr: Gulf Agency Co. (Iran) Ltd., POB 110, Khorramshahr, Iran. Cables: "Confidence", Khorramshahr. Tel. 2280, 2278, 4755/58; after office hours: 2670, 2950, 3193. Telex: 654033, 654000, 654051 (answerback "GAC IR").

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Branch Offices: Abadan, Bandar Shahpour, Bandar Mahshahr, Kharg Island, Bushire, Lavan Island, Bandar Abbas and Ras Bahregan (SIRIP). Cable address to all Gulf Agency Company branches: "Confidence".

LAVAN ISLAND: 26.47 N. 53.20 E. (See Plan)

Terminal:

Lavan Island Loading Terminal. 26° 47′ 10″ N. 53° 20′ 30″ E. Operators: Lavan Petroleum Co. ("LAPCO").

LOCATION: Lavan Island (shown on some charts and pilot publications as Sheikh Shuaib) lies on the North side of the Gulf about 6 miles from the mainland with Lavan Island Loading Terminal in Lat. 26° 47′ 06″ N., Long. 53° 20′ 30″ E., which is on the S.E. end of Lavan Island.

The island, roughly eliptical in shape, is about 13 miles in length, with a maximum width about 2 miles. It is light brown in colour and its Eastern and Western extremities are low but thence it rises to a number of hummocks having a maximum elevation of 180′ on the West part. Crude oil is delivered from Sassan Oil Field to the terminal by a 22 in. diameter submarine pipe-line which runs seaward from the island on a bearing 188° from a position in Lat. 26° 47′ 32″ N., Long. 53° 20′ 05″ E. for a distance of 76 miles where it joins the Sassan Oil Field. The Company Flow Station and Pumping Station are located in position Lat. 25° 32′ 16″ N., Long. 53° 09′ 01″ E. in the close vicinity of which is a gas flare.

PORT LIMITS: Limits of port extend approximately 1 mile Westward from East coast of Lavan Island, from Terminal Sea Buoy to half a mile Westward from Sassan Submarine Pipe-line Buoy.

Vessels must not enter the Port Limits unless a LAPCO Mooring Master is on board.

DOCUMENTS:

5 Crew and Passenger Lists.
2 Stores Lists.
2 Bonded Stores Lists.
Clear Bill of Health from last port.
4 Bills of Lading.
6 Manifests.

In Iran, an additional copy of the Bill of Lading is required for all exports from the country. This must be signed by the Master and forwarded to the Customs Authorities, Lavan Island by the ship's Agent.

APPROACHES: Vessels approaching Lavan Island from due South will have a clear approach.

(a) Landfall. There are 5 gas flare towers and 1 ground flare. The most conspicuous flare is in position Lat. 26° 47′ 34″ N., Long. 53° 20′ 39″ E. situated in the vicinity of Port Area. This flare onshore, when burning, makes a conspicuous landfall for Lavan Island, but at night from a distance tends to obliterate the various navigational lights.

The other flares are in position,
Lat. 26° 47′ 41″ N., Long. 53° 20′ 19″ E.
Lat. 26° 48′ 25″ N., Long. 53° 20′ 03″ E.
(group of 3 flares).

All tanks in the LAPCO Terminal Tank Farm are painted white and numbered in black from 1 to 6. Tanks No. 1 and 2 have the word LAPCO painted in black on the South side. Tank No. 2 is in position Lat. 26° 47′ 57″ N., Long. 53° 20′ 24″ E. A 1,000,000 Bbl. tank has recently been constructed behind tank No. 6. At present the tank is not painted and is not connected to the pipe-line system.

(b) Navigational Dangers. South side of Island is open and free from dangers, but care should be exercised approaching from seaward as soundings shallow rapidly near coast with depths of 200 ft. only 4,500 ft. off shore.

PILOTAGE: Pilotage compulsory for vessels berthing on, or departing from Oil Jetty, and when manoeuvring in restricted area. Cargo vessels and men-of-war do not require Pilots as they are accommodated in cargo anchorage. Vessels with LAPCO cargo will be moored at a buoy berth for which operation a LAPCO Berthing Master and tug are provided, without charge. Pilots provided automatically on arrival for tankers if berth available. If no berth available due to bad weather or other causes, vessels will be instructed accordingly. The normal international pilot signals are to be used.

Channel 16 VHF is to be used to call Radio Room. Pilots will normally board vessels 1 mile S.E. of Oil Loading Jetty. ETA is to be signalled 72 hours before arrival and confirmed, confirming ETA 48 hours before arrival.

Ships requested to have pilot ladder safely and securely rigged, and ready for immediate use, and long enough to reach Berthing Master's launch. A combination of pilot ladder and ship's accommodation ladder, so arranged that personnel can first use pilot ladder, until part way up the vessel's side, and then transfer to the accommodation ladder is recommended, especially on very large ships. A light line should be ready to take aboard Berthing Master's equipment. There should be adequate lighting at night. Vessels will provide a lee for Berthing Master both when boarding and leaving.

NAVIGATIONAL AIDS: *Note:* Masters are cautioned to consult their latest Notices to Mariners and Light Lists for most recent information regarding navigation aids.

Lavan Island Terminal Beacon. Lat. 26° 48′ 04″ N., Long., 53° 21′ 20″ E. Located in front of the Main LAPCO Administration Building on the S.E. end of the Island, a rotating white light on a steel lattice tower, painted maroon, 201 ft. above MLWIS exhibiting 3 flashes every 12 seconds, with a visibility of 18 miles.

Pipe-line Lavan Island Rear Beacon. 26° 48′ 04″ N., 53° 20′ 12″ E. is located to West of Tank Farm on a steel lattice tower. This light displays a fixed red range light over a 10 degree sector beamed to seawards and centred along submarine pipe-line coming to Island from Sassan Oil Field. The light is 192 ft. above MLWIS, range 17 miles in clear weather.

Pipe-line Lavan Island Front Beacon. Lat. 26° 47′ 34″ N., Long. 53° 20′ 08″ E. and is located in a position 2,800 ft. bearing 176 degree from the rear beacon fixed on a steel lattice tower. This light displays a fixed red range light over a 10 degree sector beamed to seaward and centred along submarine pipe-line coming to Lavan Island from the Sassan Oil Field.

The light is 115 ft. above MLWIS and has a range of 17 miles in clear weather. The beacons when in transit from seaward, will indicate that the observer is over the submarine pipe-line and therefore should not anchor in the proximity of this line of bearing.

Sassan Oil Field Radio Beacon. Located in position 25° 32′ 16″ N., 53° 09′ E. Station indentification signal is LA transmitting on 397 kc/s sec., primarily meant as an aircraft beacon but can be received clearly by ships.

Terminal Radio Beacon. Located in position Lat. 26° 47′ 40″ N., Long. 53° 23′ 04″ E. Station identification signal is LD, transmitting 310 kc/s (kHz/sec) from a tower on the above location. This is primarily meant as an aircraft beacon, but can be received clearly by ships.

Light Float. This light float is on station with colour and characteristics as described.

Lat. 26° 47′ 00″ N., Long. 53° 23′ 14″ E. Located approximately 1.1 miles Southward of the Eastern extremity of Lavan Island. Painted red exhibiting a white group flashing light showing 2 flashes every 10 seconds.

Leading Lights – Oil Dock: Located in Lat. 26° 47′ 34.8″ N., Long. 53° 19′ 27.9″ E. Lat. 26° 47′ 30.8″ N., Long. 53° 19′ 35.0″ E. on a bearing of 302° T.

Characteristics, Front, Qk., Fl. R. 5 miles. Rear, Qk., Fl. W. 5 miles.

Leading Lights – Cargo mooring: Lat. 26° 47′ 39.0″ N., Long. 53° 22′ 32.3′ E. Lat. 26° 47′ 33.0″ N., Long. 53° 22′ 34.1″ E. on a bearing of 344° T.

Characteristics, Front, Qk., Fl. R. 5 miles. Rear, Qk., Fl. W. 5 miles.

Oil Loading Dock Lights. The N.W. and S.E. ends of the dock are marked by single fixed red navigation lights placed on Mooring dolphins Nos. 1 and 4, respectively.

Small Craft Harbour. There is a small craft harbour located in position Lat. 26° 47′ 33″ N., Long. 53° 23″ 13″ E. which has no navigational lights displayed.

Terminal Sea Buoy. Located in position Lat. 26° 46′ 30″ N., Long. 53° 22′ 07″ E. White can buoy with lattice tower, radar reflecting, characteristic 1 flash every 5 seconds (0.5 seconds on 4.6 seconds eclipse).

Sassan Submarine Trunk Pipe-line Buoy. Located in position Lat. 26° 46′ 48″ N., Long. 53° 20′ 00″ E. Red can buoy with lattice tower, radar reflecting characteristic 1 flash red every second (0.4 seconds on 0.6 seconds eclipse).

Iminoco Radio Tower. Immediately in front of the main Iminoco Administration Building there is a steel tower painted red, elevation above MLWIS is 408 ft. Location is Lat. 26° 48′ 15″ N., long. 53° 19′ 10″ E. A red light occulting every second is exhibited from the top of the tower.

Decca Navigator Station Tower. A lattice work tower painted in red and white bands 336 ft. high above MLWIS is located Eastward of the Terminal in position Lat. 26° 47′ 39″ N., Long. 53° 22′ 25″ E.

ANCHORAGES: Vessels must not enter port limits (which enclose a Prohibited Anchorage Area and Manoeuvring Area). They should proceed to vicinity of suggested Anchorage Area East of Oil Loading Dock and East of Long. 53° 22′ 00″ E., and in suitable depths of water wait for LAPCO Berthing Master. The sea bottom is good holding ground. Depth about 40 m.

Prohibited Anchorages. Anchorage is prohibited in the vicinity of the Sassan and Rostam submarine pipe-lines and for a distance of 2,000 ft., on both East and West sides of pipe-lines and parallel to same. The Sassan 22 in. pipe-line runs 188 degrees seawards from a position Lat. 26° 47′ 32″ N., Long. 53° 20′ 05″ E., and the Rostam 18 in. pipe-line runs 205 degrees seawards from a position Lat. 26° 47′ 32″ N., Long. 53° 19′ 58″ E.

To draw attention to the Prohibited Anchorage Area in the vicinity of the Sassan Oil Field to Lavan Island 22″ Submarine pipe-line 3 notice boards have been established. The notice boards are 3 m. high and 8 m. long, painted white, with the words "Prohibited Anchorage" painted in red in English and Farsi.

These notice boards are in the following positions:
Lat. 26° 47′ 33″ N., Long. 53° 19′ 41″ E.
Lat. 26° 47′ 33″ N., Long. 53° 20° 08″ E.
Lat. 26° 47′ 20″ N., Long. 53° 21′ 18″ E.

Terminal Port Area. Area bounded by a line joining positions:
Lat. 26° 47′ 31″ N., Long. 53° 22′ 00″ E.
Lat. 26° 46′ 21″ N., Long. 53° 22′ 00″ E.
Lat. 26° 47′ 26″ N., Long. 53° 19′ 22″ E.
Lat. 26° 46′ 49″ N., Long. 53° 19′ 22″ E.

Anchorage within Port Area prohibited. Port Area used by vessels manoeuvring to and from oil loading jetty, and no vessel permitted enter Port Area until Company Berthing Master on board.

Offshore Oil Platform. Anchorage prohibited in area of Sassan Oil Field, some 76 miles South of Lavan Island Marine Terminal, due to existence of numerous submarine oil pipe-lines connecting oil wells and production platform.

RESTRICTIONS: 24-hour service. No restrictions for vessels up to 200,000 d.w.t. Tankers in ballast required to have on board at least 33% of their d.w.t. in ballast (including permanent ballast). The state of the tide does not effect entry.

The max. draft allowed for tankers using Berth No. 2 is 43 ft. 6 in. (13.26 m.).

MAX. SIZE: Vessels of 200,000 tons d.w.t. and above are only accepted with prior approval from LAPCO, which is based on standard 13 point questionnaire, detailing dimensions, loaded and ballasted draft and ability to segregate or load concurrent with deballasting. Determining factor is maximum elevation of the loading arms above the water line. Cargo vessels bound for the LAPCO cargo buoy mooring are limited to 26 ft. (7.92 m.). No restriction on vessels using the anchorages.

CLEARANCE: *(Arrival)*: After Berthing Master has boarded vessel at Port Limits, and before vessel allowed proceed, Master will be required to sign following forms. *(a)* Condition of use of Port of Lavan Island, *(b)* Tug Requisition.

Master will also be provided with copies of Fire and Safety Regulations and a Safety Inspection form. After pratique granted, Customs inspection carried out. Master will be required to furnish particulars of vessel including bonded stores, cargo, bunkers, and other information. 5 copies of the crew list and stores remaining on board will be required before clearance is granted. *Customs surveillance is strict.*

The Terminal operates an Early Sailing System covering all cargo documentation. The following documents will be prepared in advance, *except for cargo figures*, and presented by the ship's Agent to the Master for his signature, upon the ship's arrival at the loading dock.

(a) B/L. (b) Certificate of Origin and Cargo Manifest. (c) Tanker Time and Loading Report. (d) Report of Cargo and Ships Ullages. (e) Master's receipt for documents.

Official cargo figures will be passed to the Master within 1 hour of his departure for insertion by the Master on the Bill of Lading and Certificate of Origin and Cargo Manifest.

In cases of disagreement over cargo figures the Terminal will accept the Masters "Note of protest" by telex, by the authorised ships Agent, or by written note handed to the Berthing Master.

HEALTH: Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members. In the case of tankers, doctor will board when ship berthed at Loading Dock and for cargo vessels after ship has anchored. Should vessel, in either case, arrive from another Iranian port and carry a Clear Bill of Health, doctor will not normally board, and pratique automatically granted.

Signals to be exhibited for vessels entering from foreign port: by day: "Q" Flag flown at masthead; by night: red all-round light, over white all-round light. If suspected that ship has disease or fever on board, ship will report details by VHF Channel 12 to Lavan Island.

There are occasional outbreaks of cholera. International Certificates of Inoculation/Vaccination are essential.

See Radio, "Free Pratique".

RADIO: Call "LAPCO Lavan Island" on VHF Channels 16, 12, or 7.

Tugs keep constant watch on Channel 12 VHF and call at intervals on 2182 kc/s. when vessel believed to be approaching, or scheduled call at Lavan Island.

Khorramshahr Radio Station normally passes on a ship's ETA to the Agent resident on Lavan Island, through Abadan. There is a radio-telephone link from Abadan to Lavan Island.

Nomination and Loading Orders. Ship's Masters should signal their ETA Lavan Island Loading Terminal 72 hours before arrival, and confirm (correcting ETA if necessary) 48 hours before arrival. This message should include amount of cargo to be loaded by vessel, destination as per charter, hours required to de-ballast, number and size of ship's manifold connections, maximum loading rate and whether any sickness on board. This message should be addressed to LAPCO, Tehran Office, Cable address "LAPCO, Tehran", Telex address LAPCO, Tehran, Attention: Marine Supt. Lavan. No. 21-2420 LAPCO IR, and routed through nearest coastal radio station handling such messages.

Radio Station. There is no CW radio station on Lavan Island.

VHF Radio-Telephone. Lavan Island Loading Terminal equipped with International Maritime VHF/FM radio telephone service using standard international frequencies. Masters recommended use this facility when within range of Lavan Island Loading Terminal, particularly when approaching port. In poor visibility, when vessel's approach may not be observed from shore, VHF communication may be means of avoiding delay in berthing. The following VHF Channels available on a continuous watch basis:

No. 16 (Safety and Calling Channel).
No. 12 (Port Operations, First Choice, Simplex).
No. 9 (Port Operations, Second Choice, Simplex).

Initial contact should be made on Channel No. 16 and then transfer to Channel No. 12 for Port Operations.

Radio Telephone Frequencies. LAPCO Tugs fitted with VHF radio telephones covering all international maritime VHF radio telephone frequencies (156-162 Mc/s.).

Radio Watches. LAPCO Radio Station on Lavan Island keeps a 24-hour watch.

Free Pratique: Tankers nominated to load at Lavan Island will be granted radio free or provisional pratique based upon the following advance information received from the Master.

(a) Itinerary for past 30 days or last port, if outside this limit.
(b) Number of crew/supernumeries.
(c) Number of crew with (1) expired smallpox, (2) expired cholera certificates.
(d) Any person seriously ill or died during past 30 days.
(e) Any cases of contagious/infectious diseases during past 30 days.
(f) Ship's name. Registration country. Master's name. ETA Lavan Island.

All the above items must be transmitted to: "Lapco Tehran Telex No. 2420. Attention: Marine Superintendent Lavan".

Radio messages should be sent through Bahrain or Khorramshahr Radio Stations 24 hours prior to arrival.

Masters should use item letters and digits to minimise cable length.

TUGS: 2 diesel powered tugs. Both tugs are twin screw, 3,120 b.h.p. Kort Nozzle types with a static bollard pull of 42 long tons. 2 tugs are used on every movement.

For each tug employed berthing, 3 copies of Towage Certificate to be signed by Master and delivered to LAPCO Berthing Master. For each tug employed unberthing, 3 copies of Towage Certificate to be signed by Master and delivered to LAPCO Berthing Master.

The LAPCO tugs and launch assist in berthing and unberthing. These are under the direct supervision and control of the LAPCO Berthing Master. Service and facilities provided by the company including the services of the LAPCO Berthing Masters, tugs, mooring launch, or berthing equipment, are at the vessel's risk.

Note: On occasions when tugs are employed standing by vessels whilst in the berth for use, if required, the full tug charge will be charged.

BERTHING: The Oil Loading Dock is located on the South Coast approximately 2.5 miles from the East end of the Island. The loading platform is 2,030 ft. from the shore, located in position Lat. 26° 47′ 06″ N., Long. 53° 20′ 30″ E.

Deck level is 32 ft. above sea level Mean Low Water Indian Springs. Under normal conditions, 12 lines used to moor a vessel as follows: Forward: 3 headlines, 2 breast lines and 1 spring. Aft: 3 stern lines, 2 breast lines and 1 spring.

During Winter S.E. storm periods, usual to use one each additional headline and breast line at each end, making a total of 16 mooring lines. Breast lines and springs of wire rope acceptable, and normally secured to jetty patent quick-release hooks. Three-inch circumference messenger lines, 240 ft. in length, available each berth for hauling lines from mooring launches up vertical face of jetty fendering and along jetty deck, with assistance of electrically operated capstans sited at intervals along jetty.

Berth No.	*Least depth water (in ft.) above chart datum MLWIS‡*	*Maximum capacity d.w.t.*	*Loading and bunker arms†*
1	69	200,000	4–16 in. (Crude arm) 1–12 in. (Bunker arm)
2	65	65,000	2–16 in. (Crude Arm) 1–16 in. (Naphtha Arm) 1–8 in. (Bunker Arm)

LOA 800 ft.
N.B. 43 ft. 06 in. (13.26 m.) Controlling factor

Distance from ship side to manifold flange, ft.	*Maximum elevation of manifold above chart datum, feet-inches*
10	76–6
12	75–9
14	75–0
16	74–0
18	72–9

†All Chicksan Loading Arms are fitted with series 150 flanges.

‡Chart Datum is Mean Low Water Indian Springs and maximum range of tide is 7 ft.

Tankers to have ready: Fore and aft winches ready for use, and minimum of 16 good mooring lines, 120 fathoms each.

The Terminal accepts tension wires or ropes, only with proper supervision on the brake. Derricks, winches and gear must be rigged on port and starboard sides, topped over the manifold.

Ship's crews perform all operations of mooring, and unmooring, on board ships.

LOADING: Tankers should arrive with 16 in. series 150 ASA flanges on all manifold connections to be used for loading.

Sassan Crude Oil of approximately 33.73° API gravity is available from the LAPCO 3,000,000 barrel Tank Farm. Delivery of oil to the loading dock is by gravity flow, through two 36-in. diameter pipe-lines.

Rostam Crude Oil of approximately 34.48° API gravity is available from the IMINOCO 1,500,000 barrel Tank Farm, immediately West of the LAPCO tanks. Delivery of oil to the loading dock is by gravity flow through two 36-in. diameter pipe-lines.

After the vessel has berthed, the Berthing Master, who acts as a Loading Master, will discuss arrangements, inspect tanks, sign the tanker dry certificate, and finally check cargo figures with ship's personnel. Before loading commences, all items on the "LAPCO Safety Check List" will be complied with, and an inspection made by the Chief Officer and the Berthing Master.

Loading rates of up to 50,000 bbls/hr. (6,700 t.p.h.) to Berth No. 1, and 30,000 bbls/hr. (4,000 t.p.h.) to Berth No. 2 can be achieved at Lavan Island.

Up to 40,000 bbls/hr. (5,300 t.p.h.) to Berth No. 1 and 25,000 bbls/hr. (3,300 t.p.h.) to Berth No. 2 can be achieved when loading 2 ships simultaneously.

Do not close valves against crude oil flow.

Emergency Flow Stop Signal if all communications fail will be a continuous sounding of the ship's whistle.

BALLAST:

(a) Masters are warned that no dirty ballast, or bilge water should be disposed of in sea within 50 miles of coast of Iran. When so disposing of ballast all pipe-lines, sea suctions, strainers, and pumps that are later to be used to discharge clean ballast, must be flushed clean, so that there will be no chance of even a small amount of sea pollution when the clean ballast is pumped out.

(b) As soon as practical after arrival, all vessels' tanks will be inspected for oil in ballast. During discharge of ballast similar inspections will continue.

(c) Should ship's tanks be found leaking it will not be later accepted for loading, unless satisfactory evidence duly certified by "Lloyds" or "ABS" Surveyors, or other recognised surveyors of repair is submitted.

(d) Any vessel rejected because of dirty ballast or sea pollution will automatically nullify "Notice of Readiness" and will lose any priority of position for loading. On return from sea, Masters should tender new Notice of Readiness to LAPCO. If this accepted by LAPCO the vessel will be entered for loading as of new time of acceptance. Vessels will be rejected for dirty ballast at all times.

(e) Vessels equipped with separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is first obtained from the LAPCO Terminal Superintendent and provided NIOC Petroleum Inspector agrees.

(f) A vessel must have sufficient ballast for safe handling having due regard to existing weather and sea conditions. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own vessel a Ship's Master may come to the Terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

DENSITY: The temperature of sea water alongside the Loading Dock varies from 71°F. in January to 93°F. in August. The density of sea water alongside the Loading Dock is approximately 1,022 oz./cu. ft. (1.022 grams/c.c.).

TIDE: The tide is mainly diurnal with a mean range of 3 ft. 0 in., and extreme range of 5 ft. 6 in., and an extreme height of 7 ft. 0 in. above chart datum, which is MLWIS.

The tidal stream varies according to the state of the tide, with a maximum rate of about 1 knot.

An automatic chart recording tide gauge is fitted on berth No. 2.

WEATHER: In Summer time from May to September temperature reaching 50°C (122°F.) and humidity ranging from 10% to 100%. The Winter (November to March) mild and pleasant with minimum temperature approximately 6°C. (43°F.). The wind for most of year from N.W., but sometimes particularly during Winter strong S.E. storms likely to occur lasting for several days. Oil Loading Pier partly sheltered from N.W. winds, but exposed to winds from South.

During Winter storms, waves of 8 to 10 ft. often occur. A max. wave height of 15 ft. has been recorded at the Southern end of the Island.

STEVEDORES: For cargo vessels the Agent requires 4 days Notice of Arrival in order to transport labour from Bandar Abbas. Agent provides labour for working cargo "to the rail" and receiver provides lighterage and labour thereon.

MEDICAL: LAPCO maintains small clinic on Lavan for minor

medical treatment of LAPCO staff. No medical services available except in emergency and subject to availability of doctor.
FRESH WATER: None available.
FUEL: *Bunkers and Naphtha:* The National Iranian Oil Company (NIOC) owns and operates a topping plant on Lavan Island known as the Lavan Distribution Complex (L.D.C.).This plant is capable of delivering Gas Oil, Fuel Oil and Naphtha to tankers at the Lavan Crude Oil loading dock via 8 in., 12 in., and 16 in., lines respectively.
NIOC should be contacted for details of their available products.
CARGO GEAR: Ship's discharging dry cargo to barges in the cargo ship anchorage use ship's gear.
FIRE PRECAUTIONS: Vessel receives full detailed instructions from Berthing Master. Vessels must have fire-wires and engines not to be immobilised.
CONSULS: No consular representation on Lavan Island. Nearest consulates at Khorramshahr near Abadan.
REPAIRS: No repairs allowed alongside oil loading jetty. No workshop or repair facilities available. Ship's main engines must be available at all times while alongside jetty.
MARINE SURVEYS: Lloyd's Surveyor based at Khorramshahr and can usually be called through vessel's Agent at 72 hours notice. A.B.S. surveyor also based at Khorramshahr.
AIRPORT: No scheduled or regular air flights to Lavan Island. All aircraft required for transportation of goods or passengers must be made by charter. Airport is used by Oil Company Charter planes only and no other passengers are carried except in an emergency situation.
TIME: Iranian Standard Time which is GMT plus 3.5 hours.
POLICE/AMBULANCE/FIRE: There is a Government Gendarmerie Station on the Island. There are no telephones established for these services. Emergencies will be handled by LAPCO staff in case of tankers.
SHORE LEAVE: Ships' crew not allowed to go ashore.
CREW CHANGES: Not permitted.
REGULATIONS: (Miscellaneous): *Painting and scaling.* Painting, chipping, scaling or spray painting on deck or overside *strictly prohibited* while vessel at any jetty berth.
GENERAL: *Flag:* All vessels are required to fly the Iranian Flag (green uppermost) in Iranian territorial waters which extend 12 miles offshore.
Garbage: Dumping overside of garbage and refuse prohibited in Port Area.
Sanitation: Government Health Regulations require suitable covers to be fitted over all lavatory discharge outlets, etc., to prevent fouling of jetty or craft alongside.
Damage to Port Facilities: If a Master has reason to suppose that any damage has been caused by his vessel to any Port Facilities, he must agree, in writing, with LAPCO Berthing Master as to nature and extent of such damage, and this must be confirmed by LAPCO Marine Superintendent. LAPCO has standard liability forms which cover both ship and shore, and are issued on every occasion.
Rat-guards: All ships berthed alongside must provide Rat-guards for Ship's Moorings.
No visitors: No visitors allowed on terminal dock, or on board vessels alongside dock, unless by written permission of Marine Superintendent. Only persons having authorised work will be given access to port limits, dock or vessels.
AUTHORITY: LAPCO Tehran. Terminal Office: Lavan Island.
AGENT: Gulf Agency Co., Lavan Island.
Head Office: Khorramshahr. Gulf Agency Co. (Iran) Ltd., POB 110, Khorramshahr, Iran. Cables "Confidence", Khorramshahr. Tel. 2280, 2278, 4755–58. After office hours 2670, 2950, 3193. Telex 654033, 654000. 654051 (answer back "GAC IR").
Due to the few available Telex lines to Khorramshahr, messages from abroad to Khorramshahr to be sent to Tehran office, Telex 212507, 212856, 213043 and 213044. (answer back "GAC IR") stating: "For Khorramshahr".
Air-freighted spare parts and ships' mail should be addressed: Gulf Agency Co. (Iran) Ltd., POB 62, Abadan, Iran, and sent to the Abadan International Airport marked "In Transit for M/S . . . ."
Air-freight consignments should be routed by flights arriving *directly* to Abadan Airport without trans-shipment at Tehran. Cable advise "Confidence", Abadan, of flight details and airway bill number.

RAS BAHREGAN (Norwuz Loading Terminal): 29.43 N. 50.10 E. **(See Plan)**

DOCUMENTS:
5 Crew and Passenger Lists.
4 Stores Lists.
4 Bonded Stores List.
Clear Bill of Health from last port.
4 Bills of Lading.
6 Manifests.
PILOTAGE: Vessels to be moored at Bahregan Terminal will be boarded by a Mooring Master of the Company within 2 miles of the SBM. The Mooring Master will advise the ship's Master on approaches to the berth, mooring and unmooring, connecting and disconnecting the floating hose, and in all other operations within the berthing area.
Vessels are requested to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch. If at night, adequate lighting must be rigged overside for the Mooring Master to approach the side of the ship and climb the ladder safely. Adequate searchlights should also be rigged when mooring at night.
The Mooring Master will be in direct charge of the portable VHF ship-to-shore radio-telephone communications.
ANCHORAGE: The SBM is in the open sea with no surface obstructions in the vicinity. However, anchorage is prohibited in the following areas:
(a) Immediate vicinity of the SBM – within a 1.2 mile radius of the SBM.
(b) One mile on either side of 36-in. submarine pipe-line from SBM to Bahregan Oil Centre.
Suggested anchorage area is 2 miles S.W. of the SBM.
RESTRICTIONS: The Bahregan SBM Terminal operates 24 hours per day, 7 days a week. However, mooring or unmooring is only carried out if fair or moderate weather conditions are prevailing.
In the event that berthing is delayed on account of weather, vessels will keep their position in line. Vessels required to leave the terminal area on account of weather (terminal closed) should keep in contact with the terminal via radio in order to be available when weather moderates.
FLAG: All vessels are required to fly the Iranian flag on the foremast during daylight hours. Iranian territorial waters extend 12 miles seaward from the mainland and adjacent islands.
ADVICE OF ARRIVAL: It is important that ships establish radio contact with SIRIP when 3 days distant from Bahregan Terminal and maintain this contact until just previous to arrival at the Terminal. All ships should send a 72 hour ETA message to SIRIP giving the best estimate of ship's arrival time at the Terminal.
Further ETA messages should be sent to SIRIP when the vessel is 24 and 12 hours distant from Bahregan Terminal and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12-hour ETA should include a positive statement regarding "ship's readiness to load" on arrival and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring, as well as details of the flange size of the manifold.
MAX. SIZE: SBM terminal designed for tankers up to 250,000 d.w.t. Min. depth at the SBM is 24 m.
HEALTH: The rules governing quarantine of vessels is the same as found in other ports of the world.
RADIO: Bahregan Oil Centre Radio Telephone Station maintains a daily watch on the following frequencies at the times stated.
GMT: 0530–0630 on 2477 kc/s., 1130–1230 on 8230 kc/s.
In addition, once a tanker has advised its 72 hours ETA the Bahregan Oil Centre maintains a watch on VHF Channel 16. The call sign for Bahregan Oil Centre is "BOC". Contact can be made on other frequencies if requested.
Telegrams of ETA may be sent to Khorramshahr Port Radio Station addressed to SIRIP Liaison Office, Khorramshahr.
Communications during mooring and loading: Portable VHF radio-telephone units are brought on board by the Mooring Master.
NOTICE OF READINESS: Tenders to load crude oil cargo will normally be accepted and the berth will be assigned to vessels in order of arrival, provided vessels have nominations for cargo valid at time, carry clean ballast and are in all respects equipped and ready to moor.
Tankers to have ready:
(a) Windlass and deck winches forward, maindeck and aft.
(b) Ten good nylon or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line.
(c) On port side, opposite ship's manifold, equipment capable of lifting floating hose safely and expeditiously. Weight lift of 5.5 tons.
Ship's crew performs all operations on ship.
SBM: The single buoy mooring is 13.5 m. in diameter and 3.65 m. high at its highest point. It is equipped with the following navigational aids.
Signal light: White colour, flashing morse code "U" every 15 seconds. Range 5 miles.
Fog horn: Morse code "U"' every 45 seconds.
Radar reflector fitted. The whole SBM is painted a bright orange colour.
TUGS: Available and required.
SINGLE BUOY MOORING: The Monobuoy is situated about 15 kms. from the shore in position 29° 43′ 02″ N., 50° 09′ 46″ E. Depth of water in vicinity of buoy mooring is 30 to 31 m. Buoy is served by a 36-in. loading line with a capacity of 700 cu. m. per hour.
MOORING: The optimum approach to the single buoy mooring is into the wind and sea. Sometimes, however, this will not be possible because of tides at variance with strong wind conditions. Accordingly, it is incumbent upon the Master to exercise careful judgement when approaching the Terminal, particularly during the hours of darkness and in poor visibility. It should be noted that the incoming tides flow towards the N.W. (approx. 310°) and outgoing tides towards the S.E. (approx. 130°). The company Mooring Master will give all necessary advice to the ship's Master.
Particular attention must be paid to the location of two strings of floating loading hose. Normally the position of the floating hoses will be controlled by the tidal currents rather than by wind effect. During daylight hours the hose string is highly visible by virtue of their covering of orange plastic floats.
When approaching the SBM at night or during poor visibility the radar is an excellent means of ascertaining the exact distance to the Terminal. The floating hose strings normally stand out very clearly on the lower radar range scales.
Once the optimum approach route has been selected, the tanker should proceed towards the SBM at a suitable speed dependent upon conditions at that time. At approximately 3,000 ft. from the

SBM the tanker should have only sufficient way on for steerage. The floating hoses should be on the port side, and it is recommended that the tanker make the final approach with the SBM on the port bow, rather than dead ahead. This permits the Master on the bridge to observe the SBM at all times and in the event of any misjudgement of the approach speed there is no danger of over-running the Terminal. (The tanker should adjust her engines such that all way is off the vessel between 150–50 ft. from the SBM).

At a suitable distance from the SBM the service launch which will have maintained station during the approach, will take two lines from the ship and secure them to the mooring bitts on the SBM. The launch will then bring the 2 large SBM float ropes to the ship, which should have a messenger line ready to raise them. Once these float ropes (each of which has a breaking strain in excess of 305 tons) are secured the ship may, if so desired, recover its own lines which are used only to provide a safeguard during pick up of the SBM float lines.

In the event that the floatrope mooring lines provided by the Company are not used or not available, the ship is secured using 6 lines from the tanker all on port side.

HOSES: 2 flexible floating hoses connect the ship's manifold with the Terminal's cargo manifold, and separate hoses connect the underside of the SBM to the submarine pipe-line end manifold (PLEM) on the seabed. A submerged peripheral fender extending outward from the hull is provided to prevent damage to the floating hoses and SBM, should the tanker ride up against it.

After the vessel is securely moored the service launch will tow the end of the floating hoses to a point on the port side of the tanker immediately below the tanker's cargo manifolds. The tanker's derrick runner should be ready to lift the hoses which will be secured by the attached chains in such a manner as to allow the ends of the hoses to reach the ship's manifold. The weight of the hose to be lifted is approximately 5.5 tons.

The hoses are fitted with 16-in. flanges, and the Company will provide reduction pieces to 14 in. or 12 in.; other sizes (as well as gaskets) as required to make connections to ship's manifold. The hose connection is normally performed by SIRIP's loading crew under the supervision of the Mooring Master. However, a ship's deck officer must be present, and must direct the ship's crew as required.

LOADING: The ship's officer responsible for loading should give SIRIP's Mooring Master at least half an hour's notice of readiness to commence loading. In any event, the ship should advise SIRIP during its last radio contact prior to arrival of the estimated time required to discharge ballast, so that an approximate time for commencement of loading can be established. It is also helpful if the ship advises the size and type of flange and also the distance of the manifold from the ship's side during radio connection.

The initial loading rate is normally about 1,500 long tons per hour while the recently coupled flanges are inspected for leakage and the Mooring Master and ship's officer satisfy themselves that all is in order with the SBM and the ship's facilities. As soon as this is done, the loading rate is increased to the max. of 6,000 long t.p.h.

Caution: The incoming oil stream is controlled from the shore and it is extremely dangerous to close a ship's valve against the pressure, which may damage hose, ship's piping, or shore facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

The ship's officer in charge of loading should advise the Mooring Master half an hour before he estimates loading will be completed.

On advice from the ship a min. of 3 minutes is required to stop the flow of crude oil, however, a reduction in loading rate before topping up the final tanks may be arranged on request to Mooring Master.

During loading or unloading the International Code Flag "B" shall be displayed from a topmast signal halyard during daylight hours. During hours of darkness a red light shall be displayed. This light should be of a character such as to be visible at a distance of at least 1 mile, and show an unbroken light all round the horizon.

CARGO: Bahregan Sar Crude, API from 20 to 32, Temperature 85°F.

BALLAST: The waters of the Persian Gulf must not be polluted, and only clean, oil-free ballast (and/or bilge water) may be discharged.

As soon as practicable after arrival, all vessel's tanks will be inspected for evidence of oil ballast and during discharge of ballast, similar inspection will continue. If evidence of oil appears at either of these inspections, the ship must leave mooring and proceed at once to a point not less than 50 miles from any coast or island and there completely discharge all oily or dirty ballast.

Vessels equipped with a separate system of ballast and cargo tanks will be allowed to discharge clean ballast and load oil simultaneously, providing approval is obtained.

Note: When loading is carried out under rough weather conditions the tanker should not be allowed to get into a light condition, and therefore deballasting should not be completed until a reasonable amount of the cargo has been loaded.

PETROLEUM INSPECTORS: Services of the Saybolt Agency available subject to at least 3 days advance notice.

MEDICAL: Depending on the availability of the Company doctor, medical assistance can be provided, although there is no hospital available. In cases of extreme emergency, SIRIP will arrange transport to Abadan at the ship's expense and responsibility.

CUSTOMS: A Customs Officer boards each vessel calling at the terminal.

DENSITY: Salinity is approximately 20% more than normal sea water.

BUNKERS: Not available.

WATER: Not available.

STORES: Not available.

SERVICES: No facilities for crew change, etc., or any other vessel's requirements, as the terminal is situated off-shore in the Persian Gulf and there are no transportation facilities other than Oil Company's flights from Abadan which are meant for their own personnel.

REPAIRS: Masters of vessels loading at Bahregan Terminal are advised that this port is considered an "open roadstead" and under no circumstances may engines be shut down for repairs while their ships are moored. There are no facilities at Bahregan Terminal for making vessel repairs.

CONSULS: There are no consulates at the Bahregan Terminal; however, consular or diplomatic representatives for most nations maintain offices in Tehran and some in Khorramshahr.

SHORE LEAVE: There is no shore leave permitted due to lack of facilities.

TERMINAL OPERATORS: Societe Irano Italiene des Petroles (SIRIP).

AGENTS: See "Khorramshahr". (Actual handling is effected by Oil Company SIRIP, but Khorramshahr Agents are in a position to handle ETA messages, etc., addressed to them via Khorramshahr Port Radio EQK, also to communicate messages to and from SIRIP Khorramshahr and shipowners. Agents can also pass arrival and sailing details to principals, and despatch copies of loading cargo documents as required by Owners. Forwarding ship's mail to Bahregan and despatching official and crew mail received from ship, can be arranged by Agents. Such services are not undertaken by the Oil Company, and it is advisable to appoint an Agent at Khorramshahr.)

NOTES

Please also advise Shipping Guides (Services) Ltd.

Iraq

ALBAKR TERMINAL: 29.41 N. 48.49 E. (See Plan)

LOCATION: The terminal is 31 miles S.E. of Fao in position 29° 40′ 36″ N. 48° 48′ 38″ E. Depth of water 29.30 m. at MLWOST.

PILOTAGE: Pilotage is compulsory for all inward and outward tankers using the Khor al Khafja buoyed channel when the draft is over 15.85 m.

NAVIGATIONAL AIDS: 8 lighted buoys define the deep water channel at the 69 ft. (21m.) depth contours in the immediate vicinity of Albakr Terminal. The buoys are battery powered with quick flash characteristics with visibility range of 1 mile. The perimeter of Albakr Terminal is outlined with flashing marine lanterns to define a hazard to marine navigation. The lanterns are battery powered, some are white lens flash with 5 mile range and others are red lens flash with 2 mile range.

The radio tower is equipped with an aviation hazard light (red). It is also equipped with a long range marine beacon (white) located below the red hazard light.

MAX. SIZE: Max. length, 366 m. Max. draft 21 m. Night berthing possible.

RADIO: Tankers are requested to contact Albakr Terminal through Basrah Control Radio (YIR) at least 72 hours, 48 hours and 24 hours prior to arrival giving ETA. Prior to docking the tanker must also provide the terminal operator with information required to prepare the "loading order" format, this information should include the type of crude to be loaded, loading rate in barrels, the Registry No. of vessel, nationality, name of Master. The Master will be informed of approach instructions such as location of berth, weather and sea conditions, and the communication channel to be used for vessel docking assistance.

Vessels bound for Iraqi territorial waters should also contact FAO Radio (YIS) at least 24 hours before entering territorial waters requesting free pratique from Medical Officer FAO. The request should indicate the state of health of the crew on board together with relevent information.

RADIO:

Name of Station: Khor al Khafja FC(10) Albakr Terminal FP
Call Sign : Albakr Radio
Service : 24 Hours

The following table shows the details for contacting the Iraqi port coast stations. The No. between brackets corresponds to the notes explained below.

Frequency	*Emission Channel*	*Class*	*Power*	*Service Nature*
156.375 mHz. (6) (8)	67	F^3	0.02	OT (2) (3)
156.550 mHz. (3) (5)	12	F^3	0.02	OT (2) (3)
156.80 mHz. (1) (3) (4) (7) (8) (11)	16	F^3	0.02	
161.80 mHz.	24	F^3	0.02	

FC Coast Station
FP Port Station
OT Station open exclusively to operational traffic of the service concerned
(1) Transmits urgent notices to mariners
(2) Transmits meteorological bulletins (North Arabian Gulf Weather Forecast)
(3) For Navigation and harbour control services
(4) Calling and Safety frequency
(5) First priority working frequency
(6) Second priority working frequency
(7) Weather bulletins at 0630, 1430 hrs. and on request
(8) Used for marine traffic control
(10) Station under the direction of Iraq administration
(11) Permanent watch

While in Iraqi Territorial waters, ships under way shall maintain watch on Channel 16 (156.80 mHz) and/or (461.5 kHz) to ensure immediate reception of the instructions issued by the controlling authorities.

(a) Khor Al-Khafja, Albakr Terminal Radio, maintains listening watch on Channel 16 (156.80 mHz).
(b) Pilot station (Al-Rasheed Radio YIBE maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.
(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.
(d) Basrah control Radio (YIR) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

Instructions:

(a) Navigation warnings are transmitted on 500 kHz. by Basrah Control Radio (YIR).
(b) North Arabian Gulf weather forecast is transmitted by:
1 Basrah Control Radio on:
440 kHz. at 0530, 1330 GMT and on request.
6493.25 kHz. at 0530 GMT and on request.
8668 kHz. at 1330 GMT and on request.
2 Khor Al Khafja, Albakr Terminal Radio, on Channel 16 (156.80 mHz.) at 0530 GMT and on request.
(c) Traffic control signal on Channel 16 (156.80 mHz.) and on 500 kHz. by Basrah Control Radio (YIR).
(d) Traffic control signal Channel 16 (156.80 mHz.) and 500 kHz. by Fao Radio (YIS).
(e) Traffic control signal on Channel 16 (156.80 mHz.) by Albakr Terminal Radio.

Commercial and Public Correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 mHz.) 500 kHz. 4, 6, 12 and 16 mHz. bands, and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

TUGS: 3 available, 2 of 4,000 h.p. and 1 of 2,200 h.p.

BERTHING: The terminal consists of 2 loading platforms (A) and (B) each loading platform has 2 loading berths. Berths 1 and 2 of platform "A" and berth 4 of platform "B" can accommodate tankers ranging in size from 35,000 d.w.t. to 350,000 d.w.t., berth 3 of platform "B" can accommodate tankers ranging in size between 85,000 d.w.t. and 350,000 d.w.t., Total length of structure is 975.4 m. and 106.7 m. wide at centre.

LOADING: Storage and pumping facilities on shore are connected to Albakr Terminal by two 48 in. pipe-lines. The Terminal is capable of loading through either one of the pipe-lines at a time or both. Capacity of each line varies between 77,000 to 89,000 b.p.h. depending on type of crude (Basrah heavy or Basrah light type). With both lines in operation at the same time loading rate can be increased to max. 141,500 b.p.h. (19,000 M.T.H.). 2 tankers can load with different types of crude at the same time. Loading facilities can be remotely controlled from the Control Room.

Loading will be stopped if any regulations are not observed and in the case of oil spillage.

Loading may be stopped in still air conditions, during severe electrical storms and/or high wind and sea conditions.

Loading Arms: For each loading berth, 3 identical 24 in. by 80 ft. long Luceat DCMA loading arms, with hydraulically operated coupling fitted with adaptors to allow automatic and fast coupling to tanker manifold flanges ranging from 16 in. to 24 in. (spools for 10, 12 or 14 to 16 in. are available at the terminal if required).

Gangway: A power operated telescopic personnel gangway is provided at each berth. These gangways can withstand 500 lb. load at mid-span in the extended position.

Meters: 16 in. A. O. Smith positive displacement meters, 16 meters for each platform, capacity of each meter 12,500 b.p.h.

Meter Prover: One 24 in. triple "U" bi-directional mechanical displacement meter prover for each platform. The occurence of each prover is decided bi-yearly utilizing certified volume tanks.

Continuous Crude Oil Gravity Analyzer: There is a number of ARCCO Anulus Model 1-F10 50X liquid gravity analyzers on each loading platform capable of detecting API gravity from 45° to 15°, the output from these analyzers are displayed on the appropriate loading formats and is recorded on charts in the Control Room.

These gravity analyzer are to be checked constantly and re-calibrated bi-yearly according to the manufacturer's recommendations.

A responsible member of the crew must be in contact with the terminal officials at all times.

READINESS: Notice of readiness will be received by INOC representative provided the vessel is ready to load. Lay time will commence 6 hours after receipt of Notice of Readiness berth or no berth.

SAFETY PRECAUTIONS: On arrival at the terminal, INOC Representative will discuss with the Master the "Safety Requirements" letter addressed to him also the Safety Check List.

Attention is also drawn to the Tanker Safety Guide published by the International Chamber of Shipping and to the International Oil Tanker Terminal Safety Guide.

SHIP DOCKING ASSISTANCE SYSTEM: 1 unit for each berth, consisting of speed of approach measuring instrument with fixed wide and narrow beam R.F. heads, a data processor and visual display units when the vessel is within 2 miles of Albakr Terminal. The rotatable R.F. head which is nearest to the vessel shall be aimed to it, during the docking the system will display approaching vessel's velocity.

FRESH WATER: Can be made available by Ports Administration after 24 hours notice from tankers. Water supply is from barges or small water tankers. Notice to be through Agent.

FUEL: May be made available after 72 hours notice through Agent. Supply is direct from small bunker tanker or barges. Bunkering however, not allowed while tanker is on berth and it is allowed only when tanker is waiting for berth or after completion of loading and unberthing.

SHORE LEAVE: Not allowed.

LIGHT DUES: The Iraqi Ports Administration will collect any light dues payable including those due to the Middle East Navigation Aid Service.

REGULATIONS:

(a) Mooring.
"All vessels after arrival, having been moored to the satisfaction of the Harbour Master, shall tend their own anchor cables, ropes, lines and hawsers. It is important for tankers to tend their mooring frequently".
(b) Ship must be ready to move under its own power.
While in berth, ships must be ready to move under their own power in the event of their breaking adrift, catching fire or any other emergency. No repairs are to be carried out while in the berth, which would immobilise the ship or impair her firefighting efficiency.
(c) Cleaning of Boiler Tubes.
Cleaning of boiler tubes alongside the Island Terminal is forbidden.

POLLUTION: No dirty ballast. No oily water or other refuse to be discharged overboard.

When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master delivered to the representative of the terminal to this effect.

Ashes, oil, oily water or other refuse must not be discharged

overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

Vessels are subject to heavy fines and liabilities for claims arising.

AUTHORITY: All approaches to Albakr Terminal and Khor al Khafja are controlled by the Iraqi Ports Administration.

Cable MAWANI -BASRAH Telex 7008 Ports

Attention is drawn to port rules and bye laws 1942, Quarantine Regulation No. 28 of 1963 and schedules of dues and charges.

The terminal is the property of Iraq National Oil Company (INOC) and is administered and controlled by the said company to facilitate the loading of tankers with Crude Oil.

Cable Address	INOC (Basrah)	- PETROLNA BASRAH
	INOC (Baghdad)	- PETROLNA BAGHDAD
Telex No.	INOC (Basrah)	- 7003
	INOC (Baghdad)	- 2204/2295

The sole Agent for all vessels visiting Iraqi ports is Iraqi Maritime Transport Company (IMTC). All requests for services to tankers should be directed to the Agent.

Cable Address	IMTC (Basrah)	- BAWAKHIR BASRAH
	IMTC (Baghdad)	- BAWAKHIR BAGHDAD
Telex No.	IMTC (Basrah)	- 7009
	IMTC (Baghdad)	- 2207

BASRAH (Maqal and Umm Qasr): 30.31 N. 47.50 E.

DOCUMENTS: On arrival at Pilot station vessel requires following: Ship's Register, letter from Owner confirming that vessel has not called at Israel port, all Health Certificates of Crew must be valid against cholera and smallpox, 2 copies Crew List, 2 copies Provision List, 2 copies Manifest, Freight manifest for Baghdad Rail cargo, Breakdown list and Stowage Plan, Dangerous cargo and heavy lift list (if any).

PILOTAGE: Compulsory. Owners having vessels bound for Basrah should contact Iraqi Maritime Transport Co. Ltd., Basrah, cables "Bawakhir Basrah" to arrange Shatt-el-Arab Pilotage. Owners should also put Iraqi Maritime Transport in funds by remittance well in advance of vessel reaching Outer Bar of Shatt-el-Arab in order to cover port tonnage dues, pilotage and dredging dues, for sailing from Outer Bar to Basrah and return.

The pilot boat is located usually in position 29° 45′ 15″ N. 48° 50′ 45″ E. and on arrival vessel should contact pilot boat immediately for instructions. Pilots are available for vessels proceeding to Abadan and Khorramshahr (in Iran) and Basrah (Maqal and Umm Qasr). Providing Master has given Agent 48 hours notice of vessel's ETA Pilot will board immediately providing tide is suitable to allow vessel to continue to destination. Master should use call sign YIR on 500 kc/s for Basrah Radio in order to pass messages to Agent. Vessel should listen for messages on 440 kc/s from YIR or use VHF on Channels 14 and 12. On boarding the river Pilot will hand Master various forms for completion in respect of Light Dues and River Pilotage. Master to hoist the Iraqi National Flag.

The pilot boat is called *Al Rasheed* and on both sides amidships the word "Pilot" is painted in white.

The Navigation of the Shatt-el-Arab River is under the jurisdiction of the Iraqi Ports Administration which takes in the approaches to Abadan and Khorramshahr in Iran.

ANCHORAGES: On arrival off the pilot boat vessel can anchor with no depth restriction. On entering the Shatt-el-Arab River the following are the recognised anchorages:

Kasba Anchorage, position about 2 miles above Fao with a max. depth of 35 ft. fresh water.

Bawarda Anchorage, position about 2 miles below Abadan with a max. depth of 31 ft. in fresh water.

Hartha Point, position about 6 miles above Abadan with a max. depth of 35 ft. in fresh water. Hartha Point is the anchorage to enable vessels to lighten to 29 ft. in fresh water to enable them to cross the Karun Bar.

Abu Flus, position about 12 miles above Hartha Point with a max. depth of 29 ft. in fresh water.

Khora Anchorage, position about 3 miles from Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

Jubailah Anchorage, position at Basrah Silo about 0.5 below Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

The maximum length between perpendiculars permitted by the Iraqi Ports Administration for vessels in the Shatt-el-Arab River is 560 ft.

RESTRICTIONS: The Iraqi Ports Administration issue a booklet of Tide Tables each year and the movements of vessels in and out of the Shatt-el-Arab River are restricted to the high water tables for vessels using Basrah and Khorramshahr. Movements to and from these ports are only permitted in the hours of daylight. The max. draft for a vessel proceeding to Basrah is 29 ft. in fresh water. If vessel's draft exceeds this lightening takes place at Umm Qasr. Although the draft obtainable alongside the wharves is 31 ft. the max. draft for moving in the river is 29 ft. on account of the restriction at the Karun Bar.

MAX. SIZE: For vessels proceeding to Basrah the max. length between perpendiculars allowed by the Iraqi Ports Administration is 560 ft. There is no restriction on the breadth. The max. draft in fresh water for vessels to and from Basrah is 29 ft.

HEALTH: Masters are requested to call the Chief Medical Officer at Fao on 500 kc/s. call sign "YIS" requesting free pratique 24 hours before vessel's arrival at pilot station. All crew vaccination certificates should be valid and available for Medical Officer's arrival on board. He will also expect to find a valid Deratisation Certificate on board. Anyone boarding the vessel ahead of the Medical Officer whilst the "Q" Flag is still hoisted is liable to a fine. Special precautions are taken in case of a vessel arriving direct from an epidemic area and even if the crew are holding valid inoculation certificates the vessel may be delayed at the Pilot station. The Iraq Government is very sensitive about the spread of cholera and smallpox. Derat Certificate renewable at Basrah.

RADIO: When a vessel is 3 days away from Basrah, radio contact can be established with Basrah Radio, call sign YIR on HF 4, 6, 8, 12 and 16 kHz bands. When the vessel is within 3 days of arrival, Basrah Control Radio (YIR) can be used (transmitting on 500 kHz and receiving on 461.5 or 440 kHz).

List of Coast Stations (Iraq). Summary of Procedures:

1. Whilst inside Iraq territorial waters, ships under way will maintain watch on Channel 16 (156.80 mHz) and/or 461.5 kHz to ensure immediate reception of instructions issued by the controlling authorities.
   (a) Khor Al-Amaya Radio maintains listening watch on Channel 16 (156.80 mHz).
   (b) Pilot Station (Al-Rasheed Radio YIBE) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.
   (c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.
   (d) Al-Wasiliyah Radio (YIT) maintains listening watch on Channel 16 (156.80 mHz) and 461.5 kHz.
   (e) Basrah Control Radio (YIR) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.
   (f) Umm Qasr Radio (YIU) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

II. Special Instructions:
   (a) Navigational Warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).
   (b) North Gulf Weather Forecast is transmitted by:
      1. Basrah Control Radio on:
         440 kHz at 0530, 1330 hrs. GMT and on request. 6493.25 kHz at 0530 hrs. GMT and on request. 8668 kHz at 1330 hrs. GMT and on request.
      2. Khor Al-Amaya Radio on Channel 16 (156.80 mHz) at 0530, 1330 hrs. GMT and on request.
   (c) Traffic Control Signals on Channel 16 (156.80 mHz) and 500 kHz by Basrah Control Radio (YIR).
   (d) Traffic Control Signals on Channel 16 (156.80 mHz) and 461.5 kHz by Al-Wasiliyah Radio (YIT).
   (e) Traffic Control Signals on Channel 16 (156.80 mHz) and 500 kHz by Fao Radio (YIS).
   (f) Traffic Control Signals on Channel 16 (156.80 mHz) and 500 kHz by Umm-Qasr Radio (YIU).
   (g) Traffic Control Signals on Channel 16 (156.80 mHz) by Khor Al-Amaya Radio.

III. Commercial and public correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 mHz), 500 kHz, 4, 6, 8, 12 and 16 mHz bands and after initial contact has been established change to one of the working frequencies as instructed to pass messages. Basrah Radio follows the following time-table:

Hours	*Listen on*	*Answer on*	*Traffic Lists*
H24	500	440 461.5	–
0400–0600	6265.5–6280.5	6493.25	0505
0600–0800	16708–16748	16968	0705
0800–1000	8354– 8374	8668	0905
1000–1200	16708–16748	16968	1105
1200–1400	8554– 8374	8668	1305
1400–1600	12531–12561	12986.5	1505
1600–1800	4177– 4187	4356.5	1705

TUGS: River and sea-going tugs are available. Tug-boat services are offered as and when deemed necessary by port Pilot or Harbour Master, and are available at all times during day and night.

BERTHING: See "Restrictions". All berthing of vessels at Basrah is done during daylight hours only and according to suitable tide. The Harbour Master joins vessel on her arrival at Khora Anchorage which lies about 2 miles from the Maqal Wharves. In the case of Umm Qasr the Harbour Master joins vessel on arrival off the wharves.

Height of pier (quay) at berthing places above mean low water:
(a) Maqal – Plus 12.5 ft. above zero port datum. Port datum is 3.96 ft. above mean zero level at Fao.
(b) Umm Qasr – 24.65 ft. above lowest water of spring tide which is referred to as Umm Qasr Port datum.

Difference between high and low water:
(a) Maqal: A daily variation of 5 ft. between tides and max. of 8 ft.
(b) Umm Qasr: An average of 12 ft. between tides, and max. of 17 ft.

Maqai (Ma'gal). Wharves have continuous frontage of 2,000 m. depth alongside 9.15 m. Max. length of vessel, 171 m., berthing for 12 vessels.

Umm Qasr. The port is situated at the South end of the Khor Zubair, where it joins the Khor Abdullah. The sea approach to Umm Qasr is some 103 km. in length along the Khor Abdullah, commencing in deep waters of the Gulf near the mouth of the Shatt-el-Arab.

A navigation channel the lowest part of which is 9 m. at LLW and of ample width is well marked with beacons and light buoys from the Shatt-el-Arab entrance pilot vessel to Umm Qasr. Loaded vessels with a draft of 9.75 m. will be able to sail on 2 tides each day

to and from Umm Qasr. Pilot and Harbour Master services are compulsory.

The wharves are of reinforced concrete with a continuous frontage of 640 m. and depth of 9.75 m. at LLW. They are able to accommodate 3 cargo ships at one time. Each berth is 183 m. long. The wharves are provided with a total of 10 electric shore cranes from 3-15 tons capacity. In addition there is a 100 ton floating crane, 2 sea-going tugs and an ample number of mobile cranes, forklifts, eel trucks, tractors, trailers, etc. The Umm Qasr wharves are directly connected with roads and railway lines of the Iraqi Republican Railways.

There are also 2 mooring buoys 247 m. apart.

Fresh water available directly from mains on wharves.

A new project for building more berths is in hand. 5 of these berths are under construction.

3 new steel jetties at Abu Flus directly North of the Fertilizer jetty have been completed. These jetties are served by 6 electric shore cranes of 5 tons capacity. Vessels up to 171 m. long and 8.84 m. draft can lie alongside.

Grain Silo: Capacity 65,000 tons, loading capacity into ship's holds, 1,050 t.p.h. jetty 213 m. long, available for berthing ships up to 183 m. long with a draft of 8.84 m. for loading and unloading of grain.

Muftiyah Jetties: One wooden jetty with limited length owned by Port Authority for distribution of oil products and for the purpose of handling crude and refined oil for local consumption, also for exporting oil products outside Iraq. Also a further new concrete jetty available for berthing vessels 175 m.

Fertilizer Wharf: A modern concrete wharf situated on the banks of Shatt-el-Arab river at Abu Flus with a total length of 100 m., width 10 m., can accept vessels with length 182 m. and draft 8.84 m. It is allocated for the exportation of fertilizers by the State Co. for fertilizers.

Mooring Buoys: There are also 13 mooring buoys, 7 at Ashar, 4 at Sunger and 2 at Abu Al Khasib, 220 m. apart.

CRANES: The wharves are served with 60 electric shore cranes from 1.5 tons to 15 tons capacity and 1 electric shore crane of 60 tons capacity, in addition there are 2 floating cranes one of which is 100 tons capacity capable of lifting direct from ships to railway trucks on the wharves, and the other of 20 tons capacity capable of lifting cargo at a distance of 30 m. from the centre of the jib. Also about 200 pieces of various type of mechanical and electrical handling equipment.

BRIDGES: There are no bridges across the river from the entrance to Basrah Wharves (a distance of about 80 miles).

STEVEDORING: Information of the numbers of gangs required on board on vessel's arrival should be passed to the Agent together with vessel's ETA through Basrah Radio. The average rate of discharge of general cargo at Basrah (Maqal and Umm Qasr) is 6 tons per ganghour per 16 hour day. Contractors will place labour on board to discharge or load cargo but at the risk of the vessel as a Contractor will not accept any responsibility for damage done by labour.

Unloading of vessels basically carried out from vessels to wharves by Port cranes or ships' derricks. Heavy lifts and some dangerous cargoes are discharged overside into barges. Loading from jetty is by crane directly into ships. Loading at midstream is by lighters.

Bulk Cargoes: Discharged by grab direct to the Dock at Umm Qasr and by suction to the silo at Basrah. The equipment at Basrah is rated at 2,500 L/tons per day discharge and 5,000 L/tons per day loading, but under favourable conditions discharge rate may exceed 3,000 L/tons per day.

VHF: Port radar service. VHF can be used to call the Iraqi Port Administration at Basrah on Channel 16.

MEDICAL: For a vessel in to Basrah (Maqal and Umm Qasr) no advance notice is required, in order to obtain medical attention. Hospital facilities available at the new port hospital and other local hospitals.

For arrival at Basrah it is necessary to hold valid cholera and smallpox certificates.

TANKERS: See "Khor-al-Amaya".

FRESH WATER: Fresh water is available at the wharves at Maqal and Umm Qasr but where a vessel is moored in midstream and requests water there is the additional charge for the hire of the water tanker.

FUEL: Only 1 grade of fuel oil available from the Basrah Refinery, a fuel oil viscosity 200 to 210 Red. No. 1, SG 0.920. Diesel oils also available.

Fuelling is direct if taken alongside Muftiyah Refinery jetties, otherwise by barge. No coal bunkers available.

GANGWAY/DECK WATCHMEN: It is recommended that vessels moored or anchored in the river employ Gangway/Deck Watchmen.

OPENING/CLOSING HATCHES: This work is normally done by crew, but if the labour on board are asked to do it they should be supervised by an Officer.

CUSTOMS ALLOWANCES: (Tobacco) The Ship's Bond is sealed on arrival but prior to the sealing each member of the crew can have 200 cigarettes. The Bond will be opened by the Customs on the request of the Master at any time during vessel's stay in Basrah.

(Wine and/or Spirit). Each crew member is permitted to have 1 litre out of Bond. On sailing from Basrah the Master is required to wait till vessel has cleared the Shatt-el-Arab River before opening the Bond. This does not apply when vessel calls at Khorramshahr or Abadan on the way down river.

IDENTIFICATION CARDS: All crew members are required to carry with them some form of identification when going on shore.

CONSULS:

Belgium	Tel. 3666	Pakistan	Tel. 3598
Denmark	,, 3205	Sweden	,, 3511
Norway	,, 3511	U.S.A.	,, 4231
Saudi Arabia	,, 3219	India	,, 4824
United Kingdom	,, 4251	Portugal	,, 4469
Greece	,, 3601	U.S.S.R.	,, 5410
Kuwait	,, 2235		

REPAIRS: All types of repairs except major engine repairs can be carried out.

DRY DOCKS: Floating dock available, capacity 4,000 tons. Also slipway, capacity 700 tons.

REPATRIATION: No difficulties in arranging the repatriation of crews from Basrah. Emergency visas are easily obtained for joining and departing crews.

AIRPORT: The Basrah Airport formerly an International Airport is now used only as a domestic airport and is situated about 2 miles from the Maqal Wharves but 50 miles from Umm Qasr. There is a daily flight to Baghdad to connect with International flights, also 3 flights per week to Kuwait to connect with International flights.

TIME: Iraq time is 3 hours ahead of GMT and there are no alterations made to clocks during the year.

HOLIDAYS: The official holiday of the week in Iraq is Friday. The other holidays are: 3 days Id-el-Fitr; 4 days Id-el-Adha; Al Hijaa; Ashura; Birth of the Prophet Mohammad; New Year 1st January; Army Day 6th January; 8th February; 21st March; 1st May Labour Day; 14th July; 17th July.

POLICE/AMBULANCE/FIRE: A call to 7601 or 7606 will connect to the department required.

TELEPHONES: Telephone is placed on board a vessel as soon as secured alongside wharf.

GENERAL: The rain season in Basrah is between November and April and during the Summer months from May to October the temperature can be as high as 55°C. It is important that crew members keep the backs of their necks covered whilst working on deck during the heat of the Summer. The use of salt tablets are recommended during the heat of the Summer.

SPECIAL SERVICES: There is a laundry service available.

SHORE LEAVE: There is no restriction on crew members going on shore but it is important that they carry a form of identification.

REGULATIONS: The Port Authority have requested that no photography takes place from the ship whilst passing naval or military installations.

DELAYS: As the port of Basrah is considered very well equipped, cargo vessels usually receive a very quick despatch and it is very seldom that a vessel experiences waiting time for a berth for discharging, loading or bunkering. All discharge takes place at the wharves and all loading takes place in midstream at mooring buoys. Where a vessel can load whilst discharging, this is permitted.

AUTHORITY: President State Organisation of Iraqi Ports, Basrah.

AGENTS: The business of Shipping Agencies relating to all ships calling at Iraqi Ports is entrusted solely and exclusively to Iraqi Maritime Transport Co. Ltd. The addresses of Iraqi Maritime Transport Co. Ltd are the following:

Main Office: Iraqi Maritime Transport Co. Ltd., POB 3052, Baghdad/Iraq. Cable address: "Bawakhir", Baghdad.

Basrah Branch: Iraqi Maritime Transport Co. Ltd. POB No. 3, Basrah/Iraq. Cable address: "Bawakhir", Basrah.

FAO: 29.58 N. 48.29 E.

DOCUMENTS: On arrival at Pilot station, vessel requires the following:

Ship's Register.
Letter from Owner confirming that vessel has not called at Israeli Port.
Health Certificates of Crew must be valid against cholera and smallpox.
2 copies Crew List.
2 copies Provision List.
2 copies Manifest.
Dangerous Cargo List, if any.

PILOTAGE: The pilot boat is located in position 29° 46′ 45″ N., 49° 48′ 37″ E., and on arrival vessel should contact Pilot boat immediately for instruction. VHF Channels 14 and 12. Provided Master has given Agent 48 hours' notice of vessel's ETA, Pilot will board immediately. The Pilot boat is called *Al Rasheed* and on both sides amidships the word "Pilot" is painted in white.

ANCHORAGE: On arrival of the Pilot boat vessel can anchor with no depth restriction.

MAX. SIZE: *Tankers* – 675 ft. LOA. Vessels may load to a max. draft of 35 ft. (10.65 m.) depending on the tidal conditions at the time, otherwise to a draft suitable to cross the bar with safety.

HEALTH: Masters are requested to call the Port Medical Officer at Fao on 500 kc/s, call sign "YIS4", requesting free pratique between 8 and 12 hours before vessel's arrival. All crew vaccination certificates should be valid and available for the medical officer's arrival on board. He will also expect to find a valid Deratisation Exemption Certificate on board. Anyone boarding the vessel ahead of the Medical Officer whilst the "Q" Flag is still hoisted is liable to a fine.

Special precautions are taken in the case of a vessel arriving from an epidemic area and even if the crew are holding valid vaccination certificates the vessel may be delayed at the Pilot station. The Republic of Iraq is very sensitive about the spread of cholera and smallpox.

RADIO: Basrah Radio, call sign "YIR" on high frequencies 4, 6, 8, 12 and 16 bands. Fao Radio, call sign "YIS", traffic control signals on Channel 16, and 500 kHz. Also see Khor-al-Amaya.

Tankers should establish contact with Iraqi National Oil Co. 48 hours before arrival. Call sign RNT. Frequency 6493 kHz.

TUGS: Available on request.

BERTHING: There are 4 loading jetties with a depth of 10.95 m. alongside at LWST. Each jetty has one 60 cm. crude oil delivery line with four 25 cm. flexible hoses. Jetties are floodlit and fitted with fire monitors and four 3 ton SWL cranes. Lengths of berth, 205.75 m. each. Max. draft 10.65 m. Night berthing possible. Loading rates Nos. 2 and 4 jetties average 4,000 t.p.h.

FRESH WATER: Available, rate approximately 10 t.p.h.

REPAIRS: Minor repairs possible.

MEDICAL: No advance notice is required in order to obtain medical attention. Medical units are present at Fao, Umm Qasr and Maqal. A modern hospital containing all the essential units is found at Maqal. Crew in need of special attention or admission may be referred to it by the medical units.

TIME: 3 hours ahead of GMT.

AUTHORITY: President, State Organisation of Iraqi Ports, Basrah.

AGENT: Iraqi Maritime Transport Co. Cables: Bawakhir Fao.

KHOR-AL-AMAYA: 29.46.44 N. 48.48.36 E.

OPERATORS: Basrah Petroleum Company Limited.

LOCATION: Island Terminal about 17 miles out in the Gulf from the mouth of the Shatt-el-Arab River.

ADMINISTRATION: All waters of the Shatt-el-Arab and of the approaches to Khor-al-Amaya are controlled by the Iraqi Ports Administration.

APPROACHES: *(a) Lights.* One white all-round navigation light has been fitted to the top of the radio mast on the centre piled structure at a height of 153 ft. above MHWS. Character: flashing every 5 seconds, visible for 18 miles: candlepower 7,400.

Red lights are fitted at the 4 extreme corners of the structure which is 1,300 ft. long. Character: fixed red visible 2 miles.

Additionally there are several aircraft warning lights (red) on various parts of the structure marking the upper extremities of towers and other erections including the central radio tower.

The channel between the entrance to the Shatt-el-Arab and the Khor-al-Amaya Sea Island Oil Terminal is marked by buoys and the Shatt-el-Arab Light Vessel (refer to relevant notices issued by the Iraqi Ports Administration, M.E.N.A.S., and Admiralty Notices to Mariners).

(b) Tides. High water at the Terminal may be expected to occur about 20 minutes before high water at the Shatt-el-Arab, Outer Bar. This may vary due to local meteorological and spate conditions. Tidal streams in the vicinity are rotatory and are not likely to exceed 2 knots. The maximum streams are generally along the berthing faces of the Terminal, but at certain states of the tide, cross sets, at right angles to the berthing faces, may be experienced. These are unlikely to exceed 0.75 knots.

DOCUMENTS:

Crew List (5 copies).

Store List (2 copies).

PILOTAGE: Compulsory. Masters of vessels bound for Khor-al-Amaya Terminal should contact the Pilot vessel which cruises in an area about 2 miles S.E. of the Terminal. They will receive instructions as to whether to lie off, anchor or proceed towards the Harbour Master's launch.

(a) All vessels using Khor-al-Amaya buoyed channel are reminded that loaded tankers outward bound from Khor-al-Amaya Terminal have top priority in navigating the buoyed channel and all other vessels are to keep clear in all cases.

(b) All inward-bound vessels are to contact Khor-al-Amaya Harbour Master on VHF Channels 16 and 14 before entering Khor-al-Amaya channel for information regarding deeply laden tankers using the restricted channel, and for berthing and anchoring instructions.

(c) Pilotage is compulsory for all inward and outward bound tankers using the Khor-al-Amaya buoyed channel when the draft of the tanker is 15.85 m. (52 ft.) or over.

(d) Tankers arriving to load at Khor-al-Amaya with draft in excess of 15.85 m. (52 ft.) must give their ETA at Shatt-el-Arab Light-vessel at least 12 hours in advance by contacting the Pilot station or Khor-al-Amaya Terminal.

ANCHORAGES: Anchorage areas have been established bounded by lines joining the following positions:

(a) *Anchorage "A"*

(i) 29° 32′ 08″ N. 48° 58′ 59″ E. (iii) 29° 32′ 53″ N. 48° 56′ 56″ E.
(ii) 29° 31′ 24″ N. 48° 58′ 06″ E. (iv) 29° 33′ 14″ N. 48° 57′ 20″ E.

(b) *Anchorage "B"*

(i) 29° 44′ 03″ N. 48° 49′ 34″ E. (iii) 29° 42′ 08″ N. 48° 50′ 18″ E.
(ii) 29° 43′ 52″ N. 48° 49′ 12″ E. (iv) 29° 42′ 21″ N. 48° 50′ 45″ E.

(c) *Anchorage "C"*

(i) 29° 45′ 39″ N. 48° 48′ 41″ E. (iii) 29° 44′ 06″ N. 48° 49′ 31″ E.
(ii) 29° 44′ 28″ N. 48° 47′ 38″ E. (iv) 29° 43′ 35″ N. 48° 48′ 28″ E.

(d) *Temporary Lightering Anchorage*

(i) 29° 46′ 00″ N, 48° 48′ 28 ″ E. (iii) 29° 45′ 34″ N. 48° 46′ 35″ E.
(ii) 29° 45′ 40″ N. 48° 48′ 39 E. (iv) 29° 44′ 06″ N. 48° 47′ 18″ E.

Note:

(i) Anchorages "A" and "B" are for deep-draft vessels of 12.19 m. (40 ft.) and upwards.

(ii) Anchorage "C" is to be used by tankers (laden or in ballast) whose draft does not exceed 12.19 m. (40 ft.).

(iii) The temporary lightering anchorage is for the exclusive use of lighters. No other ships or vessels are to anchor within this area.

MAX. SIZE: 330,000 d.w.t. loading part cargo. Max. LOA: 1,200 ft. Max. draft, 68 ft.

HEALTH: Quarantine Officer boards after berthing. Vaccination Certificates required.

RADIO: Procedure for contacting Basrah Petroleum Company. Vessels are requested to establish contact with Basrah Petroleum Company Limited, Basrah, 48 hours prior to arrival, and to re-establish contact 48 hours after departure. Telegraphic Address: (Baspetco Basrah), (Baspetco Fao). Position: Lat. 30° 35′ 36″ N., Long. 47° 48′ 32″ E. Call sign "HNT" (FC). (a) Transmission 8,582 kHz. (b) Reception, tankers call on 8,356–8,374 and work on 8,374–8,457.5 kHz. Periods 0400–0430 hrs. 0800–0830 hrs. 1200–1230 hrs. 1600–1630 hrs. All times GMT. Services: C.V. Class of Operation: C.W. Class of Emission: A1.

Vessels should indicate their date and time of arrival, quantity of cargo required and whether in a state to receive cargo. In the event of vessels being unable to establish direct wireless contact with Basrah Petroleum Company Radio Station, messages should be passed through the Iraqi Ports Administration.

Procedure for contacting Iraqi Ports Coast Stations

1. Summary of Procedure. Whilst inside Iraqi territorial waters, ships under way will maintain watch on Channel 16 (156.80 mHz) and/or 461.5 kHz to ensure immediate reception of instructions issued by the controlling authorities.

(a) Khor Al-Amaya Radio maintains listening watch on Channel 16 (156.80 mHz).

(b) Pilot Station (Al-Rasheed Radio YIBE) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

(d) Al-Wasiliyah Radio (YIT) maintains listening watch on Channel 16 (156.80 mHz) and 461.5 kHz.

(e) Basrah Control Radio (YIR) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

(f) Umm-Qasr Radio (YIU) maintains listening watch on Channel 16 (156.80 mHz) and 500 kHz.

II. Special Instructions.

(a) Navigational warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).

(b) North Gulf weather forecast is transmitted by: 1. Basrah Control Radio on: 440 kHz at 0530, 1330 hrs. GMT and on request. 6493.25 kHz at 0530 hrs., GMT and on request. 8668 kHz at 1330 hrs., GMT and on request. 2. Khor-al-Amaya Radio on Channel 16 (156.80 mHz) at 0530, 1330 hrs. GMT and on request.

(c) Traffic Control Signals on Channel 16 (156.80 mHz) and on 500 kHz by Basrah Control Radio (YIR).

(d) Traffic Control Signals on Channel 16 (156.80 mHz) and 461.5 kHz by Al-Wasiliyah Radio (YIT).

(e) Traffic Control Signals on Channel 16 (156.80 mHz) and 500 kHz by Fao radio (YIS).

(f) Traffic Control Signals on Channel 16 (156.80 mHz) and 500 kHz by Umm-Qasr Radio (YIU).

(g) Traffic Control Signals on Channel 16 (156.80 mHz) by Khor-al-Amaya Radio.

III. Commercial and Public Correspondence. Call Basrah Radio (YIR) on Channel 16 (156.80 mHz), 500 kHz, 4, 6, 8, 12 and 16 mHz bands, and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

Frequencies instruction to pass messages time table 1200–1400 hrs. listen on 8354–8374 answer on 8668 traffic lists 1305.

Note. All messages are changeable except those concerning navigational aids, distress, pratique and medical advice messages.

TUGS: 3 tugs of 4,000 b.h.p. are available to assist in berthing and unberthing.

BERTHING: The Terminal consists of a piled structure, in 22 m. of water, having 1 tanker berth on one side and 2 berths on the other side with suitable mooring dolphins and platforms ahead and astern which are connected by cat-walks. The orientation is 320°/140°. The max. loading rate, with only 1 berth in use, is 9,000 t.p.h.; with 2 berths in use the max. loading rate at each is 4,500 t.p.h. Fire-fighting towers are provided, also a helicopter platform. Loading by "Woodfield" flow booms offering 4×16 in. and 2 or 4, 12-in. hoses. Vessels of the order of 120,000 d.w.t. can be accepted at berths 5 and 6 and 330,000 d.w.t. max. draft 21 m. at berth No. 7.

The S.G. and A.P.I. and temperature of the crude oil will be supplied to the Master on radio request.

Berthing of tankers: MENAS NOTICE No. 114/74.

No tanker of draft exceeding 17.68 m. (58 ft.) shall be permitted to berth or unberth at the existing Wharf No. 7 in the N.W. Direction.

No tanker of draft exceeding 17.00 m. (56 ft.) shall be permitted to berth at Wharf No. 7 and in the S.E. Direction.

No tanker of draft exceeding 17.68 m. (58 ft.) shall be permitted to berth at the proposed Wharf No. 8 and in the N.W. Direction.

No tanker of draft exceeding 17.00 m. (56 ft.) shall be permitted to berth at the proposed wharf No. 8 and in the S.E. Direction.

MEDICAL: An Iraqi Ports Administration Medical Dresser will always be available to attend to quarantine matters, deratisation certificates, etc. A doctor can be made available, through vessel's Agent, upon prior request, but necessary to give 24 hours notice to arrange.

FRESH WATER: Available with 24 hours notice.

FUEL: Not available ex-wharf.

CUSTOMS ALLOWANCES: During vessel's stay at Terminal, 1 carton of cigarettes only allowed to each crew member.

SAFETY REGULATIONS: Safety regulations and fire fighting procedures will be discussed with the Master on arrival.
GANGWAYS: Ships must supply their own gangways when alongside. Accommodation ladders and other ship side ladders are not suitable.
REPAIRS: Basrah Petroleum Company has no facilities to undertake ship repair work of any description.
AUTHORITY: President, State Organisation of Iraqi Ports, Basrah.
AGENCY: All Agency work is carried out by the Iraqi State Maritime Transport Company. Cable address: Bawakhir Basrah, or Bawakhir Fao. Masters of tankers should contact the Agent through Basrah Radio Station prior to arrival. Agent's representatives are not housed on the island. Ship's documents for port clearance purposes are passed by them to the Agent for action. Stores and provisions will be sent out by the Agent, given sufficient prior notice.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Israel

ASHDOD (Inc. Ashkelon): 31.49 N. 34.39 E.

DOCUMENTS:
3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.
Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 72 and 48 hours before arrival holds workable and gangs required also draft forward and aft on arrival.

PILOTAGE: ETA through Haifa Radio 4XO addressed to Agent at least 12 hours before arrival. Pilot station and boat equipped VHF Channel 14 and 16 contact station for instructions. Pilot boards about 0.5 mile off port entrance between W. to N.W. from breakwater head (green light).

In bad weather, when boarding impossible, vessel is guided into harbour by VHF or tugboat waiting at entrance, at Master's consent.

Pilot ladder as per Safety of Life at Sea. Vessel should head about 4 points into weather. Recommended 2 life lines running along ladder, 1 each side, ropes 2.5–3 in. cir.

ANCHORAGE: All area open sea, no recommended safe anchorage, but vessel should avoid anchorage near fairway and too close to oil installation buoys.

Masters are advised to keep the decks well lit in view of the strong lights ashore which may cause the anchor lights to be seen with difficulty by approaching vessels.

Vessels moored to the breakwaters shall have their anchor lights burning.

RESTRICTIONS: Pilotage available 24 hours. Enter according arrival time or berths available. Vessels at anchorage awaiting berth keep watch Channels 14 and 16.

MAX. SIZE: Draft limitations at Bulk Pier: Summer, 11 m. Winter, 10.5 m. Draft limitations other piers: 9.8 m. No. limits length or breadth. Tankers see below.

HEALTH: Free pratique is requested via Haifa, address, "Quarantine Haifa".

RADIO: Haifa Radio 4XO, also see "Haifa".

TUGS: 1 of 1,500 h.p., 2 of 1,000 h.p. Each charge included in pilotage charge for normal berthing attendance. Tugs await at port entrance and act on Pilot's instructions. Vessel's lines are requested.

TANKERS: Terminal situated at Ashkelon where tankers load crude oil by under-water pipe-lines. Size of vessel is unlimited due to the depth of water. The loading rate is about 30,000 tons in 12 hours. All services such as supply of bunkers, provisions, water, crew changes, must be carried out at Ashdod roadstead where health and immigration officials board. Vessels not requiring any services at Ashdod may call directly at Ashkelon, only paying light dues and anchorage dues.

FRESH WATER: Fresh water supplied by taps at 220 t.p.h. or by barge. Minimum supply is 30 tons.

FUEL: Supplied by trucks, or supplied by special barges. 24 hours advance notice required.

CONSULS: All Consulates in Tel-Aviv approx. 40 km. Available by telephone.

REPAIRS: No dock, but minor repairs effected.

GANGWAY/DECK WATCHMEN: Private companies supply gangway watchmen, obtainable through Agent.

OPENING/CLOSING HATCHES: Performed by stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of GMT.

AIRPORT: Lod, served by regular air lines, distance 35 km.

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; The 2 days of the Jewish New Year (Rosh Hashana); The Day of Atonement (Yom Kippur); The first and the last day of the Feast of Tabernacles (Sucot); The first and the last day of Passover (Pesah); Pentecost (Shvuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire Services, telephone 22222.

DEVELOPMENTS: A new container berth and terminal under construction, become operational 1974.

REGULATIONS:

Stand by for moving vessels: The Master or person for the time being having charge of a vessel shall ensure that adequate officers and crew are available and that the main propelling machinery of the vessel is maintained for moving the vessel at 1 hour's notice.

No vessel may drop steam, dismantle engine or otherwise interfere with the propelling power of the vessel, nor may the vessel be left unattended by responsible officers and crew unless permission to do so is first obtained in writing from the Harbour Master.

Photographing: Photographing in the Port Area is strictly forbidden without a written permit issued by the Security Officer of the Port.

Swimming: Swimming in Ashdod Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of ship's boats: The use of ship's boats is forbidden in Ashdod Port. Launch service is available for the convenience of ship's personnel.

Shore leave: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police.

All breakwaters are out of bounds to crews of merchant vessels.

AUTHORITY: Israel Ports Authority.

AGENT: M. Dizengoff and Co. Ltd., PO Box 4001, Ashdod, Israel. Tel. 2158/7. Telex 03–814, 03–836.

EILAT (Elath): 29.32 N. 34.57 E. **(See Plan)**

DOCUMENTS:
For Customs:
Customs Questionnaire, Crew Customs Declaration, Stores List, Crew List, Passengers List, Foreign Currency List, Narcotics List, Arms List, Import Cargo Manifest, Transit Cargo Manifest.
For Quarantine:
Maritime Declaration of Health, Valid Vaccination Certificate for smallpox all crew and passengers, Deratisation Exemption Certificate.
For Border Control:
1 Police Questionnaire, 2 Crew Lists, 2 Passenger Lists, Seamen's Books and travelling documents of passengers.

PILOTAGE: Compulsory, ordered through Agent. When unable to contact Agent, Pilot can be ordered by contacting Harbour Master by Eilat Radio, or by VHF Channel 14. Vessel due to berth awaits opposite oil installations located approximately 2.5 cables South of the main jetty. Vessels requesting Pilot for anchoring stop opposite the North end of the main jetty. Tankers waiting Pilot for oil installations to stop 0.5 mile South of oil installations. Pilot motor launch, red hull, grey superstructure amidships stationed at North end of main jetty. Pilot ladder complying with all safety regulations and properly lighted during dark hours is necessary. Vessels awaiting Pilot should anchor only in designated area.

ANCHORAGES: Boundaries of area marked by lines connecting following positions;

(A)	29° 32′ 51″ N.	34° 57′ 19″ E.
(B)	29° 32′ 26″ N.	34° 58′ 34″ E.
(C)	29° 31′ 40″ N.	34° 58′ 27″ E.
(D)	29° 32′ 31″ N.	34° 57′ 06″ E.

Average depth 25 fathoms. If arriving at port for first time, do not try anchoring anywhere outside anchoring area.

MAX. SIZE: For berthing alongside main cargo jetty, length 528 m., max. draft up to 39 ft.

Additional cargo jetty length 170 m., max. draft up to 19 ft.

North Oil Jetty accommodates tankers up to 125,000 d.w.t. with draft of 56 ft.

South Oil Jetty can accommodate tankers up to 500,000 d.w.t. Depth of water alongside 94 ft.

HEALTH: Free pratique may be requested by cable via Haifa or via Eilat Radio from Quarantine Authorities. If suspected disease or fever on board immediately advise Quarantine Eilat with all details.

RADIO: Call sign Eilat Radio 4XA. Full details working hours and frequencies found in Admiralty List Radio Signals and similar publications. Good radio connection with Eilat can be obtained also via Haifa Radio, call sign 4XO, operating continuously.

TUGS: Tugs meet vessel off quay. Lines not usually used as tugs usually push. When needed, ship's lines used. 1 tug 2,750 h.p., 1 tug 960 h.p., 1 fire-fighting tug 280 h.p. and 5 tugs 100–180 h.p.

BERTHING: No difficulty except at times of strong Southerly winds when small vessels may have to leave quay and proceed to anchorage or sea, due to strong swell.

Additional cargo quay 662 ft. in length with max. draft alongside of 22 ft. completed and brought into operation.

BULK HANDLING FACILITIES: Bulk elevator for bulk loading (Phosphate & Potash) capacity 800 m. t.p.h.

CRANES: 4 heavy cranes, 25 tons capacity. 2 cranes, 5-10 tons capacity. 1 crane, 15 ton capacity.

STEVEDORES: Booked by ship's Agent. All details of cargo distribution and storage to be cabled in advance to Agent.

MEDICAL: Hospital facilities available. Crew members or passengers must have valid international cert. for smallpox.

DENSITY: 1030.

FRESH WATER: Available in unlimited quantities and supplied at all jetties. No facilities for supplying fresh water at anchorage.

FUEL: All grades supplied in small quantities by road tanker.

OPENING/CLOSING HATCHES: Normally by stevedores.

CUSTOMS ALLOWANCES: Every crew member is permitted to keep 200 cigarettes or equivalent amount of other tobacco, out of bond. Every crew member is permitted to keep 1 bottle of spirits and 1 bottle of wine, out of bond.

IDENTIFICATION CARDS: Every crew member going ashore should have a shore leave pass. Shore leave passes will be received from the border control officer after the vessel is cleared.

CONSULS: There are no consulates in Eilat. All consulates are in Jerusalem or in Tel-Aviv.

REPAIRS: All afloat deck and engine repairs can be performed by local workshops.

DRY DOCKS: Syncrolift with lifting capacity of 1,200 tons.

REPATRIATION: There are all facilities for arranging repatriations or crew changes.

AIRPORT: Eilat Airport is used at present for internal traffic only. There are 8 flights daily from Eilat to Tel-Aviv except on Saturdays. From Tel-Aviv there is good transportation to Lod International Airport.

TIME: Local time is GMT plus 2 hours; no Summer time is kept.

HOLIDAYS: No cargo work is usually performed during official

holidays or Saturdays. The official holidays are: Passover (2 days during April); Independence Day (1 day end April/beginning May); First Harvest Day (1 day end May/beginning June); Jewish New Year (2 days, September); Day of Atonement (1 day end September); Feast of Tabernacles (2 days, October). No cargo work is usually performed during 1st of May although it is not an official holiday.

TELEPHONES: At present there are no facilities to arrange telephones on board ships.

SHORE LEAVE: Crew members are granted shore leave.

DELAYS: Normally vessels arriving after midnight are berthed only at daybreak, before the beginning of the morning shift.

AUTHORITY: Israel Port Authorities.

AGENT: M. Dizengoff and Co. Ltd., PO Box 11, Eilat. Tel. 2146–7. Telex No. 07729. Also Lloyd's Agent.

HAIFA: 32.49 N. 35.00 E.

DOCUMENTS:

1 Photograph of each member of the crew.
3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each Crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.

Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 78 hours before arrival holds workable and gangs required, also draft forward and aft on arrival.

PILOTAGE: Compulsory for all merchant and foreign naval vessels. Pilotage service is rendered round the clock. Vessels are boarded by Pilot seaward of the main breakwater.

ANCHORAGE: Vessels shall not anchor within the prohibited areas and must keep clear of the fairways of the main harbour and Kishon Zone.

MAX. SIZE: The width of the entrance channel to the main port, between the main and lee breakwaters, is 183 m. The depth of the entrance is 12 m. The width of the entrance to the Kishon Harbour is 70 m., with a min depth of 8.50 m. Vessels of max. draft 35 ft. can be safely accommodated in the main port: in the Kishon Harbour accommodation is limited to vessels of 27 ft. draft. Depth in both harbours are maintained by dredging at regular intervals.

Tankers: Up to 50 ft. draft at buoy moorings.

RADIO: Radio-telephone service from ship-to-shore and vice versa via Haifa Radio, call sign 4XO. Ships in port may also be connected to the Israeli telephone system.

The port has a signal station equipped with a modern 60 kw VHF installation, working on Channels 12, 14 and 16. The station is licensed for port operation only and is in continuous service. For all other ship-to-shore communication contact Haifa Radio, call sign 4XO.

The Israeli Meteorological Service broadcasts twice daily the weather forecast in English for East Mediterranean area over Haifa Radio.

Vessels approaching the coast of Israel shall report their position to the Israeli Authorities in accordance with the following procedure:

(a) Every foreign vessel bound for the ports of Haifa, Ashdod, Ashkelon or Gaza, shall send a position report to the Israeli Ministry of Transport (IMOT) via Haifa Radio (4XO). Such position report should be sent in the form of a free of charge service cable when the vessel arrives at a distance of 50 miles from the coast and it shall contain vessel's name, position, course, speed and destination.

(b) In addition to the report, in *(a)* above and according to the ports' regulations, every vessel (foreign or Israeli) entering the Israeli territorial waters shall send a position report which shall contain vessel's name, position, course, speed and destination and which shall be sent at the time the vessel enters territorial waters (12 miles) to:

(1) The nearest Port Operation Services, by means of VHF; or
(2) The IMOT via Haifa Radio (free of charge service cable) in cases where VHF communication with the nearest port cannot be established.

HEALTH: Free pratique by radio is granted on request by the International Quarantine Message to the Quarantine Station round the clock (including holidays) via Haifa Radio, call sign 4XO on 500 kc/s.

Medical advice by radio for all ships may be obtained through Haifa Radio 4XO free of charge. Call "Medico Haifa".

There is no special quarantine anchorage.

Vaccination against smallpox is required from arrivals, except those who were resident in a European country, in Canada or in the U.S.A. for more than 14 days before disembarkation in Israel, provided those countries are free from smallpox.

TUGS: Vessels obtain tug assistance, if required, for entering or leaving the harbour and for shifting. 2 tugs of 1,500 h.p. 1 of 1,000 h.p. and 1 of 500 h.p.

BERTHING: Ships moor normally to wharves and jetties, and to a lesser extent stern to the main breakwater and alongside dolphins.

Main Harbour

The main harbour is situated on the Southern shore of Haifa Bay at Lat. 72° 48′ N., Long. 35° 01′ E. It is protected by 2 breakwaters: the main breakwater, 2,210 m. long, in the North, and the lee breakwater, 745 m. long, in the East.

The harbour basin covers an area of 1,050,000 sq.m. (about 260 acres). The main port's land area amounts to 630,000 sq.m. (about 155 acres).

Kishon Auxiliary Harbour

To the East of the main port, around the lower reaches of the Kishon rivulet, lies the Kishon Auxiliary Harbour. It consists of an outer harbour basin that is protected by 2 breakwaters of 600 m. and 350 m. length respectively, and a main channel of 1,045 m. length, of which the first stretch of 700 m., measured from the entrance to the outer harbour basin, has a depth of 8 m. while the second stretch of 345 m. has a depth of 6.50 m. A side channel, 213 m. long and 4 m. deep, which branches off the main channel toward the East, serves as a fishing dock. Another side channel 350 m. long and 8 m. deep serves as holding basin of the shipyard and the Chemicals Terminal.

Wharves

	Length metres	*Depth metres*
Main Port		
Main Wharf	171	9.4
	400	9.4
	270	11.5
	40	11.5
	40	11.5
	170	9.0
	48	9.0
Cargo Jetty	205	9.0
	85	9.0
Oil Jetty	350	10.7
	330	9.8
East Lighter Wharf	110	4.4
West Lighter Wharf	220	3.0
Kishon Zone		
Cargo Wharf	355	6.5
	285	8.0
Fishing Dock	213	4.0
Chemicals Wharf	325	8.5

BULK HANDLING FACILITIES: *Coal:* Coal imports are usually handled by grabs fixed to shore cranes.

Grain: 2 mobile elevators on main wharf with combined unloading capacity of 465 t.p.h. A third elevator has a nominal capacity of 600 t.p.h. and is operating at 300 t.p.h. in the 1st Phase.

Chemicals: Chemicals in liquid bulk unloaded and loaded at chemical tank farm in Kishon Zone. Terminal jetty suitable for tankers up to 20,000 d.w.t. with draft 22 ft. 6 in. Storage capacity 45,000 cu.m.

Containers: Presently containers are discharged and loaded in the Western area of the port, having all facilities to handle 20 ft. and 40 ft. containers. A container terminal is in the process of being established in the Eastern part annexed to the Oil Dock Breakwater. All container handling equipment available.

CRANES:

	No.	*Capacity (Tons)*	*Radius (m.)*
Floating Derrick	1	100	
Portal Cranes	2	3	20
	2	3	25
	12	5	25
	3	15	30
	6	25	30
Mobile Cranes	4	5–6.5	
	9	8–13	
	3	25	
	2	28–30	
	2	50	

CONTAINER HANDLING EQUIPMENT:

	No.	*Capacity under spreader (tons) (20′-40′ containers)*	*Reach from quay (m.)*	*Height of lift (m.)*
Container Quay	1	35	32	22
Gantry Cranes	1	35	32	26.5
	No.	*Capacity (tons)*		
Rubber-tyred	2	30.5		
Portal Cranes	3	40		

TANKERS: Up to 4 oil tankers can be accommodated at one time at the Oil Jetty, 2 on each side (draft 28 ft.–33 ft.).

In the Roadstead.

There are 3 submarine oil loading and unloading berths, each connected to a submerged pipe-line, 2 to 12 in. dia. pipe-lines and 1 to a 32 in. dia. pipe-line.

Berth No.	*Situation in relation to harb. entrance*	*Diameter*	*Extension from shore*	*Direction*	*Depth under water*
1	1.75 m. N.E.	12 in.	4,200 ft.	307°	52 ft.
2	1.25 m. N.E.	12 in.	4,500 ft.	290°	52 ft.
3	0.50 m. N.E.	32 in.	10,000 ft.	319°	58 ft.

The signal station ashore opposite berth No. 3 has 2 signal masts. Vessels moor with their own 2 anchors ahead and mooring lines to 2 buoys astern. The Oil Company's Mooring Master acts as a Pilot until the vessel is moored and supervises the connecting and loading or discharging, remaining aboard until sailing time.

Throughput Rates

Vessels load or unload up to 1,000 t.p.h. through 10 in./12 in. pipe-lines on the Oil Jetty and up to 700 t.p.h. at the 12 in. pipe-line submarine berths. The 32 in. pipe-line berth is destined for loading or unloading supertankers at the rate of up to 2,000 t.p.h.

MEDICAL: Hospital facilities available. Agent will board vessel with company doctor if so required by the Master.

FRESH WATER: Drinking water is plentiful and of satisfactory

quality; no treatment is needed as water is frequently examined and chlorinated when required. The water is supplied by hydrants from shore or by water-barge at a delivery rate of 30–50 t.p.h. Boiler water not available.

FUEL: The following grades of oil are available for supply as bunkers:

Heavy Fuel Oil	1,500 secs. Red. 1 at 100° F.
Light Fuel Oil	450 secs. Red. 1 at 100° F.
Marine Diesel Oil	Standard Grade

The oil is supplied direct from Oil Dock or from barges. Bunkers are normally supplied between 0700 and 1515 hrs. on working days; at any other time by special arrangement. Delivery rate from Oil Dock is up to 500 t.p.h. (3,500 bbls.) and from barges up to 150 t.p.h. (1,000 bbls.)

REPAIRS: Israel Shipyards Ltd. run a modern shipyard, situated in the Kishon Zone, capable of building ships of up to 25,000 d.w.t. and to handle hull repairs, conversions, engine repairs and repairs of electric equipment.

The yard operates 2 floating docks with a lifting capacity of 7,500 and 1,100 tons respectively.

Vessels which need no dry docking can be repaired at the shipyard's quay, totalling 400 m. length with 7–8 m. depth. Ogen Ltd. also undertake ship repairs.

Floating Dock with lifting capacity of 20,000 tons near completion.

STEVEDORES: Enable Agent order gangs, important obtain 48 hours advance accurate ETA from vessel. Failure give precise ETA may result in ship losing 12/24 hours, also cost gang waiting time. No work on official holidays.

Working Hours

Work is usually carried on in 2 shifts: the first shift is from 0630 to 1430 hrs., on ordinary working days, or from 0630 to 1330 hrs. on the eve of Saturdays and holidays. The second shift is from 1530 to 2230 hrs. on ordinary working days and from 1330 to 2030 hrs. on the eve of Saturdays and holidays. Occasionally, in order to complete work on a ship or for special cargoes, a third shift is worked.

GANGWAY/DECK WATCHMEN: Not compulsory. Port guard keeps gangway watch.

OPENING/CLOSING HATCHES: Performed by Stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, and 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of G.M.T.

AIRPORT: International air connection from Lod Airport, 105 km. from Haifa.

CONSULS:

Austrian	Liberian
Belgian	Norwegian
Ivory Coast	Spanish
Guatemala	Finnish
Danish	Panamanian
Holland	French
Yugoslavian	Swedish
Greek	

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; the 2 days of the Jewish New Year (Rosh Hashana); the Day of Atonement (Yom Kippur); the first and the last day of the Feast of Tabernacles (Succot); the first and the last day of Passover (Pesach); Pentecost (Shevuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

GENERAL:

Persons Boarding Vessels

No person shall be allowed on board any vessel unless he is in possession of a boarding pass which must be shown on demand to the police officer at the gangway.

Passes for boarding cargo vessels on business are issued by the Port Management; passes for boarding cargo vessels for any other purpose and passes for boarding passenger vessels are issued by the Frontier Control Section of the Port Police.

Swimming

Swimming in Haifa Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of Ship's Boats

The use of ship's boats is forbidden in Haifa Port. A public motor-launch service is available for the convenience of ship's personnel. The signal to call the motor-launch is as follows:

By day: The international Code of Signals Flag "N" hoisted at the yard.

By night: Repeated flashing light signalling of the International Morse Signal "N".

Photographing

Photographing in the port area is strictly forbidden without a written permit issued by the Commander of the Port Guard.

SHORE LEAVE: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police. All shore leave passes must be surrendered to the Boarding Officer before departure of the vessel.

DEVELOPMENTS: Two projects, running concurrently, form the first stage of the development. One of the projects refers to the construction of a new Container Terminal within a specially designed containerships basin outside the existing breakwaters. The second project deals with the deepening and extension of the Kishon basin.

The Container Terminal will consist of 800 m. of quay front, with water depth reaching 14 m. below M.S.L. and a land area covering over 30 hectares.

The Kishon basin development provides for the construction of a 600 m. extension to the existing quay, which itself will be reconstructed and deepened. The extension, with the water depth reaching 11 m. below M.S.L., will provide specialized berths for handling scrap iron, logs and unitized timber.

The Kishon basin extension will make it possible to proceed with the development of the Industrial Port and Free Zones within the Kishon area of Haifa Port, where an inland Auxiliary Distribution Centre, covering an area of some 20 hectares is under construction.

Both the Container Terminal and the Kishon Basin projects are in advanced stages of detailed planning and their completion is expected toward the end of 1978.

AUTHORITY: Israel Ports Authority.

AGENT: Messrs. M. Dizengoff and Co. Ltd., POB 300, Haifa. Telegrams: Diship, Haifa. Telephone No. 43371. Inland Telex No. 044827. International Telex No., Haifa 044814/044815 (2 lines).

NOTES

Please also advise Shipping Guides (Services) Ltd.

Italy

ANCONA: 43.37 N. 13.32 E.

DOCUMENTS:
4 copies Crew Lists.
1 copy Provisions List.
1 copy B/L every set.
1 copy General Cargo Manifest.
3 copies Crew Dutiable Articles (slop-goods).
5 copies Passenger List (in transit or not).

PILOTAGE: Pilot usually boards vessel range 1-2 miles from harbour's entrance (red light) in fine weather conditions. Pilot house situated near the "red light" – pilot boat of international type. If bad weather Pilot boards vessel at harbour's entrance. Compulsory for vessels over 500 g.r.t.

ANCHORAGES: In Ancona roads at Master's discretion (Pilot available for anchorage).

RESTRICTIONS: Tankers berthed in daytime only.

MAX. SIZE: Falconara Oil Terminal: up to 44 ft. draft.
Ferruzzi Silos: up to 30 ft. draft.
General Cargo Berths: up to 28 ft. 6 in. draft.

HEALTH: Sanitary pratique obtainable by radio according International Rules by cabling "Sanimare Ancona" between 12 to 6 hrs. before arrival.

RADIO: Ancona Radio "ICA" – frequency 500 kc/s. – working frequency 489 kc/s. By radio-telephone: Ancona Radio PT "IPA", kc/s 2182. (Service for VHF to be installed within a short period of time.)

TUGS: Usually join vessel at harbour entrance – ship's lines used, compulsory for vessels of over 3,500 g.r.t.

STEVEDORES: ETA usually tendered to Agent 72/48/24 hrs. prior arrival in order arrange gangs.

MEDICAL: Assistance available if required.

BULK HANDLING FACILITIES: *Grain:* Silos operated by Ferruzzi and ICIC. Discharging rate 2,500 metric tons per 16 hours.

Silos owned by S.A.I., S.O.A., at dock 21. Draft, 28 ft. 12 vertical silos of 1,500 ton grain capacity and 4 inside service cells of 1,000 tons capacity. Fittings are provided for loading and discharging any kind of grain with Vacuvator pumps, each one of about 150 t.p.h. capacity.

Ore: Discharging rate 1,200 metric tons each shift of 8 hrs.

TANKERS: *Falconara Oil Terminal.* Owned by Anonima Petroli Italiana S.P.A. 1 hose of 16 in., 1 hose of 12 in., 2 hoses of 14 in., 1 hose of 8 in. (for bunker), 1 hose of 4 in. (for water), 1 flying hose for fresh water about 70 mm., 1 flying hose for bunker of 100 mm.

Permitted draft up to 42 ft.

Sea Buoy Berth. Situated 600 m. N.W. of the terminal, for discharging crude oil. 7 pipe-lines with the following size: 1 for fresh water (3 in.), 1 for crude oil (300 mm.), 1 for fuel oil (200 mm.), 1 for gas oil and diesel marine (200 mm.), 1 for gasoline (200 mm.), 1 for gasoline (300 mm.).

Permitted draft is about 44 ft.

Jetty: A tanker berth is situated at 300 m. from the end of the jetty, used for vessels with draft not over 19-20 ft.; 1 pipe-line of 200 mm. for gasoline. A further berth at the pier is being constructed to take vessels with draft not over 26 ft.

FRESH WATER: Available from quay. Straight time plus increase for overtime and holidays.

FUEL: All grades available. (Note: marine diesel obtainable not distilled but mixed fuel/gas oil.) Delivered by pipe-line or barge.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended.

OPENING/CLOSING HATCHES: Optional crew or stevedores.

CERTIFICATES:
Radio Telegraphy.
Load Line.
Tonnage.
Class.
Registry Safety Equipment.
Derating, etc.
Italian Anchorage Dues Bill, if already paid.

CUSTOMS ALLOWANCES: Tobacco. 50 cigarettes for each man during vessel's stay at Ancona – British/U.S.A. flag vessels may obtain after a certain period of stay another ration of 50 cigarettes per man. Seals cannot be opened. Wines/vermouths/beer no restrictions. Spirits three quarter bottle depending on the number of crew.

IDENTIFICATION CARDS: Passport or seamen's book required.

CONSULS:
Swedish Consul, tel. 23252.
French Consular Attache, tel. 22879.

REPAIRS: Minor engine/electrical, carpentry repairs can be effected.

DRY DOCKS: 1 for up to 500 d.w.t.

REPATRIATION: From April to October weekly regular lines to Greece/Yugoslavia/Cyprus/Israel every fourth night.

AIRPORT: Falconara – 14 km. from Ancona. Direct flight to Rome/Milano, connection for international flights.

TIME: In Winter plus 1 hour to GMT. In Summer 2 hours to GMT.

HOLIDAYS: National and local holidays: 1st January, 6th January, 19th March, 25th April, 1st May, 4th May (local), Easter and day after Easter, Ascension Day, Corpus Christi, 2nd June, 29th June, 15th August, 1st November, 4th November, 8th December, 25th-26th December. Work can be arranged if required in time and subject to Harbour Master agreement.

POLICE/AMBULANCE/FIRE: Port Police, tel. 31030; Fire Station, Port, tel. 31715; Red Cross, tel. 23332; Yellow Cross, tel. 22680.

TELEPHONES: No facilities for connecting to vessels.

GENERAL: All tankers proceeding to Falconara must approach Ancona roadstead for Pilot and pratique.

AUTHORITY: Il Comandante, Colonello di Porto, Ancona.

AUGUSTA (Including Priolo): 37.13 N. 15.14 E.

LOCATION: The bay is divided into 3 parts: Port Xifonio, the old port, once used by small vessels, now sometimes used for anchorage of ships which cannot come into the port Megarese. Port Megarese, where there are oil installations and other works. Priolo's cove, industrial zone. Priolo is the place name used to indicate the area of the Montedison installations.

DOCUMENTS:
Crew Lists (at least 6 copies).
Custom Manifest.
Passenger Lists (6 copies).
Maritime Declaration of Health.
Bills of Lading.
Vaccination Certificates.

Can be presented as an information note on the arrival of the ship to the Harbour Master. This note can be broadcast by radio or telegraph. This facilitated procedure is suspensible by Harbour Master in case of particular events and, by request, these documents must be sent in:
Certificate of Registry.
Cargo and Gear Safety Certificates.
Radio Safety Certificates.
Safety Construction Certificate.

PILOTAGE: Compulsory for vessels over 500 tons (gross tonnage). Pilot available day and night. Vessels requiring a Pilot should display appropriate International Code Signals, should approach about 1 mile from the principal entrance. Pilot boat is black with a white band, letter "P" is painted in amber on each side of the bow. Pilot boards about 1 mile from main entrance. In bad weather the launch will wait inside the breakwater by the main entrance. Pilot station telegraphic address is Augusta Piloti. ETA should be given 12 hours in advance. Vessels with VHF can contact Augusta Piloti on Channel 12.

APPROACHES: Entrance is from the East, between central and Northern breakwaters, with leading lights in a line approx. 274°. Entrance is about 400 m. in width, with a depth over 35 m. in the middle, and may be used day or night.

Another entrance from S.E. between central and Southern breakwaters used only for small ships or emergency is about 300 m. in width, with a depth of 11 m.

ANCHORAGE: Inside the breakwaters, in the central zone, the depth of water is not less than 22.40 m., and is possible to receive many ships, including the VLCC.

MAX. SIZE: Up to 65 ft. draft at Montedison new supertanker jetty, capable of receiving vessels up to 130,000 g.r.t.

HEALTH: Pratique may be allowed by radio, request to Sanimare Augusta 24 hours prior arrival. If not requested by radio, pratique is given on arrival but only during daylight. Pratique is automatic for vessels coming from an Italian port and Common Market European Ports.

RADIO: R.T.: Augusta Radio listening on 2182 kc/s. Working on 1643 and 2260 (24 hours a day).

V.H.F.: Augusta Radio (Ch.16) Between 0000 and 2400 hrs. working.
Harbour Master (Ch.16) Working 24 hrs. a day.
Pilots (Ch.12) Working 24 hrs. a day.
Tugs and Liners (Ch. 8) Working 24 hrs. a day.
Taxi-boats (Ch.10) From 0600 to 2400 hrs.

TUGS: Available, join vessel inside breakwater entrance. H.p. varying from 750 to 3,000.

BERTHING: *Shell Pier:* Berth Nos. 1, 2 and 3 at a finger jetty with depths of 12, 28 and 12 ft. respectively and used by coasters and bunkering barges.

Punta Cugno: Northern Jetty: Berth No. 3 Liquichimica, used for discharging and loading chemical products by Liquichimica factory. Accepts vessels up to 3,000 g.r.t. with depth 17ft. 09 in. Mooring alongside. Southern jetty: Berth No. 4, used by Esso Bunker barges. Berth No. 5, used by Liquichimica factory, for vessels up to 15,000 g.r.t., which are moored by the stern with bow anchors. Depth 30 ft. Berth No. 5bis, is at Steel Island used for chemical products discharging and loading. Ships moored by the stern with 2 anchors. Depth 22 ft.

Esso: Pier No. 1: Length of pier about 740 m. Heading 110°.

Berth No. 6: Depth 16 ft., used by small tankers loading gasoline (regular, premium, Jet A 1), gasoil, bitumen, fuel oil, LPG, 4 pipe-lines at berth. Connection of 4 in. for LPG, loading rate about 300 t.p.h.; 6 in. for white products, loading rate 150 t.p.h.; 6 in. for black products, loading rate 150 t.p.h. Gangway ashore.

Berth No. 7: Depth 25 ft., vessel moored by the stern. 3 pipe-lines with connection of 6 in. Loading rate 150 t.p.h. Loading of gasoline, gasoil, bitumen, fuel oil. Gangway ashore.

Berth No. 8: Depth 36 ft., for ships about 20,000 g.r.t. 4 pipe-lines at berth with connections 8 in. (2 for white products and 2 for black products). Loading of same products as No. 7. Gangway ashore. Deballasting pipe-line available for all berths. Diameter 14 in., rates from 700 to 2,000 t.p.h.

Pier No. 2: Length of pier about 1,150 m. Heading: 110° ending in a steel platform. Large tankers discharge crude oil on either side of the platform at rates of up to 6,000 t.p.h.

North side, No. 10, depth 52 ft., receiving tankers up to 50,000 g.r.t. Loading of gasoline, gasoil, fuel oil, lube oil. Connections: 6

in. for bunker, 10 in. for black and white products, 10 in. for lube oil. Gangway ashore.

South side, No. 11, depth 54 ft., receiving tankers up to 75,000 g.r.t. Loading of all products as No. 10 except lube oil. Connections 10 in.

At about 400 m. from end platform there are 2 smaller platforms (Berth No. 9 and 12).

Berth No. 9: Depth 28 ft., receiving tankers up to 7,000 g.r.t. Loading of gasoline, gasoil, fuel oil, lube oil. 4 pipe-lines with connections of 8 in.

Berth No. 12: Depth 28 ft. for tankers up to 10,000 g.r.t. Connections of 6 in. Loading of same products as No. 9. Alongside the pier pipe-lines are of diameter of 18 in. to 24 in. for crude oil, 16 in. to 20 in. for fuel oil, 14 in. for diesel and gasoil, 10 in. for kerosene, 8 in. for gasoline, 10 in. for naphtha and JP4. There is also a 14 in. pipe-line for deballasting and 8 in. lines for lube oil. All berths are provided with gangway. At Nos. 10 and 11 vessels may use wire ropes only if the eyes are made of either manila or nylon.

Cement: A finger jetty. Berth Nos. 13 and 14 with depths of 23 ft. used by small vessels carrying cement in bulk. Operations are through a conveyor-belt system, with a handling rate of about 300 tons per day.

N.A.T.O. Pier: Berths No. 15 and 16 in depths of 35 ft. and 36 ft. respectively. Used for loading and discharging petroleum products, but being a Navy jetty, berthing is subject to priority being given to Navy requirements.

Montedison: Montedison Supertanker Jetty: For vessels up to130,000 g.r.t. Depths vary from 13 ft. to 65 ft. Berths Nos. 17 to 24. Montedison Jetty: Berth No. 25, depth 43 ft. and Berth No. 26, depth 38 ft. Steel Island: Berth No. 27, depth 33 ft., for vessels up to 20,000 g.r.t. which are moored by the stern, and secured to 4 buoys with bow anchors down. Berth used for chemical and petroleum products. All the berths have a deballasting pipe-line.

Montedison concrete jetty: Both dry and liquid chemicals are handled at this jetty. Berth No. 28, depth 18 ft., for small vessels whose length is not more than 80 m. moored by the stern. Berth No. 29, depth 30 ft., for vessels up to 15,000 g.r.t. Berth No. 31, depth 31 ft. 06 in., for vessels up to 20,000 g.r.t. Bagged cargo at a rate of 2,000 tons per day, and bulk cargo up to 4,000 tons per day, load or discharge. Berth No. 30 used by bunker barges. Berth No. 32, depth 13 ft., for small tankers only.

New Montedison jetty (carichi liquidi): Is situated in Priolo's cove. Chemical products are handled. Berth No. 33, depth 17 ft. for vessels up to 1,700 g.r.t. Berth No. 34, depth 25 ft., for vessels up to 5,000 g.r.t. Berth No. 35, depth 25 ft. and No. 36 with a depth of 12 ft.

MEDICAL: Medical and hospital facilities available. Vaccinations done on board. Advance notice preferred for assistance required on arrival.

TANKERS: See "Berthing".

DENSITY: 1024 to 1026.

FRESH WATER: Available by barge.

FUEL: All grades available by pipe-line or barge; suppliers Esso, Shell, B.P., Agip, Gulf. 48 hours notice required.

DEVELOPMENTS: A new pier for larger tankers will be constructed by Liquichimica at Punta Cugno. It is also planned to extend the Esso Pier No. 1.

GANGWAY/DECK WATCHMEN: Employment of shore watchmen advisable.

OPENING/CLOSING HATCHES: Normally by ship's crew.

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.

IDENTIFICATION CARDS: Shore passes given by local police.

CONSULS:

Liberia. Tel. 975341.
Norway. Tel. 975182.

REPAIRS: No repairs permitted while alongside tanker berths. May be done in the anchorage subject permission of port authorities.

DRY DOCKS: E.B.A. Company. Floating Dock, length 105 m., breadth 17.10 m., lifting capacity 3,000 tons.

REPATRIATION: No difficulties.

AIRPORT: Nearest at Catania, can be reached in 40 minutes by car. Daily flights to Rome and Milan for international connections.

TIME: GMT plus 1 hour. Summer time, May to September, GMT plus 2 hours.

HOLIDAYS: Tankers not affected. 1st January; 6th January; 19th March; Easter Monday; 25th April; Ascension Day; Corpus Domini; 15th August; 4th November; 8th December; 25th December.

POLICE/FIRE/AMBULANCE: Police, Tel. 975555; Ambulance, 975000; Fire, 974777.

TELEPHONES: Situated at all berths. No direct connection to vessels.

SHORE LEAVE: Allowed at all times.

AUTHORITY: Capitaneria di Porto.

BAGNOLI: 40.48 N. 14.10 E.

DOCUMENTS: An arrival report is required wherein are indicated main particulars of vessels entering. All vessels coming from abroad and/or from another Italian port must have ready before arrival following documents:

5 Crew Lists.
5 Passenger Lists.
Store List in duplicate.
International Health Declaration.
Cargo Manifest.

PILOTAGE: Pilot is available any time of day. Usually boards vessels 3 miles out of port. Vessels requesting pilot service to use flag, sound morse signal "G". No VHF available. Pilotage is compulsory for anchorage. Full pilotage fee is due even if anchored without Pilot. On departure 30 minutes will be sufficient notice for having Pilot and tugs ready. In case of bad weather (Bagnoli area is exposed to S.S.W. winds) vessels to shift out of piers or change anchorage into Baia roads (sheltered natural bay 3 miles from Bagnoli in direction West).

ANCHORAGE: Depths ranging from 11 to 15 m. Sandy bottom.

RESTRICTIONS: Vessels can enter port at any time of day. No restriction for night departures.

MAX. SIZE: Draft 40 ft., largest vessel allowed is 80,000 tons d.w.t.

HEALTH: Free pratique can be requested via radio cabling to Health Officer of Naples. Cable address: Sanimar, Naples.

RADIO: Naples Radio.

TUGS: 1 tug available, if more required they come from Naples. Time taken approximately 2 hours.

BERTHING: 1 pier length 357 m. Max. depth 41 ft. 3 in.

STEVEDORES: Available. Rate of discharge 1,500/1,700 t.p.h.

FRESH WATER: Available from pier. Rate of delivery 20 t.p.h., or by barge.

FUEL: All types available always delivered by barge, 48 hours notice required.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS/ALLOWANCE: Tobacco, 50 cigarettes per crew member. Wine/spirit, 1 bottle opened.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: Small repairs undertaken.

TIME: GMT plus 1 hour Winter. GMT plus 2 hours Summer.

HOLIDAYS: See "Naples".

POLICE/AMBULANCE/FIRE: Police 602553; Ambulance 520696; Fire 330210; Port Office 602564.

SHORE LEAVE: Allowed.

AUTHORITY: Ente Autonomo del Porto di Napoli.

BARI: 41.08 N. 16.52 E.

DOCUMENTS: On arrival:

5 Crew Lists.
3 Provision Lists.
3 Lists of Articles in possession each Crew member.
Customs Documents.
Cargo Manifests.
Bills of Lading.
Ship's Papers.

PILOTAGE: Pilot boards vessels on arrival by motor-boat near harbour entry, outer buoy. Pilotage compulsory for vessel over 500 g.r.t. inward or outward, shifting vessels from one point to another in or out of port.

Pilot call: Letter "G" of International Code, Pilot attending day and night. For services from 1700 hrs. to sunset, or from sunrise to 0800 hrs. the dues are increased.

ANCHORAGE: Good anchorage in all weathers, but precautions should be taken against winds from North. Rocky bottom covered by mud. Bad holding ground. Strong range in the port when bad weather. Not allowed to anchor in fairway except in case of emergency. Anchorage usually allowed East side of Nuovo Molo Foraneo at a distance of about 1 mile from shore.

RESTRICTIONS: Max. depth at harbour entrance 40ft., width 793 ft. Depth of water at berths from 33 ft. to 40 ft.

MAX. SIZE: Maximum permissible length 800 ft. for oil carriers proceeding to oil pier. Max. draft 39 ft.

HEALTH: Masters can request free pratique by radio by applying to "Sanimare Bari". Free pratique automatic for vessels coming direct from other Italian port, and "Q" flag not to be flown on entering. In event of any suspected disease or fever on board, Master should inform Sanimare Bari, not permitting anybody to board the vessel before doctor's inspection.

RADIO: Radio Roma, call sign "IAR."

TUGS: Tugs normally join vessel outside harbour entrance. Towage service is carried out by following tug-boats belonging to "Rimorchiatori Napoletani": *Camaldoli* of 674 I.H.P.; *Citta di Trieste* of 812 I.H.P.; *Mastino* of 1,105 I.H.P. Basic tariff is increased by 20% when the towage rope is given by tug-boat.

BERTHING: When specific side alongside berth is required by stevedores, Agents radio Master prior arrival and advise Pilot. Otherwise side alongside at Master's option after conferring with Pilot. Depth at piers 20/38 ft. dependent location. No shore fenders alongside quays.

BULK HANDLING FACILITIES: Grain discharge by 2 suction pipes at rate of 90 to 100 metric t.p.h. each.

STEVEDORES: Important to give ETA in good time. Normal working hours: Winter time (weekdays), 0800–1200 hrs., 1300–1700 hrs. Saturdays, 0800–1300 hrs. Summer time (weekdays), 0800–1200 hrs., 1400–1800 hrs. Saturdays 0630–1300 hrs.

Overtime: From 0600 to 0800 hrs. the tariff to be increased 25%; 1200 to 1300 hrs., 50%; 1700 to 2000 hrs., 25%; 2000 to 0600 hrs., 70%.

For handling pieces over 1,000 kilos, increase of 50% on the tariff. For unhealthy work, increase of 30% on the tariff.

Sunday. From 2400 to 0800 hrs. the tariff to be increased 100%; 0800 to 1200 hrs., 50%; 1400 to 1800 hrs., 50%; 1200 to 1400 hrs., 100%; 1800 to 2400 hrs., 100%.

MEDICAL: Not necessary for Agents to receive advance notice of required medical attention. Hospital facilities available.

TANKERS: Not allowed to do any degassing of tanks or any kind of repairs to vessel without Harbour Office permission.

Cleaning and degassing of tanks not allowed in port. Inspection

of tankers and gas-free certificate can be obtained. Only clean ballast can be discharged in port.

Diameter of load-discharge pipe-lines at oil berth are:

20 in., 16 in. and 12 in. pipe-line for crude oil; 12 in and 18 in. pipe-line for fuel oil; 8 in. pipe-line for gasoil; 8 in. pipe-line for gasoline.

Crude oil discharged to Stanic refinery from Berths No. 31 and No. 4 (Molo Foraneo) suitable for tankers up to 39 ft. draft.

Fuel and other refined products discharged at Berth Nos. 31, 32, 33 and 34.

DENSITY: Salinity 36%.

FRESH WATER: Available at all berths served with hydrants. Good drinking water supplied by Ente Acquedotto Pugliese. No barge available to carry water in the harbour and in the roads. Tugs may be used for this purpose.

FUEL: Available, 3 days advance notice required.

DEVELOPMENTS: Expected draft increases in the near future for berthing tankers up to 80,000 tons.

GANGWAY/DECK WATCHMEN: Service of watchmen is recommended: shift of 10 hours.

OPENING/CLOSING HATCHES: Normally carried out by stevedores. Opening or closing of hatches charged for work carried out during usual working hours.

CUSTOMS ALLOWANCES: 50 cigarettes only are given to each crew member out of bond on vessel's arrival. Wine is permitted to be held out of bond but no spirits allowance permitted.

IDENTIFICATION CARDS: Shore leave pass is compulsory.

CONSULS:

Great Britain	Holland
France	Spain
Belgium	Germany
Portugal	Norway
Liberia	Turkey
Sweden	Monaco
Denmark	Ethiopia
Switzerland	Bolivia
Greece	Austria

REPAIRS: Workshops and shipyards are capable to carry out repairs to hull and engines.

DRY DOCKS: No dry docks are available at Bari. Nearest dry docks are at Taranto.

REPATRIATION: Many facilities for effecting crew changes and possibilities for arranging any necessary repatriations.

AIRPORT: Airport is located about 10 km. North of city. Served by regular airlines with flights for all countries daily.

TIME: Local time 1 hour ahead of GMT. Alterations to clocks are made from Spring to beginning of Autumn, giving 2 hours advance on GMT.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter Monday; Ascension Day; Corpus Domini; St. Nicholas (9th May); St. Nicholas, Patron of the Town (10th May); Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B. V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

Cargo work can be arranged on above days, and the stevedoring tariff increased as follows:

From 2400 to 0800 hrs., increase 100%; 0800 to 1200 hrs., 50%; 1400 to 1800 hrs., 50%; 1200 to 1400 hrs., 100%; 1800 to 2400 hrs., 100%.

POLICE/AMBULANCE/FIRE: Police, 214116; Ambulance, 246552, 341217; Fire, 212518.

TELEPHONES: No arrangements exist for placing telephone on board.

SHORE LEAVE: Allowed.

AUTHORITY: Capitaneria di Porto.

BRINDISI: 40.39 N. 17.56 E.

DOCUMENTS:

3 Crew Lists.
3 Lists of Passengers Disembarking.
3 Lists of Passengers in Transit.
Manifests of Cargo carried, with specification of port of origin and whether for local discharge or in transit. If stowed on deck or below deck.
List of Articles in possession of each Crew member, such as cameras, binoculars, portable radios, cigarettes, tobacco or any kind of cheap-priced goods.

Other Certificates required to be on board:

Certificate of Ship's tonnage.
Load Line Certificate.
Deratisation Certificate.
R/T Certificate.
Safety Certificate.
Anchorage Dues Receipt (if previously paid).

PILOTAGE: Vessel approaching port should apply for Pilot by hoisting the "G" flag, if by daytime. By night-time, letter "G" will have to be signalled by Morse, to port semaphore (Signal Station) which is located under shore lighthouse showing white flashes.

Telegraphic address of Pilot station is "Piloti Porto, Brindisi". No ETA required for Pilots as station not equipped with wireless apparatus. Characteristics of Pilot boat: gross tonnage, 9.4; power, 65 hp; speed, 8 knots.

Area where Pilot boards vessel:

In good weather: 1 mile from harbour entrance.

In bad weather: (a) If vessel is heading for inner harbour and is of small tonnage (up to 3,000 tons) Pilot boat will steer in a direct line, bows pointing towards vessel, up to entrance to "outer" harbour, where Pilot will board vessel. If vessel is of higher tonnage, she will have to take a "crosswise" position so as to form a sheltered area for Pilot, about 1 mile from harbour entrance. *(b)* If vessel (tanker) is bound for outer off-shore terminal (Montedison Installation) for discharge of crude-oil, Pilot boat will endeavour to approach vessel to communicate impossibility of immediate mooring. Anchorage roads, pending possibility for Pilot to board vessel, are 0.8 miles E.N.E. of "Punta Penne" (Capo Gallo).

ANCHORAGES: Besides anchorage point described above, there exists safe anchorages in bay for vessels having a draft of 9 m. (29 ft. 6 in.) and in external harbour for vessels of less than 3,000 tons (gross).

RESTRICTIONS: Tankers of over 1,500 tons gross may berth only from sunrise till sunset. Port berths are inaccessible in unfavourable winds. Passenger or cargo vessels no restrictions.

MAX. SIZE: *Inner Harbour:* Draft not to exceed 9.4 m. (30 ft. 10 in). *Outside Main Port area:* For discharging crude oil at offshore terminal, max. draft allowed 11.50 m. (37 ft. 8 in.). For discharging or loading of other refined products of Montedison Installations, depth of berths varies from 4 to 9 m. (from 13 ft. 1 in. to 29 ft. 6 in.).

HEALTH: Apply to "Sanimare, Brindisi" by radio, 12 hours before arrival, and not later than 4 hours before arrival, according to provisions of Health Regulations, notifying in message state of health of crew and port of origin of vessel. Procedure not required if vessel entering after calling at another port in same country.

RADIO: Vessel can communicate ETA messages to Agents through Bari Radio (nearest station) or through Rome Radio which can pick up messages from vessels at sea almost in any part of the world.

TUGS: Tug service is generally effected from Punta Riso-Faro Della Pedagne junction, up to inner harbour. It is customary to use tugs' lines for mooring and unmooring of tankers at terminals outside main port area, in view of the peculiarity of mooring operations and the area where tugs are to operate (subject to surf, choppy seas, winds). Charge for use of tugs' lines is 20% extra on normal towing rates.

TANKERS: Crude oil discharged at offshore buoy mooring for vessels up to 37 ft. 8 in. draft.

Other tanker berths at Inner Harbour for refined products, suitable for tankers up to 28 ft. draft.

STEVEDORES: Always advisable to notify in ETA messages to Agents number of hatches vessel intends working simultaneously to arrange gangs. Normal working hours: From 0700 to 1200 hrs. and 1400 to 1700 hrs. Overtime: Weekdays, 70% increase on normal tariffs. Sundays and holidays: Work performed during normal hours, 50% increase. On overtime, 100% increase.

MEDICAL: Hospital facilities available. For any kind of medical attendance or hospitalisation, if needed, it will be helpful to have port Agents advised by radio in advance.

FRESH WATER: Almost all mooring points alongside wharves are fitted with fresh water distributing hydrants. At off-shore terminals, supply is effected by tugs.

FUEL: Types of fuel available: Bunker "C", viscosity Engler at 50° (centrigrade), 16/20; specific weight, .950/960. Gasoil, viscosity Engler at 20° (centigrade), 1.4; specific weight, .830. 48 hours advance notice for any supplies required.

FIRE PRECAUTIONS: Firemen always in attendance during loading/unloading operations by oil carriers.

DEVELOPMENTS: Under construction: 1 pier in outer harbour, which is scheduled to be 200 m. in length (219 yards) with a depth of 12 m. (39 ft. 4 in.).

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: For vessels over 500 tons effecting international voyages:

(a) Passenger vessels:
Safety Certificate.
Radio and Radiophone Certificates (latter if included in vessel's equipment).

(b) Freighters:
Safety Construction Certificate.
Safety Equipment Certificate.
Radio and Radiophone Certificates.

CUSTOMS ALLOWANCES: 50 cigarettes a day for each crew member, if vessel's stay in port exceeds 24 hours. No allowance if stay is shorter than 24 hours. Third of a bottle of liqueurs only.

IDENTIFICATION CARDS: Not particularly needed besides regular seaman's books.

CONSULS: Vice-Consulate of Denmark, Portugal and Holland, all having the same telephone number: 21123. Vice-Consulate of Spain: telephone: 21039.

REPAIRS: Only minor deck and engine repairs can be carried out locally.

REPATRIATION: Adequate facilities exist for effecting crew changes and repatriations as necessary.

AIRPORT: Distance from local airport 5 km. (3 miles). Airport regularly served by Alitalia Airline, ensuring 2 daily flights to Rome and 1 daily flight to other Italian cities, including, among others; Naples, Catania, Palermo, Cagliari, and other destinations via Rome. Direct international flights not scheduled from Brindisi.

TIME: Local time 1 hour ahead of GMT (generally from early June to end September), 2 hours ahead of GMT (Summer time).

HOLIDAYS: Officially recognised. Both national and religious holidays include: Sundays; New Year's Day; Epiphany (6th Jan.); St. Joseph's Name Day (19th March); Easter (Easter Monday); Anniversary of Liberation (25th April); Labour Day (1st May);

Ascension, Corpus Domini (oscillating dates); Proclamation of the Italian Republic (2nd June); the Saints Peter and Paul Name Day (29th June); Assumption (15th August); All Saints' Day (1st Nov.); National Unity (4th Nov.); the Virgin Immaculate Conception (8th Dec.); Christmas, Boxing Day.
POLICE/AMBULANCE/FIRE: Police, 25555; Ambulance, 21310; Fire, 21222.
TELEPHONES: No current arrangements existing for placing telephones on board.
SHORE LEAVE: Allowed.
AUTHORITY: Comandante del Porto di Brindisi.

CAGLIARI Sardinia (including Sarroch): (See Plan) 39.05 N. 09.01 E.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
2 Provisions Manifests.
2 Manifests of crew personal effects.
Cargo Manifest.
Bills of Lading.
2 Arrival Reports, completed on arrival.
Maritime Declaration of Health, completed on arrival.
Ship's Certificates including Italian anchorage dues.
Vaccination Certificates for sighting.
PILOTAGE: Compulsory for vessels over 500 tons. Requested by ship's Agents. Vessels should wait in the roads for Pilot to board. International Code signals used for calling Pilot. Pilot station telephone number: 652929. Pilot boards tankers about 2 miles East of oil terminal.
Sarroch. Compulsory for all tankers. Vessels should wait in roads as follows:
G1 – (for tankers of more than 42 ft. draft) Lat. 39° 05′ 00″ N. Long. 09° 05′ 00″ E.
G2 – (for tankers of less than 42 ft. draft) Lat. 39° 04′ 27″ N. Long. 09° 03′ 15″ E.
G3 – (for tankers of less than 5000 g.r.t.) Lat. 39° 05′ 48″ N. Long. 09° 02′ 00″ E.
Pilot station telephone number 929006–929057. VHF Channel 16.
ANCHORAGE: All of the roads is available for anchorage except where prohibited zones indicated on charts.
MAX. SIZE: Cagliari port. Max. draft 26 ft. Sarroch, SARAS Terminal, tankers up to 100,000 d.w.t. Max. draft 57 ft.
HEALTH: Free pratique may be requested by radio to Sanimare Cagliari between 12 to 6 hours prior arrival advising vessel's name, nationality, last port, number of passengers and crew and state of health on board. Pratique is automatic for vessels coming from ports in Italy, U.K. France, Belgium, Holland, W. Germany and Greece.
RADIO: Cagliari Radio operating continuously on 2182 kHz., and on 156.8 mHz.
VHF: *Cagliari.* Harbour Master's Office, Channel 16.
Sarroch. Harbour Master's Office, Channel 16. Pilot station, Channel 16. Mooring station, Channel 6. Boat Service station, Channel 8.
TUGS: 6 available, of up to 2,000 h.p.
Cagliari. Normally join vessels at the port entrance.
Sarroch. Normally join tankers at anchorage points and assist berthing at Saras Jetties Terminal.
BERTHING: *Cagliari*
Berth No. 1: Length 68.0 m.; draft 14 ft.
Berth No. 2: Length 128.0 m.; draft 24 ft.
Berth No. 3: Length 227.0 m.; draft 21 ft.
Berth No. 4: Length 123.7 m.; draft 18 ft. 03 in.
Berth No. 5: Length 60.3 m.; draft 18 ft. 03 in.
Berth No. 6: Length 116.8 m.; draft 8 ft.
Berth No. 7: Length 92.6 m.; draft 16 ft. 06 in.
Berth No. 8: Length 278.6 m.; draft 23 ft.
Berth No. 9: Length 325.8 m.; draft 24 ft.
Berth No. 10: Length 328.0 m.; draft 26 ft. 06 in.
Berth No. 11: Length 203.2 m.; draft 26 ft. 06 in.
Berth Numbers 2, 3 and 4 reserved daily for passenger ships.
TANKERS: *Sarroch Saras Jetties*

P.1: draft 42 ft.	P.6: draft 26 ft.
P.2: draft 39 ft.	P.7: draft 35 ft.
P.3: draft 39 ft.	P.8: not yet workable
P.4: draft 36 ft.	P.9: not yet workable
P.5: draft 36 ft.	P.10: draft 23 ft.

Platform island No. 1 (for crude oil discharging only) draft 57 ft.
Platform Island No. 2 (for crude oil discharging only) draft 47 ft.
Loading rates:

Berths No. 1–4	Crude oil	5,000 t.p.h.
	Fuel oil	2,000 t.p.h.
	Gas oil	1,600 t.p.h.
	Gasoline	500 t.p.h.
Berth No. 5	Fuel oil	1,000 t.p.h.
	Gas oil	800 t.p.h.
	Gasoline	500 t.p.h.
	LPG	200 t.p.h.

Berth No. 6 For Bunkering Barges and small tankers up to 3,000 d.w.t. Fuel oil, gas oil, kerosene and gasoline at slow pumping rates.

Berth No. 7	LPG	200 t.p.h.
	Fuel oil	1,000 t.p.h.
	Gas oil	800 t.p.h.

Platform island for crude oil only at 5,000 t.p.h.
MEDICAL: All facilities available at Cagliari.
DENSITY: 1025.
FRESH WATER: Available by pipe-line at all berths. No water barges, although bunker barges may be able supply small quantity fresh water in emergency only.
At times fresh water is in short supply and may not be available.
Cost of delivery of fresh water by tug is 3,000 lire per metric ton.
FUEL: All grades available ex-wharf at tanker berths. Barges supply vessels at anchor and vessels calling for bunkers only.
Vessels calling at Sarroch for bunkers by barge are required to keep Agents closely advised of their ETA and bunker requirements. Messages confirming the vessel's ETA should be sent to Agents 72, 48 and 24 hrs. before vessel's arrival. Masters should note that customs regulations do not permit the return of bunkers to the refinery after the barge is loaded, therefore an accurate figure of bunkers required must be given in the first ETA message to Agents.
BALLAST: The discharge of ballast by tankers can be effected at all berths at a pumping rate between 1,000 and 2,500 t.p.h. Reception of ballast ashore is into 3 tanks with total capacity of 20,000 cu.m. and 6 API separator vessels.
CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man, usually allowed for consumption on board while vessel in port.
IDENTIFICATION CARDS: Shore passes issued by local police.
CONSULS:

Belgium	Great Britain
Denmark	Netherlands
France	Norway
Sweden	

REPAIRS: Minor repairs can be handled at Cagliari. Slipway for vessels up to 400 tons.
REPATRIATION: No difficulties.
AIRPORT: Elmas Airport situated 12 km. from Cagliari.
TIME: GMT plus 1 hour. Summertime June to September: GMT plus 2 hours.
HOLIDAYS: Not applicable to tankers. New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and Day after Easter; Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter & St. Paul (29th June); Assumption B.V.Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).
POLICE/FIRE/AMBULANCE: *Cagliari:* Police 658956; Fire 652222; Ambulance 656979.
Sarroch: Police 929063; Fire 652222; Ambulance 929024.
TELEPHONE: No telephone connection on board.
SHORE LEAVE: Allowed.
AUTHORITY: Capitaneria di Porto di Cagliari.
AGENT: Enrico Pernis, 5, Piazza Deffenu, PO Box 273. Cables: "Pernis". Telex: 79036. Tel.: 654754.

CATANIA (Sicily): 37.29 N. 15.06 E.

DOCUMENTS: Arrival report requested by Harbour Authorities. Also see "Augusta".
PILOTAGE: Master can communicate with Pilot on VHF Channel 16. Pilot boards at sight on harbour entry. International Code signals used to call Pilot.
ANCHORAGE: Vessel must remain on roads awaiting Pilot.
RESTRICTIONS: No restrictions on entry at night, except for tankers (either loaded or empty, as per harbour regulation). The tide at Catania is no more than 30 cm. Bar at entrance 30 ft.
MAX. SIZE: No limitation on the length and breadth but only on draft of vessel, provided same can be contained within the size of piers of Catania Harbour. See "Berthing" below.
HEALTH: The usual sanitary pratique as per all Italian ports is requested. Free pratique obtainable by radio prior arrival sending cable to "Sanimare Catania".
RADIO: The quickest way is to address messages to "Romaradio", better if adding to the telegraphic address the telex number of Agency, so that after very short time from reception at Romaradio the message is in Agents hands.
It is important that 72 *working* hours notice of ETA be passed to Agent.
TUGS: When Pilots are on board, they can call tugs by small radio-calling station. Very frequently the tug's Company, when seeing a big ship, join vessel at same time as Pilot. Tugs using ship's lines.
BERTHING:

Berth Nos.		*Length*	*Depth*
1 and 2	Molo Mezzogiorno, Oil berths	361 m.	30 ft. 6 in.
6	Molo Crispi, Silo berth	154 m.	30 ft.
7	,, ,,	130 m.	29 ft.
8	,, ,,	140 m.	29 ft.
9	,, ,,	130 m.	20 to 28 ft.
10 and 11	Sporgente Centrale	307 m.	30 ft.
12	Molo Centrale	120 m.	30 ft.
13	Sporgente Centrale	182 m.	30 ft. 6 in.
14	,, ,,	169 m.	29 ft.
17	,, ,,	142 m.	22 ft.
18	,, ,,	142 m.	22 ft.
19	,, ,,	156 m.	18 to 21 ft.
20	,, ,,	170 m.	16 ft. 6 in.
21	,, ,,	111 m.	19 ft. 6 in.
22	,, ,,	60 m.	16 to 20 ft.

STEVEDORES: As per actual Port Labour Regulations, in order to book gangs, stowage details must reach Agency not later than 11 o'clock of the day before ship's arrival, except for work to be done on Saturdays, Sundays and Mondays when application for gangs must be made on Friday.

The official load/discharge rate for general cargo is 50 tons per hatch per day (8 hours), but real output is higher. Increase for overtime, continuous shifts (0700–1330 hrs; 1330–2000 hrs; 2000–0230 hrs.). Night work, Sundays, national holidays, etc.

MEDICAL: Hospital facilities easily available. No advance notice required unless for emergency cases and for cases to be urgently treated during night and holidays.

TANKERS: 2 tanker berths are situated in line at Southern breakwater, called "Molo Mezzogiorno". There are 3 pipe-lines, diameters of 8 in., 6 in., 4 in. No discharge facilities for tank washing.

Tankers are not allowed to berth or unberth at night.

SALINITY: Average salinity of water inside the port is the same as the average salinity of Mediterranean.

FRESH WATER: Available at nearly all quays including bunker piers.

FUEL: Bunkers available and supplied only by pipe connection at Bunker pier (Molo Mezzogiorno). Max. rate 400 t.p.h.

CUSTOMS ALLOWANCES: Tobacco, for foreign ships not in coastal service in Italian Ports: 50 cigarettes per each crew member, for the first 24 hours of the ship's stay in port. Other cigarettes can be obtained for which an application to the Customs House is required. Spirits: 2 or 3 bottles per day (provided minimum 20 crew members).

CONSULS:

Austria	Germany	Netherlands
Belgium	Greece	Portugal
Denmark	Nicaragua	Spain
Finland	Norway	Sweden
France		

REPAIRS/DRY DOCK: Small repairs can be carried out at Catania. No dry docks available.

AIRPORT: Very near important airport with regular international flights.

TIME: GMT plus 1 hour. In Summer time GMT plus 2 hours.

HOLIDAYS: Normally, during all holidays it is possible to work with extra payment.

TELEPHONES: Numbers of emergency services: Police 226741; Fire Brigade 227702; Sanitary Office 226262; Harbour Master 226762.

AUTHORITY: Capitaneira di Porto.

CIVITAVECCHIA: 42.05 N. 11.47 E.

DOCUMENTS: On arrival:

4 Crew Lists.
4 Lists Passengers in Transit.
4 Lists Passengers Disembarking.
2 Provisions Lists.
2 Lists of Crew Articles, including Tobacco, Cigarettes, Spirits, Radio, etc.
Manifest(s) and Bill(s) of Lading n/n covering all cargo on board.

It is recommended that particular care be exercised in giving the exact weight and number of tobacco, cigarettes, spirits, paper for cigarettes, cigars, cigarillos, coffee, sugar, salt, pepper, spices, cocoa and chocolate, etc., on board, as well as bunker quantities and lub. oil, thus avoiding fines in case the Customs guards in searching vessel subsequently should find any concealed.

PILOTAGE: Pilots are advised of vessel's arrival by port authorities and by Agents. Therefore accurate advance notice of ETA should be addressed by Master to Agents. Pilot usually boards vessel within 2 miles of port. Pilot station in port area.

ANCHORAGES: Any vacant place assigned by port authorities, taking into account vessel's draft. If port is congested vessels anchor at roads. Pilot assistance is recommended.

RESTRICTIONS: No restrictions are imposed upon entry. With the exceptions of particular individual cases to be submitted for perusal to harbour authorities, vessels may berth and sail at any time, weather permitting.

MAX. SIZE: Max. permissible draft: 29 ft.

HEALTH: Clearance is granted by radio; Master to cable Sanimare Civitavecchia 24 hours prior to vessel's arrival. Quarantine requirements are those prevailing in all other Italian ports.

RADIO: Communications to and from vessels are sent and received from Civitavecchia Radio.

TUGS: Tugs wait for vessel at port entrance. Tug assistance is necessary although not compulsory. Ship's lines have to be used.

BERTHING: Shore fenders keep vessel off the quay. Berths:

No. 2 for vessels up to 180 m. length, 28 ft. 6 in. draft.
No. 7 for vessels up to 160 m. length, 25 ft. draft.
No. 8 for vessels up to 240 m. length, 29 ft. draft.
No. 9 for vessels up to 130 m. length, 23 ft. 6 in. draft.
No. 10 for vessels up to 220 m. length, 29 ft. draft.
No. 11 for vessels up to 220 m. length, 29 ft. draft.
Grain Silo located at berth No. 8.

SPECIALISED CARGO HANDLING FACILITIES: Berth No. 8: grain silo of 35/40,000 tons capacity is available; this berth is equipped with 2 rail-suckers, 4 movable suckers and 1 elevator. Ore, coal, fertilisers, sulphur, etc. can be handled at quays No. 2/7/9/10 and 11. Structures for containers not available here, nevertheless small traffic might be practicable. Roll-on/roll-off traffic practicable. Liquid chemicals practicable. No facilities exist for LPG carriers.

STEVEDORES: To enable Agent to order gangs it is very important to obtain accurate ETA in good time.

From 0800 to 1200 hrs. and from 1300 to 1700 hrs., or from 0600 to 1230 hrs., from 1230 to 1900 hrs. and from 1900 to 0030 hrs. against payment of 32.50% extra.

Saturday: From 0600 to 1230 hrs. against payment of 32.50% extra; from 1230 to 1900 hrs. and from 1900 to 0030 hrs. against payment of a further increase of 25%.

Sunday: Work can be performed at overtime rates plus 50% extra from 0600 to 1230 hrs., from 1230 to 1900 hrs. and from 1900 to 0030 hrs.

Holidays: Work can be performed at overtime rates plus 150% extra from 0600 to 1230 hrs., from 1230 to 1900 hrs. and from 1900 to 0030 hrs.

MEDICAL: Not necessary to receive advance note of required medical attention. Hospital and clinical surgery available. Master to advise in advance of particular inoculations required.

TANKERS: Max. draft allowed 28 ft. 6 in. Max. length 180 m. Tankers are not permitted to enter port before sunrise and after sunset. Diameter of discharge lines 8–10 in.

FRESH WATER: Drinking water and water for boilers is supplied from pier by hoses. Average pumping rate 8–10 t.p.h.

FUEL: Bunkering can be effected by means of barges and/or tank-lorries at all quays. Grades available: fuel oil and gas oil.

DEVELOPMENTS: Availability of quay No. 0 dredging to 30 ft., length 180 m., equipped with 2 cranes of maximum lifting capacity of 35 tons each. Extension of outer breakwater and deepening of the basin.

The port is being developed to receive tankers up to 80,000 d.w.t.

GANGWAY/DECK WATCHMEN: Watchmen services recommended.

OPENING/CLOSING HATCHES: First opening and last closing normally carried out by crew.

CERTIFICATES: Requirements are those prevailing in all other Italian ports, e.g. Tonnage Certificate, Safety Equipment, Load Line, Deratting Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco. Quantity permitted to each crew member: 50 grams to be smoked within first 48 hours. Wine and/or Spirits. 1 open bottle of spirits.

IDENTIFICATION CARDS: Required. Passes issued by local police.

CONSULS: There are no Consulates, but only Consular Agencies or Honorary Representatives for the following countries:

France	Tel. 23044	Spain	Tel. 24304
Sweden	Tel. 23109	Norway	Tel. 25207
Finland	Tel. 23134	Portugal	Tel. 23048

Nearest British Consulate is in Rome.

REPAIRS: Repairs of limited extent and importance may be carried out by 2 local workshops.

REPATRIATION: Facilities exist to effect crew changes and to arrange repatriations.

AIRPORT: Distance from Airport Leonardo da Vinci (Rome) 70 km.

TIME: 1 hour in advance in relation to GMT. Clock will be advanced 1 hour in Summertime, giving 2 hours advance of GMT.

HOLIDAYS: All Sundays, 1st and 6th January, 19th March, 25th and 28th April, 1st May, 2nd and 29th June, 15th August, 1st and 4th November, 8th, 25th and 26th December, Easter Monday, Ascension Day, Corpus Domini. Holiday work is subject to the authorisation of port authorities.

POLICE/AMBULANCE/FIRE: Police, 23729; Ambulance, 23382; Fire, 23333.

TELEPHONES: Can be connected on board vessels at quays No. 7 and 10.

AUTHORITY: Capitaneria di Porto.

AGENT: Gastaldi & C. S.p.A., c/o Ant. Bellettieri & Co. S.p.A. 23 Largo Plebiscito – P.O. Box 70 – 0005 3 Civitavecchia. Cables: "Dick". Tel. 23289/23625; A.O. 21125. Telex 62432 "For Dick".

FIUMICINO: 41.46 N. 12.13 E.

DOCUMENTS:

3 copies of Crew List.
Store Manifest.
List of Personal Effects.
Manifest of Cargo.

PILOTAGE: Vessel should await Pilot about 0.5 mile off the tanker loading platforms which are situated in the following positions:

Platform R1: Lat. 41° 45′ 06″ N. Long. 12° 09′ 15″ E.
Platform R2: Lat. 41° 44′ 37″ N. Long. 12° 10′ 04″ E.

ANCHORAGE: Vessels waiting to berth should anchor to the South of Platform R2, not less than 1 mile from the platform. The anchorage is not recommended during strong South or South-westerly winds, and in unfavourable weather conditions it is advisable for vessels to remain underway.

It is forbidden to use anchors in the near vicinity of the tanker berths, due to the presence of underwater pipe-lines. When approaching the moorings, anchors must be firmly secured in the hawse.

RESTRICTIONS: Pilotage and mooring is not carried out during hours of darkness.

MAX. SIZE: Ships of any length can be moored.

At R1 platform, water depth 23 m., max. draft 54 ft.
At R2 platform, water depth 19.50 m., max. draft 46 ft.
From time to time it may be possible to allow greater drafts subject to Pilot's advice.

HEALTH: Sanitary pratique can be granted by radio cabling "Sanimare Fiumicino", 36 hours (48 hours in case of arrival a day

after holiday) before arrival stating: last port, number of crew and good health of same, ship's flag – using international code.
RADIO: Advise Refinery of vessel's ETA 72 hours before arrival via Roma Radio. Confirm ETA 24 hours before arrival.
Vessels arriving for the first time at Fiumicino should also advise dimensions of vessel's manifold flange connections.
During cargo operations, the tanker will communicate by radio-telephone with the pumping station and the refinery.
VHF: No VHF service, but vessel, when moored, can contact Agent through Refinery radio-telephone.
TUGS: Not required for mooring.
MEDICAL: Local doctor and hospitals available in Rome.
TANKER BERTHS: 2 offshore mooring platforms, R1 and R2, connected to sea-lines of 20 in., 28 in. and 36 in. diameters. Loading rates 600 to 1,200 cu.m. per hour. Rate of discharge 2,500 to 4,000 cu.m. per hour.
MOORING: Vessel to have ready on arrival: port derrick rigged for hose handling; boat-rope and pilot ladder on the port side; 3 good mooring lines at the bow, each not less than 150 m. length.
Vessel is moored by the bow about 30 to 50 m. distant from the mooring platform. All ship's ropes are led back and secured on board to facilitate unmooring.
HOSES: Connecting and disconnecting hoses performed by refinery personnel, vessel to supply winchman and man the derrick. Derrick capacity to be at least 3 tons. Each platform is equipped with 2 floating hoses, about 200 m. long, which drift fully extended when berth is not occupied.
BALLAST: Raffineria di Roma can accept dirty ballast or tank washings up to a maximum of 15,000 tons. Recommended advise before arrival the quantity of ballast to be discharged. Ballast should be reduced to a safe minimum to save time at the mooring berth.
SALINITY: 25-28 grams per litre.
FRESH WATER: Supply by barge 100 tons per trip.
FUEL: Bunkers not available, only luboil in drums can be supplied.
CUSTOMS ALLOWANCES: 40 cigarettes per day for 3 days for each Crew member.
CONSULS: All Consulates and Embassies in Rome.
REPAIRS: Small repairs can be effected but no dry dock.
AIRPORT: International airport "Leonardo da Vinci" at Fiumicino.
TIME: GMT plus 1 hour.
REGULATIONS: Raffineria di Roma will hold vessel responsible for consequences of any pollution caused by oil leaking or discharged from the ship. Strictest precautions to be observed.
Engine to be kept ready to leave the berth in the shortest possible time.
Propeller movements are forbidden while vessel in berth, due to presence of floating pipe-lines.
TERMINAL OPERATOR: Raffineria di Roma S.p.A.
AUTHORITY: Il Comandante del Porto.

GAETA: 41.13 N. 13.35 E.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report – completed on arrival.
Maritime Declaration of Health Certificate – completed on arrival.
Ship's Certificates, including Italian Authority dues.
Vaccination Certificates for sighting.
PILOTAGE: Compulsory for entering road, docking and undocking. Pilots meet vessels about 2 miles off Punta Stendardo.
MAX. SIZE: Pontile Petrole – North side: Max. length 265 m. draft 48 ft. South side: Max. length 190 m., draft 39 ft.
HEALTH: Automatic for vessels coming from ports in Italy, U.K., France, Belgium, Holland, W. Germany and Greece. Otherwise, free pratique granted by local Health Officer who boards ships on arrival together with harbour officers, between 0700 hrs. and sunset with possible exceptions. In order to facilitate boarding by Officers at anchorage or berth, it is requested that vessels have a convenient accommodation ladder/gangway ready.
RADIO: 72 hours and 24 hours definite notice to Agent through Roma Radio IAR.
TUGS: Tug-boat assistance compulsory for docking and undocking; also stand-by tug during loading/discharge, from connection to disconnection of cargo hose.
BERTHING: Docking and undocking – normally performed in daylight only, but with favourable weather conditions exceptions have been and will be granted. Undocking normally until midnight.
DRY CARGO FACILITIES:
Banchina Caboto: 106 m. long quay, with a maximum official draft limitation of 20 ft. Vessels 130 m. length have been accommodated with a draft of 21 ft. 6 in. Cargo operations are performed by ships' gear and/or dockers mobile cranes of up to 30 tons capacity. Ample space for lorries, no railway junction.
Genepesca Banchina Pier: About 50 m. long pier with 1 berth each side in about 4.20–4.30 m. (14 ft.–15 ft.) depth. Cargo operations performed as above. Cargo handled: frozen commodities (in and out), general cargo, newsprint, clay, woodpulp, steel coils, etc.
TANKERS: The oil terminal is situated at Punta Molino and is represented by a finger jetty with 2 berths alongside; North for tankers up to 100,000 d.w.t. with a depth 51 ft.; South for 40,000–50,000 d.w.t., with a depth of 40 ft. and 1 separate stern berth with 40 ft. depth available. The latter is generally used for small ships and loading refined products. At the 2 berths on the jetty discharge and loading is performed through up to 4 articulated 8-in. steel pipe connections. All berths are equipped for loading or discharge of full range of liquid petroleum cargoes. The distance between the connections of the hoses at midship and the stern of the ship must not be more than 450 ft.
The height between sea level and hose connection on the ship is not to exceed 15 m., otherwise necessity of ballasting during discharge of crude carriers may arise.
Sea Berth for VLCC's: The sea berth is in approximate position 41° 13′ 27″ N., 13° 36′ 27″ E. Moored vessels will lie in an 076.5° direction. The depth is reported to be 22 m. The pipe-line to the shore is 42 in. diameter. Length 3,150 m.
The mooring consists of 1 buoy with flashing red light marking the position of the manifold, 2 buoys to the W.S.W. of the mooring position in a line 076.5° to indicate the "berthing line" and 7 mooring buoys.
The max. draft initially, 19 m. Hourly pumping rate 7/8,000 tons.
BALLAST: Ballast is to be discharged exclusively ashore into tanks of the refinery plant; discharge is performed through 8 in. connections and a 1600 m. long 10 in. pipe-line at a rate of 350/400 t.p.h. It is therefore advisable that vessels nominated to load products at Gaeta arrive with as little ballast as possible. Heavy fines are put on Masters if ballast is discharged overboard.
MEDICAL: Physician, dentist, eye and other specialists available. Hospital and nursing homes in Formia about 7 km. from Gaeta. Inoculation against smallpox, typhoid fever, etc., international certificates released. Extension of deratisation certificates granted, but no fumigation performed.
FRESH WATER: Of excellent quality, is supplied from city main at all berths. The supply to ships at the jetty cannot be assured during Summer season, owing to lack of water in city mains.
FUEL: Supplies of Bunker C and gas-oil, can be arranged ex installation for ships at oil berths. A minimum quantity of 400 tons is required for fuel and 100 tons for gas-oil. At dry-cargo berths bunkers can be supplied by road tankers only.
REPAIRS: There are 2 machine shops for current requirements including welding work.
CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.
IDENTIFICATION CARDS: Shore passes given by local police.
TIME: GMT plus 1 hour. Summer-time: May to September, GMT plus 2 hours.
AIRPORT: Nearest Rome, Fiumicino, Leonardo da Vinci Airport.
DEVELOPMENTS: New dry cargo wharf under construction, to be suitable for vessels up to 14,000 d.w.t. in about 10 m. depth of water.
AUTHORITY: Gaeta Industrie Petroli S.p.A.
AGENT: Italnoli, Lungomare Caboto, Palazzo Albani 3, 04024 – Gaeta, Italy. Cable Address: "Italnoli – Gaeta". Telex: 68050 Italgaet. Tel. 40572, 40915. *After Hours:* 40859 and 43277.

GELA: 37.04 N. 14.15 E.

DOCUMENTS:
For Maritime Authority:
Arrival Report.
Crew List.
Passenger List.
Ship's Certificates, for sighting.
For Port Health:
Maritime Declaration of Health (2 copies).
Vaccination Certificates, for sighting.
For Customs:
List of supplies and engine stores.
Cargo Manifest enclosing Bills of Lading.
For Police:
Passenger List (2 copies).
Crew List (2 copies).
Shore Passes for all Passengers and Crew.
PILOTAGE: Pilots are requested by International Code signals. (Flag or whistle acoustic signal, 2 long and 1 short blast). Telegraphic address: Piloti del Porto Gela. ETA required at least 2 hours before arrival. No VHF.
The pilot boat has black hull, white cabin with letter "P" painted in black on both sides. The pilot boat stationed near port island, Pilot boards about 1 mile off the port.
ANCHORAGE: Anchorage for vessels waiting Pilot about 1 mile West of the head of the Western breakwater, South of the 10 m. depth line. Small vessels may anchor to the West or East of the pier not less than 0.2 miles from the pier and in such a position as not to obstruct vessels berthing or leaving from the dock or the pier.
LIMITATIONS: Entry only between sunrise and sunset.
MAX. SIZE: Dry Cargo vessels: 180 m. length, 30 ft. 6 in. draft. Tankers berthing at the Mole: 250 m. length 31 ft. draft. Sea Line Tanker terminal: 250 m. length, 44 ft. draft. Up to about 60,000 d.w.t.
HEALTH: No radio pratique. Free pratique can be given on board on request.
RADIO: Roma Radio, or Augusta Radio. Messages are forwarded quicker through Roma Radio.
TUGS: 1 stationed to West or East of the pier, depending on weather and tide. Use of tug lines is optional.
BERTHING: The Anic Pier has berths on both sides in depths of 30 to 31 ft. Jetty is 2,800 m. length, and is protected by a breakwater. 2 berths suitable for dry-cargo vessels of up to 10,000 d.w.t. are available at the jetty terminal platform.

At the Breakwater there are 2 berths suitable for tankers up to about 34,000 d.w.t., plus 4 other berths for smaller vessels. See "Tankers".

TANKERS: Anic Sea Line Terminal: situated about 1 mile off the breakwater, a crude oil discharge berth in depth of 15 m. served by 34-in. sea-line terminating in two 12-in. flexible hoses. No slop discharge facilities. At the breakwater, Berth Nos. 1 to 6 for loading refined products and LPG can accommodate vessels up to 34,000 tons with max. draft 31 ft. These berths are also used for discharging crude oil and naphtha.

Storage tanks situated up to about 15 m. above sea level.

STEVEDORES: Should be ordered 12 hours in advance. Ship's gear used in dry-cargo operations although 5-ton mobile cranes are available. 2 shore cranes are available fitted with grabs for discharge of bulk sulphur and phosphates.

MEDICAL: All assistance can be arranged at 2 hours notice to Agents. Hospital and private clinic available. Vaccinations and inoculations with relative certificates can be arranged.

DENSITY: 1024.

FRESH WATER: Available at all berths. Not available at Sea-Line Terminal.

FUEL: Usually available without notice. Bunker oil is only supplied at breakwater berths.

DEVELOPMENTS: 2 additional berths at the new pier situated to the West of the Anic pier, suitable for vessels of up to about 7.31 m. (24 ft.) draft and used for loading ammonia and discharge of sulphuric acid.

OPENING/CLOSING HATCHES: Optional to employ shore personnel.

CUSTOMS ALLOWANCES: As for other Italian Ports.

IDENTIFICATION CARDS: Required.

CONSULS: No local representation.

REPAIRS: Only minor repairs possible.

AIRPORT: Catania, 104 km. away, 8 flights a day to Rome.

TIME: GMT plus 1 hour. Summertime: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter Monday Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); Patron Saint (8th September); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Police, tel. 30091; Ambulance, 37058; Fire, 30222.

SHORE LEAVE: Allowed.

AUTHORITY: Ufficia Locale Maritimo.

GENOA: 44.24 N. 08.54 E. (See Plan)

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
3 Cargo Manifests.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Authority Dues.
Vaccination Certificates for sighting.

PILOTAGE: Pilots advised of vessel arrival by port authority and the latter by vessel's Agent. Therefore accurate ETA recommended. Pilotage compulsory for vessels over 500 g.r.t. To contact Pilots and pilot boats, VHF Channel 12. Time of working 0800 to 1700 hrs. Pilots board vessel at about 1 mile off port entrance.

ANCHORAGES: In case of port congestion or awaiting Pilot, vessel may anchor outside port entrance, East of the fairway.

RESTRICTIONS: Tankers not usually berthed during night-time.

MAX. SIZE: Tankers: up to 46 ft. draft. Other vessels: 31 to 40 ft. draft. Also see "Tankers".

HEALTH: Free pratique may be requested by radio to Sanimare, Genoa, between 12 to 6 hours before arrival, advising vessel's name, nationality, last port, number of passengers and crew and state of health on board. Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Holland, W. Germany and Greece.

RADIO: Genoa Radio, call sign ICB. Agent uses same station when cabling to vessels.

TUGS: Tugs join vessel at port entrance. Ship's line used.

BERTHING: Pilot advises Master which side to berth. Shore fenders keep vessel off quay.

Calata Betolo: 1,432 ft. berthing length, 29 ft. permitted draft; Ponte Rubattino: 1,863 ft. berthing length, 31 ft. permitted draft; Ponte S. Giorgio: 2,050 ft. berthing length, 30 ft. permitted draft; Italsider Pier: 1,700 ft. berthing length, 40 ft. permitted draft; Silos Granario: 555 ft. berthing length, 30 ft. permitted draft; Silos Granario: 490 ft. berthing length, 27 ft. permitted draft.

CRANES: 38 floating cranes with capacities up to 150 tons and many electric cranes with capacities up to 45 tons.

CONTAINER TERMINALS: I. *Ponte Ronco (Ronco Pier):* Depth alongside, 11 m. Length of quay along Eastern side of the pier where 2 container ships can operate simultaneously, 400 m.

Equipment: *(a)* 2 "Paceco-Vickers-Reggiane" cranes having a maximum lifting capacity of 45 tons and the following main characteristics:

gauge of crane gantry 27 m. (88 ft. 6 in.);
maximum height of structure above wharf level 31 m. (101 ft. 7 in.);
total length of travelling bridge 74.85 m. (245 ft. 6 in.);
maximum seaward outreach 35 m. (114 ft. 8 in.);
useful travel of spreader with bridge partially drawn back for crane working on quayside 28 m. (92 ft.);
maximum height of spreader above wharf level 20.5 m. (67 ft. 2 in.);
crane suitable to unload 20 ft., 30 ft., 35 ft., 40 ft. containers using telescopic spreader; other cargoes by hook (capacity 45 tons); bulk materials by bucket (capacity 15 tons);

(b) 1 telescopic straddle carrier for 20 ft., 35 ft., 40 ft. containers;

(c) 3 service tracks along the wharf; 1 side track for railcars along the Western side of the pier and 1 track for service of the container shed;

(d) independent in-and-out six-lane customs check-point, with weighing plants, rail and road sidings to the Sampierdarena base network and to Lungomare Canepa respectively;

(e) check-point buildings covering total surface of 875 sq. m. (9,418 sq. ft.) and of 9,620 cbm. (339,728 cu. ft.) in volume, divided as follows:

Building No. 1 to accommodate Police, Customs guard, Italian State Railways, the heating plant and other services;
Building No. 2 to accommodate Port Authority, Customs and commercial offices which can be enlarged 3,000 additional cbm (105,944 cu. ft.);

(f) 1 metallic shed with loading platform for both railway cars and lorries, for consolidation (groupage) operations, having a surface of 1,400 sq. m. (15,070 sq. ft.);

(g) special pavings which allow piling of containers up to 6 heights.

The Ronco pier also has the possibility of internal direct communications with Sampierdarena docks through the Calata Derna (Derna quay), the possibility of direct connection with the harbour elevated road through ramps at the end of the pier and the possibility of doubling the berthing places along the Western side of the pier and of a further Westward enlargement of 20,000 sq. m. (5 acres).

2. *Ponte Libia (Libia Pier):* Depth alongside, 11 m. Length of quay 400 m. along Western side of the pier served by the "Paceco" crane, and 150 m. on the Southern side not served by the crane.

Equipment: *(a)* 1 "Paceco-Vickers-Savigliano" crane having a maximum lifting capacity of 40 tons and the following main characteristics:

gauge of crane gantry 27 m. (88 ft. 6 in.);
maximum height of structures above wharf level 31 m. (101 ft. 7 in.);
total length of travelling bridge 69 m. (226 ft. 4 in.);
maximum seaward outreach 28.8 m. (94 ft. 3 in.);
useful travel of spreader with bridge partially drawn back for crane working on the quayside 23.3 m. (76 ft. 4 in.);
maximum height of spreader above wharf level 20.5 m. (67 ft. 2 in.);
crane suitable to unload containers by 20 ft., 30 ft., 35 ft., 40 ft. spreaders; other cargoes by hook (capacity 40 tons); bulk materials by bucket (capacity 15 tons);

(b) stockyards for a total surface of 42,900 sq. m. (10.7 acres);

(c) shed with loading platform and steel supporting frame 100 m. (328 ft.) long, 25 m. (82 ft.) wide and a total surface of 2,500 sq. m. (26,910 sq ft.);

(d) 6 straddle carriers having a lifting capacity of 30 tons and possibility of stacking up to 3 rows of containers.

(e) 80 flat cars, 7 of which are for 40 footers, 12 tractors, 12 fifth-wheel tractors, two 11.5 ton lift-trucks, six 2-ton lift-trucks, and one 3-ton lift-truck.

TANKERS: Berths in Genoa Harbour suitable for tankers up to 750 ft. length, 34 ft. draft. Tankers discharging at Calata Sanita and Calata Olii Minerali are berthed stern to quay.

Multedo Harbour situated West of main harbour has the following jetties:

Multedo Pier – for vessels up to 588 ft. length, 31 ft. draft.
Pier "A" – for vessels up to 580 ft. length, 36 ft. draft.
Pier "B" – for vessels up to 850 ft. length, 43 ft. draft.
Pier "C" – for vessels up to 850 ft. length, 46 ft. draft.
Pier "D" – Presently accommodating tankers up to 46 ft. draft.

Discharge Rate: Maximum discharge rate for crude products:

Pier "A"	2,500/3,500 t.p.h.
Pier "B"	3,500/6,000 t.p.h.
Pier "C"	6,000/10,000 t.p.h.
Pier "D"	6,000/10,000 t.p.h.

Masters may speak direct to Pilots or Harbour Masters at Multedo Oil Berth in order to obtain latest information about berthing, etc., by calling on VHF Channel 6.

Buoy Terminal: A steel tower, set up about 2,800 m. off the Genoa Multedo Oil Dock in water 50 m. in depth is provided for the discharge of crude oil from supertankers up to 500,000 d.w.t.

A 48 in. (120 cm.) submarine pipe-line connects the tower with the terminals of all the oil companies operating at the Multedo Oil Dock.

Technical Characteristics: The tower consists of a steel structure having the form of a truncated pyramid set into the sea-bed at a depth of 50 m. and supporting the following parts above the level of the sea:

A lower platform having quarters for the accommodation of personnel or the housing of the various services, the deck being at a height of 6.335 m. a.s.l. This platform is protected by a steel structure mounted on elastic supports, with wooden fenders topped with rubber buffers. The toroidal structure, externally to the

rubber buffers, is 34.200 m. in diameter. Under the impact of a vessel, the ring will shift axially for a distance of 2 m. as a result of the system of shock absorbers which support the lower platform.

An upper platform 10.335 m. a.s.l. which carries the rotating arm for berthing tankers and the connection of the floating discharge hoses. The rotating arm reaches a height of 13.882 m. a.s.l. and is fitted with:

(a) a bollard capable of withstanding a horizontal pull of 360 tons;

(b) 2 pipes 24 in. in diameter running to a double universal joint at sea level for connecting the riser of the submarine line to the floating hoses linking tower and tanker; on the rotating part of the tower, the two 24 in. pipes are fitted with cut-off valves and may be connected one to the other by means of a by-pass with a gate valve;

(c) a 5-ton service crane;

(d) a lighted beacon and radar reflector at a height of 23 m.

Floating hoses for crude oil discharge: The two 24 in. pipes with which the riser connects on the tower are coupled by universal joints to 2 floating hoses of 24 in. diameter, with 16 in. terminals, each hose being about 310 m. in length and consisting of 29 sections of 10.67 m., of which the last 3 are of 16 in. diameter for connecting to the ship's manifold. They are fitted with a blank flange, a Camlock rapid-closing joint and a Keystone rapid cut-off valve that will ensure perfect tightness and rapid disconnection in an emergency.

The hose connections are exactly 90° left of the bollard with respect to the mooring vessel.

Signal lights and fog horn: The tower is equipped with a regulation flashing white light 23 m. a.s.l. and a fog horn.

The 2 floating hoses are marked at night by 5 red lights visible at a distance of 2 miles.

Request for berth: Mooring at the tower is generally reserved for tankers which, owing to their size and draft, are unable to use the Multedo Oil Dock and have applied for permission to the Port of Genoa Authority Oil Dock Management.

Order of berthing: Arriving tankers that are to work cargo at the tower and are awaiting authorisation to berth thereat must anchor in the roads.

The order of berthing is that of anchorage in the roads and, for vessels authorised to berth, according to the moment when arrival in the roads is signalled to the Port Authority's lookout station at the foot of the main lighthouse in Genoa harbour.

Should it be impossible to communicate with the lookout station, the time when communication is established with the Genoa-Multedo Oil Dock Operations Office over VHF radio, on the frequency that will be notified as soon as possible (normally Channel 6 – 156.3 mc/s.), indicating the point of anchorage or the ship's position, will serve for establishing the order of berthing.

Berthing at the tower will be authorised by the Oil Dock Management upon receipt of the Master's written or radioed assurance that the ship is fully efficient and ready to proceed to berth and commence discharge. The Oil Companies that are receivers of cargoes or anyway interested as users of the Oil Dock should begin discharge within 4 hours of completion of mooring and continue without interruption, day and night.

Saving cases of proven *force majeure*, vessels moored at the tower must restrict berth occupancy to the time strictly needed for discharge operations and for ballasting.

Berthing at tower: Berthing at the tower will be authorised only weather permitting and must be carried out with the assistance of a Pilot. The Master may ask for the help of tugs, in the number needed to ensure the manoeuvre being executed safely.

Ships should moor using two 15 in. nylon hawsers 65 m. in length, supplied by the tower, each able to withstand a 300 ton pull. The end of each hawser is fitted with a 4.5 m. length of chain of which the last link, devoid of stud, will be made fast to the ship's bow structures for securing mooring ropes.

The section of chain outside the fairleads contains a safety element calculated for a breaking load of 200 tons.

The vessel's mooring structures: anchor plates with aperture for pin, quick release hooks, bollards, steel ropes, warping winches, etc., must be in fully efficient condition and able to withstand the stresses to which they will be subject once the mooring ropes have been made fast to them; they must furthermore allow for the ship's being unmoored at any moment by the crew.

As the mooring hawsers can break for accidental or other unpredictable causes before the limit of 200 tons is reached, despite the inspection normally made before the arrival of each ship, all tankers moored at the tower must at all times have their engines ready to move at full speed.

Safety distance around tower and pipe-line: No ship or other craft may station itself, anchor, fish, or carry out underwater or other activities in the area around the tower and pipe-line, boundaries of which are:

South: parallel 44° 23′ 30″ N.
North: the coast.
West: meridian 8° 49′ 40″ E.
East: meridian 8° 49′ 20″ E.

Excepting for tankers proceeding to the tower and the craft providing harbour services and assistance, or other craft which have been duly authorised, no vessel or whatsoever craft may sail within a radius of 800 m. of the tower.

Mooring and warping ropes: The 2 mooring hawsers will be secured to a bollard which is part of the rotating structure of the tower and about 14 m. a.s.l. When no vessel is at berth, the 2 hawsers float on the surface, supported by red and yellow luminescent sleeves.

The ends of the hawsers are secured to 2 luminescent red buoys which support the lengths of chain that are to be made fast aboard.

Before a tanker arrives, the Port Authority's personnel will make the ends of the chain of each mooring line fast to a big, floating polypropylene rope about 80 m. in length which the vessel must pick up so that she may be slowly warped in to the tower.

Vessel will be moored with the aid of a craft suitable for operations in the open sea.

Watches, emergency services and Master's contacts with personnel engaged in discharge: As though at anchor in the roads, vessels moored at the tower must continue to keep sea watches and retain on board the crew required to cope with any emergency manoeuvre, either for vacating the berth or to meet any other serious event involving the safety of the ship, persons and cargo.

Before commencing discharge, Masters should take steps to see that liaison ensuring rapid and reliable communication between the Oil Dock Management's representatives aboard, the Company interested with the discharge and the Master has been arranged.

Safety measures to keep vessel clear of tower: Vessels at berth must keep sufficiently clear of the outer ring of the tower to ensure that the bow bulb will not collide with the tower structures.

To this end, the Master must adopt all necessary measures and precautions and take such other steps as may be ordered by the Port Authority, including the use of the tender or, should that not suffice, of a tug in order to keep the vessel at a safe distance from the tower.

Vessels needing to activate propellers in order to heat turbines must keep revolution to the minimum and run engines astern.

Hose handling: While vessels are approaching and mooring at the tower, one of the craft will take the floating hoses in tow, arranging and keeping them in a position where they will not hinder manoeuvring.

On completion of mooring, the hoses will be brought alongside the vessel on the port side, so that the ends are level with the ship's manifold, and will be secured to the tackle of the cargo derrick in such a manner that the cargo receivers' personnel and the ship's crew may jointly hoist, connect and get the hoses ready and then begin discharge. Hoses must not be subjected to a pressure of more than 14 kg./sq. cm.

The ship's derrick should be able to lift at least 10 tons.

Stand-by tenders during discharge: During mooring and discharge and until sailing, the Port Authority will keep alongside or in proximity to the tower a stand-by tender of suitable size and power provided with the personnel, material and equipment that will ensure the proper functioning of the tower's facilities and provide any assistance that may be needed in the event of a spillage or other emergency.

Another smaller craft, duly equipped for the purpose, will be provided by the Port Authority for liaison between the Oil Dock, tower, tanker and tender and for transporting personnel or light materials.

The 2 craft will be equipped with continuous listening VHF radio and with anti-pollution and fire-fighting equipment.

Platform services: The services relating to the operation of the tower's fixed and mobile facilities are under the control of the Genoa-Multedo Oil Dock Management, which exercises them through its personnel on the spot.

The employee in charge of services on the tower will be in touch, by VHF radio, with the Oil Dock Management, informing the latter how discharge is proceeding and of any abnormality and receiving from the latter such instructions as may be necessary. Locally, he will keep in touch with the ship's Master and the representative of the Company interested with the discharge in order to facilitate operations in so far as he is responsible and comply with all requests that may result in advantages and in improving safety in general.

Personnel attending to ship's discharge: The Oil Company who is cargo receiver or anyway interested with the discharge and the Master, each within his own field of competence, will jointly supervise and be responsible for discharge and for connecting and disconnecting hoses.

A representative of the cargo receivers appointed for the purpose, will keep in constant touch with the company's booster station and the Oil Dock by means of VHF radio. He will act also in collaboration with the Master and the Port Authority's representative. For connecting and disconnecting hoses, the latter will make available the material and equipment provided on the tender.

Filling of hoses with water when not in use: For reasons of safety and to prevent pollution, the floating hoses must be kept full of water when not in use.

To this end, the 2 hoses are connected in the tower by means of the by-pass before the gate and non-return valves.

In agreement with the Master, the cargo receivers must drain the hoses of water before commencing discharge.

On completion of discharge, the cargo receivers must likewise flush out the hoses to remove all traces of oil, fill then with water, disconnect them, apply the blank flanges, close the Keystone cut-off valves and lower the hoses into the sea.

It is strictly forbidden:

(a) to introduce compressed air or any kind of gas into the hoses or the submarine pipe-line;

(b) to discharge the water from the hoses into the sea at the beginning of operations or that used for flushing the hoses on completion of operations.

During flushing, the cargo receivers must take all precautions against leakage or spillage of the water employed for the purpose.

Interruption of discharge operations for safety reasons: In the event of a deterioration of sea conditions, violent thunderstorms, trouble with the facilities that jeopardises safety, large scale

pollution or other dangerous circumstances, the Management of the Oil Dock may, at its own unchallengeable discretion, order:
- immediate interruption of discharge;
- that the hoses be got ready for lowering into the sea.
- the adoption of all such measures as will enable the vessel rapidly to vacate the berth.

In agreement with the cargo receivers, vessels must therefore maintain a trim during discharge that will enable them to take to sea safely at any moment.

Prohibition to pollute. Cleaning up: Ships moored at the tower must not pollute the water with hydrocarbons, solid residues, or oil mixtures of any kind, nor effect gas-freeing or tank cleaning or transfer oil from one tank to another by means of temporary hoses or pipes slung over manholes or other tank apertures.

In the event of oil spills, the Oil Dock Management, without prejudice to the application of the penalties provided by law, will order the anti-pollution equipment of the craft standing by to come into operation at once, at the expense of whomsoever may be concerned, and the despatch of other equipment for cleaning up should it deem this necessary.

Bunkering and victualling: Bunkers, victuals, drinking water and stores must in general be taken aboard while awaiting berth in the roads. Such operations may also be effected with the vessel moored at the tower before or during discharge (but not during ballasting) according to the procedure prescribed by the Oil Dock Management and with observance of the precautions that are ordered.

Ships and any other craft coming alongside tankers must be provided with a sufficient number of strong fenders to prevent hull to hull contact and be fitted with spark arresters on all main and auxiliary engine exhausts.

Authorisation to go aboard: Persons needing to go aboard to do work or for other justified reasons must be provided with an authorisation issued by the Oil Dock Management.

Work on engines: It is forbidden to vessels moored at the tower to carry out works which put the engines out of action or reduce its efficiency.

Other work which cannot be delayed may be authorised exceptionally by the Oil Dock Management at its own discretion provided certain instructions and safety measures are observed.

Transhipments: Vessels moored at the tower may carry out transhipment of their cargoes only to vessels moored in the Oil Dock, for such purposes making use of the pipe-line.

Other regulations: Without prejudice to the regulations currently in force in the waters of the Maritime Department of Genoa, for all such matters as are not expressly provided for in the present regulations there shall be applied, to the extent to which they are applicable, the provisions of the Harbour Police and Safety Regulations for the Genoa-Multedo Oil dock, approved by order No. 10 of the President of the Port of Genoa Authority on the 30th September, 1968, the regulations for bunkering tankers in the Genoa-Multedo Oil dock, approved by decree No. 1384 of the President of the Port of Genoa Authority on the 1st September, 1966, of the Marine Services and Harbour Police Regulations approved by order No. 2 of the President of the Port of Genoa Authority on the 1st March, 1972, and the other laws and regulations in force in the Port of Genoa.

Penalties: Infringements of these regulations will be punished by application of the penalties provided in the Code of Navigation.

Safety rules to complied with during stay of tankers at sea terminal of Genoa-Multedo: The following are the principal safety rules that the Master is bound to strictly comply with and enforce during the stay of the ship under his command of Genoa-Multedo.

1. The main propelling machinery must be kept ready to move (standby) and there must always be available on board a sufficient number of crewmen to enable the ship to leave the berth immediately whenever ordered to by the Port of Genoa Authority (Consorzio autonomo del porto);
2. Vessel must have ready the accommodation ladder on starboard side and – on port side – the pilot ladder rigged forward of the poophouse;
3. Decks and surrounding waters must be properly lighted;
4. When mooring to platform anchors must never be dropped;
5. Vessel's firefighting equipment and the men in charge with its operations must always be ready for immediate action (in case of emergency). Men in drunken state must be watched and kept under supervision;
6. The ends provided with eyes of 2 strong 3.5 in./4 in. wire cables, length of which must be of 80/100 m. (260 ft./330 ft.) at least, must be placed hanging one fore and one aft to enable the ship to be towed out (to sea) in case of fire.
7. Unless authorised to the contrary and which will only be allowed in exceptional cases by the Oil Harbour Master, it is forbidden:
   (a) to carry out repair works. cleaning or gasfreeing of tanks or bunkers, etc.;
   (b) to carry out loading of cargo, water or other liquid products using hoses introduced through the cargo tanks lids.
8. It is strictly prohibited:
   (a) to keep fires of any kind on board, with the only exception of those for the service of ship's boilers and galleys if located in special rooms thoroughly protected against gas exhalations and far from the cargo lines;
   (b) to throw or pump overboard waterballast, bilge-water or water from any other source, that might pollute the port waters;
   (c) to cause escape of oil from the sea valves due to delay in starting the ballast pumps or any other reasons; to cause escape of oil due to leakage of pipes or valves on board; to provoke overflow of oil from cargo tanks. Accidental leakages on deck on deck must be collected into suitable receptacles and – with all precautions – poured again into the cargo tanks or carried ashore; all scuppers on the main deck and particularly those near the cargo manifolds must be plugged during the loading/unloading and ballasting operations;
   (d) the use of devices, tools and wrenches not made of non-sparking material, to connect or disconnect hoses, pipes or pipe fittings and to carry out work to any ship's equipment placed on deck or inside those spaces where the generation and/or presence of gas is possible;
   (e) to smoke on board except in those rooms approved by the Master and to throw overboard lighted matches or cigarettes;
   (f) the use of rocket signals, flares, etc.;
   (g) the use of electric hot plates, fans and other equipment which might produce sparks on deck or into those rooms having openings towards the cargo tanks;
   (h) the use of electric portable lamps and cables and of telephones not being explosion proof;
   (i) to keep open skylights, doors and hatches of spaces located in way of or near the cargo tanks;
   (l) to keep open the cargo tanks lids; to keep open butterworth openings.

   The ship's personnel should take care that all ullage openings and gas vents are provided with spark arresters and that the latter are sound. They also should take care that the spark arresters placed on the funnels and combustion gases exhausts are sound;
   (m) shifting of steel tools, winch manoeuvring, loading and unloading of materials, connecting and disconnecting of cargo hoses during the whole period in which sampling and gauging of cargo tanks is carried out;
   (n) to carry out loading and unloading operations during storms with lightning;
   (o) the idling of pumps. Ship's personnel should immediately stop pumps that – for any reason – should idle;
   (p) the blowing of boiler's tubes;
   (q) the coming onboard of unauthorised people.
9. All engine propelled boats approaching the vessel must be provided with spark arresters on the combustion gas exhausts.
10. During shifting operations into tanks:
    (a) radio apparatus must be switched off and all aerials set to ground;
    (b) cargo lines not in use must have all valves closed and manifolds are to be blank flanged.
11. Loading of ship's stores and equipment should be carried out from the extreme poop. In case the aforesaid operations have to be carried out on deck, near the cargo tanks and should it involve the handling of heavy or metallic materials anyway, all precautions relating to the case or those each time specified by the Oil Harbour Master, should be taken.

    As a general rule the above mentioned operations are not allowed during the loading or ballasting of the ship. The crafts used for the transporatation of the materials must approach the ship, stay alongside and move out without making use of the engine.
12. Tankers having on board inflammable or dangerous products, or – being empty or in ballast – having their tanks not certified gasfree, must hoist steadily and well in view, a red flag (letter "B" of the international code of signals) and by night a red light, which can be sighted from round the horizon.

BALLAST: Facilities exist for the collection and clearance of slops by means of special barges.

BULK HANDLING FACILITIES: Coal, ore, steel waste, etc., discharged at Italsider Pier, length 518 m., depth alongside up to 13.70 m.

STEVEDORES: Working hours: General cargo 0800–1200 hrs. and 1330–1730 hrs.; coal, 0700–1300 hrs. and 1400–2000 hrs.; ore grain, 0800–1200 hrs. and 1330–1930 hrs.; Saturdays, 0800–1300 hrs.; grain silos, 0700–1200 hrs. and 1330–1630 hrs., 0700–1200 hrs. on Saturdays. Italsider Pier: 24 hours daily in 3 shifts.

MEDICAL: All medical assistance available. Advance notice required for urgent cases only.

DENSITY: Varying from 10253 to 10263.

FRESH WATER: Available direct from quay at almost all berths. Supply by lighter, minimum 20 cu. m.

FUEL: All grades available. Delivered by barge. 48 hours notice desirable.

DEVELOPMENTS: Construction of new port at Voltri. A floating dock with capacity of 300,000 tons under construction.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: First opening and last closing normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco. Customs allow a maximum of 50 cigarettes or 10 cigars, or 50 grams tobacco per person, as long as vessel stays in port. All cigarettes, cigars, etc. must be ready on arrival in a locker in order to be checked and sealed by Customs guards. Wine and/or spirits. Wine allowed any reasonable amounts. Spirits allowed 1 bottle for every 2 Crew members.

CARGO GEAR: Certificates must be in order, otherwise authorities may prevent vessel perform commercial operations, especially if using derricks.

IDENTIFICATION CARDS: Required. Shore passes issued by local police.

CONSULS:

Argentina	Guatemala
Austria	Haiti
Belgium	Honduras
Bolivia	Paraquay
Brazil	Spain
Chile	Turkey
Colombia	U.K.
Costa Rica	Indonesia
Cuba	Iceland
Denmark	Lebanon
Panama	Liberian
Portugal	Madagascar
Switzerland	Mexico
U.S.A.	Monaco
Cyprus	Nicaragua
Dominican	Norway
El Salvador	Netherlands
Ecuador	Peru
France	Sweden
Germany	Uruguay
Greece	Venezuela

REPAIRS: All types of repairs available. Preferable have advance notice of requirements.

DRY DOCKS: 1 floating dry dock, lifting capacity up to 15,000 tons; 7 dry docks (largest dimensions 280×40×12.50 m.).

REPATRIATION: All facilities available.

AIRPORT: Located at about 5 km from town. Served by regular lines, international services.

TIME: Local time in relation to GMT 1 hour ahead. Summer time further 1 hour ahead from May to September.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and day after Easter; Ascension Day; Corpus Domini; Proclamation Day (2nd June); Patron Saint's Day (24th June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Holiday (26th December).

Holiday work is available at overtime rates. Generally workers not available on 1st January, 1st May and 25th December. Saturday: work performed after 1200 hrs. is at overtime rates.

POLICE/AMBULANCE/FIRE: Police, tel. 55.555, 61.395; Ambulance, tel. 469659, 480171; Fire, tel. 22.222, 466666, 62.222.

TELEPHONES: Telephones can be placed on board at approximate cost of lire 6.500 for installation lire 2.250 rent per apparatus for the first day, lire 850 for each succeeding day.

IMPROVEMENTS: Forecasts for new traffic are of such extent that the Libia pier will be improved by adding a second special 45-ton crane with a seaside outreach of 35 m. (115 ft.) and with an enlargement on a new area of 20,200 sq. m. (5 acres) which will bring the total surface of the terminal up to 72,100 sq. m. (17.8 acres).

The above new area will be equipped with a bridge crane on rails with 54.50 m. (178 ft. 8 in.) of gauge and having sufficient height to allow stacking up to 4 rows of containers. This will bring the handling capacity of the pier up to 5,566×20 ft. containers. The terminal is connected to the port elevated road and through this, linked to the net of the inland bound highways.

Calata Bettolo Terminal: The third container terminal will be built on reclaimed land obtained in the waters facing the "Calata Bettolo" and along the "Calata Canzio". The filling-in works will be 400 m. (1,312 ft.) long and 220 m. (722 ft.) wide. Its total surface will be of about 100,000 sq. m. (24.7 acres).

Two 45-ton Paceco cranes will operate on the terminal which will be equipped with a warehouse similar to the one existing at Ponte Libia. An elevated road connection 2 km. (1.3 miles) long will link the new terminal to San Benigno customs check-point.

Track and railway facilities will run at the centre of the pier according to the most advanced trends, in order to avoid any interference with the truck traffic.

AUTHORITY: Consorzio Autonomo del Porto di Genoa.

LA SPEZIA: 44.06 N. 09.49 E.

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 List of Parcels.
1 Cargo Manifest.
1 Bill of Lading.

All Ship's Certificates including Italian Anchorage Dues.

PILOTAGE: Compulsory. Pilot station situated on breakwater at entrance to Gulf. 1 hours notice to Pilots required for shifting, sailing vessel, Pilot boards incoming vessels at Torre Scuola.

ANCHORAGE: Safe areas available in depths 25 to 34 ft. Mud bottom, no tide. Tankers: if waiting berth required to anchor in Safety Zone immediately behind the breakwater. If this anchorage is occupied by 2 vessels later arrivals must anchor outside the Gulf.

RESTRICTIONS: Western entrance to Gulf is 400 m. wide with depth of 42 ft. 6 in. The dredged channel to the port is 42 ft. deep. Eastern entrance is 200 m. wide used by smaller vessels only.

MAX. SIZE: Limited only by draft; 33 ft. for the Mercantile Port and grain silos. For vessels proceeding to coal berth max. draft 30 ft. 4 in. For vessels proceeding to Enel Pier max. draft 35 ft.

Tankers up to 40 ft. draft accommodated.

HEALTH: Radio pratique may be requested to Sanimare-Laspezia before arrival. Pratique is automatic for vessels from Ports in U.K., France, Belgium, Holland, W. Germany, Greece and Italy.

RADIO: Genoa Radio – ICB or Marina Militare ICS. Radio telephone station at Leghorn, transmitting 2591 kHz., receiving 2182 kHz.

TUGS: 7 tugs available up to 1,500 h.p. For large tankers, 4 tugs usually used.

BERTHING:

Garibaldi Quay: Length 510 m., with 3 berths for ships up to 29 ft. draft.

Malaspina: Length 200 m., depth alongside 21 ft.

Paita Dock: Length 535 m., 3 berths for vessels up to 30 ft. draft. At Berth No. 7 depth increased to 33 ft.

Italia Quay: Length 368 m., depth alongside 19 ft. 6 in.

Dock No. 8: Length 80 m., depth alongside 18 ft.

ENEL Quay: Length 200 m., depth alongside up to 35 ft.

TANKERS: Shell Pier, length 177 m., with 4 berths up to 39 ft. 6 in. depth.

SPI Buoy Terminal, situated 650 m. from San Bartolomeo shore. Vessels moor stern towards the shore. A crude oil discharge berth in depth of 11.50 m., suitable for tankers up to 36 ft. draft. Other oil berths at ENEL Quay, depth 35 ft. SNAM terminal for loading situated in Panigaglia Bay. Length 498 m., depth alongside 39 ft. Berths for 2 vessels.

Safety regulations are handed to Master on arrival and must be strictly observed. No shore steam or electricity available. At Shell pier, no goods may be loaded from shore.

Slop discharge facilities available only at the Shell pier.

BULK HANDLING FACILITIES: Ferruzzi Grain Silos at Paita Dock. Discharge by 2 mechanical conveyors, capacity 2,000 tons per 8 hour shift.

At Garibaldi Quay grain discharged by 4 vaccuum-operated intake pipes, capacity 400 t.p.h.

Coal conveyor system at Paita Dock, capacity 450 t.p.h.

CONTAINER TERMINAL: Situated on the Eastern side of the Commercial Port. Owned by Contship of Cadenazzo. Crane for discharging and handling containers up to 40 ft. max. draft 18 ft.

STEVEDORES: Gangs to be ordered by 0700 hrs. for morning shift, and by 1300 hrs. for afternoon shift every normal day from Monday to Friday. For mechanised work the same routine is to be followed. Saturdays, morning is considered as overtime work (tariff plus 27.50%). On the afternoon of Saturday, time is considered as holidays and so are Sundays. Saturdays and Sundays shift to be ordered on Friday afternoon within 1530 hrs.

MEDICAL: All facilities available. Vaccination/inoculation can be arranged. Prior notice should be given if urgent attention required on arrival.

FRESH WATER: Available at most berths, or by barge.

FUEL: Can be taken concurrent discharge at Shell Pier and S.P.I. terminal. Supplied by barge at other berths.

IDENTIFICATION CARDS: Shore passes issued to crew.

CONSULS: Following countries represented at Spezia: Denmark, France, Finland, Holland, Norway, Portugal, Sweden.

REPAIRS: Naval and civil repair yards can undertake all types of work.

DRY DOCKS: Available only when not used for naval vessels: No. 5, 209.65 m. by 27.60 m.; No. 6, 210.20 m. by 23.10 m. Floating dock for 80,000 d.w.t. under construction.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and Day after Easter; Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); All Saints' Day (1st November); Victoria Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

SHORE LEAVE: Allowed.

AUTHORITY: Capitaneria di Porto.

AGENT: Gastaldi & C. S.p.A., 39–A/4, Via F. Crispi, PO Box 371. Cables: "Dick". Telex: 27482. Tel.: 32040 and 32041.

LIVORNO (Leghorn): 43.33 N. 10.20 E. **(See Plan)**

DOCUMENTS: Complete set of Manifests and B/Ls relative to cargo destined for this port. Complete set of Manifests of all cargo in transit. 3 Crew Lists. 3 Passenger Lists. All ship's documents.

ANCHORAGE: Anywhere between 1–1.5 miles from breakwater.

PILOTAGE: Sound signals for calling Pilot, 3 long blasts, or international signal "G". Pilot boards vessels 1 mile from breakwater.

RESTRICTIONS: No night berthing for tankers; no restrictions for tankers on sailing, when empty and up to 15,000 gross tonnage according to weather conditions.

MAX. SIZE: Max. draft for commercial port 34 ft. 6 in.; for oil carriers: 37 ft. 6 in. for tankers up to the length of 215 m. or 34 ft. 6 in. for tankers from 215 to 240 m. length.

HEALTH: To obtain free pratique by radio cable to "Sanimare", Livorno, advising all health particulars at least 12 hours before arrival.

RADIO: Roma Radio generally used for communications.

VHF: 24 hour service on Channel 16 and 14.

TUGS: Tugs normally join vessel at entrance of the port. Ship's lines used.

BERTHING: Alto Fondale, depth alongside 34 ft. 6 in.
Calata Orlando, depth alongside 28 ft. 6 in.
Calata Carrata, depth alongside 25 ft.
Calata Pisa, depth alongside 25 ft.
Calata Depositi Franco, depth 29 ft.
Calata Sgarallino, depth 28 ft. 6 in.
BULK HANDLING FACILITIES: Grain: discharging rate 1,000 to 1,500 m. tons per day.
Ore and coal bulk: discharged by shore elevators at Calata Orlando, discharging rate 1,500 to 2,000 tons per day.
TANKERS: 2 berths at Darsena Petroli for tankers up to 240 m. length, draft 39 ft. 6 in.
4 other tanker berths, for vessels up to 30 ft. draft.
Loaded tankers berth only in daylight hours, tankers may sail up to midnight.
No slop facilities available.
STEVEDORES: ETA required by Agent in order to arrange matters with stevedores at least 48 hours before arrival.
MEDICAL: It is advisable to give details of assistance required together with ETA cable. Hospital facilities available.
FRESH WATER: Available, by pipe-line. On other quays delivery by barge.
FUEL: All grades available from berth. Advance notice required 48 hours; supply subject to Owners' stem.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CERTIFICATES: All ship's certificates required.
CUSTOMS ALLOWANCES: Tobacco. 50 cigarettes, or 50 grams tobacco per man for the first 24 hours. Wine and/or Spirits. Only in consignment of the Master.
IDENTIFICATION CARDS: Issued by local police authorities.
CONSULS:

Denmark	Norway
Finland	Netherlands
France	Peru
West Germany	Portugal
Greece	Spain
Haiti	Sweden
Liberia	Switzerland
Monaco	

REPAIRS: All types of deck and engine repairs are possible.
DRY DOCKS: Dry docks suitable to accommodate a Liberty type ship. A small floating dry dock for vessels up to maximum of 1,500 tons.
New Graving dock 350 m. × 56 m.
REPATRIATION: All necessary repatriations possible.
AIRPORT: Nearest at Pisa, distance about 20 km.; served by Alitalia and British Airways.
TIME: Local time is 1 hour ahead of GMT, and Summer time 2 hours ahead.
HOLIDAYS: 1st January, 6th January, 19th March, Easter Monday, 25th April, 1st May, 23rd May, 2nd June, 13th June, 29th June, 15th August, 1st November, 4th November, 8th December, 25th December, 26th December. On these days work can be arranged with an increase of 150%. Some of these holidays are liable to be abolished in 1977.
TELEPHONES: Only at some quays is it possible to place telephones on board.
AUTHORITY: Camera di Comercio Industria e Agricultura Livorno.
AGENT: G. Fanfani & Co., via Fuime 15, Livorno. Tel: 28151 (5 lines) Telex: 50006 Cables: FANFANICO.

MANFREDONIA: 41.37 N. 15.55 E.

DOCUMENTS:
5 Crew Lists.
3 Provision Lists.
3 Lists of Crew Possessions.
Customs Documents.
Cargo Manifests.
Bills of Lading.
Ship's Papers.
PILOTAGE: Compulsory for vessels over 300 tons. Pilot boards 1 mile off Mole di Levante. No VHF station.
ANCHORAGE: Good holding ground in 5 fathoms, 1 mile S.E. from Mole di Levante. Sheltered from all winds, except N.E. to S.E.
RESTRICTIONS: Depth 23 ft. at breakwater entrance, which is 1.25 cables wide. Depth 23 ft. alongside Mole di Ponette, for a length of 1,500 ft.
HEALTH: Pratique given at anchorage.
RADIO: Radio Roma, call sign "IAR".
TUGS: 3. Tugs make fast at anchorage and tow vessel into harbour (in the case of large vessels). Ships lines used.
STEVEDORES: 100 men available.
MEDICAL: There is a small hospital.
FRESH WATER: Available.
FUEL OIL: Not available.
DEVELOPMENTS: Large future development expected. At present a new jetty is under construction, extends in a S.E. direction for 1.25 miles to seaward, about 0.5 mile east of Mole di Levante. Depth alongside this jetty will be 12 m. Owing to construction it is advisable, when arriving at night, to remain about 3 miles off until morning, when a closer approach can be made.
GANGWAY/DECK WATCHMEN: Available, but unnecessary.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCE: 40 cigarettes per man. 1 bottle spirits.
IDENTIFICATION CARDS: Shore passes are issued by Police on arrival.
CONSULS: None.
REPAIRS: Only small repairs.
REPATRIATION: Can be arranged.
AIRPORT: Bari and Foggia.
TIME: GMT plus 1. Alterations to clocks are made from Spring to beginning of Autumn, then GMT plus 2 hours.
POLICE/AMBULANCE/FIRE: All services telephone 113.
TELEPHONE: Situated at Main Gate, end of Mole di Ponette.
SHORE LEAVE: No restrictions.
AUTHORITY: Harbour Master.

MESSINA: 38.11 N. 15.34 E.

DOCUMENTS: If vessel comes from foreign port, whenever possible, at least 1 copy of Crew List and Passenger List to be sent some days before her arrival, so that they can be delivered to police in advance. Required on arrival:
3 Crew Lists.
1 Provisions List.
3 Lists Passengers in Transit.
3 Lists Passengers Disembarking.
1 List of Articles – new and Customs-barred in possession each crew member – cameras, binoculars, radios, cigarettes, tobacco, new articles, etc. If on inspection articles or quantities not in conformity or in excess, Master responsible; articles removed and heavy fine imposed.
Copies of Cargo Manifest also to be prepared on arrival.
If Anchorage Dues already paid and still in force, the relative receipt to be shown to the harbour Authorities, together with other ship's papers and report of arrival to be delivered to them.
PILOTAGE: Pilot meets vessel at about 1 mile from port's entrance. On request he can meet vessel at a greater distance, but additional tariff to be paid. Pilotage through Messina Straights is available but not compulsory.
MAX. SIZE: Max. draft allowed: 33 ft. at passenger quay: Other berths 27 ft.
Max. length 200–300 m.
Tankers: Length 100 m., draft 27 ft.
ANCHORAGES: Allowed outside harbour; at Paradiso's Bay, sufficient depths for safe anchorage existing. Advisable to request Pilot's assistance for indication of best anchorages.
RESTRICTIONS: For entering harbour during night-time ETA to be given in advance.
HEALTH: Free pratique automatic for vessels coming from other Italian ports and quarantine flag not to be flown on entering. From other countries usual procedure applies.
RADIO: Contact through Rome Radio, Naples Radio, Augusta Radio, or Messina Radio.
TUGS: Not compulsory. Tugs join vessels at about 0.5 mile from entrance of harbour. If tug's lines used increase of 10% on tariff.
STEVEDORES: To enable Agent order gangs important obtain accurate ETA. Latest time to order gangs: normal shift 0730 hrs. for work in the morning; 1200 hrs. for work in afternoon; night shift 1600 hrs. same day – Saturday noon or Sunday at 1200 hrs. on Saturday.
Failure to give ETA results in cost of waiting gangs, charged to vessel.
Tonnage: Per gang in 8 hours: General cargo 50 ton – cereals 80 ton.
MEDICAL: Doctor can attend sick crew members or for vaccinations. Hospitals available.
TANKERS: There is an Esso bunkering station only. Small tankers from time to time discharge fuel oil, gasoline, etc.
FRESH WATER: All quays have water pipe-line connections and water may be supplied day and night (provided ETA given) directly from ashore by hoses; during Summer time water may be supplied from 0700 to 1100 hrs. only.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: May be carried out by the crew or stevedores.
CERTIFICATES:
Safety Certificate.
Wireless Safety Certificate.
Freeboard Certificate.
Deratisation Certificate.
Anchorage Duties Voucher.
Crew List.
Passenger List.
Construction Certificate.
CUSTOMS ALLOWANCES: 50 grms. tobacco for each seaman. Spirits: 0.75 bottle for all crew.
IDENTIFICATION CARDS: Required.
CONSULS:

Argentina	Peru
Great Britain	Germany
Norway	Panama
Sweden	Denmark
Colombia	Finland
Holland	Guatemala

REPAIRS: Almost all types of deck and engine repairs can be carried out.
DRY DOCK: Dry dock belonging to Italian Navy. If it is not engaged for warships it can be hired. Therefore application must be granted by the Marina Militare. Dimensions are as follows: 492 ft.×52 ft. 7 in. (bottom), 81 ft. 6 in.×24 ft. 8 in. (top).

Smaller floating dry dock available, but also belongs to Italian Navy. One graving dock, length 250 m., breadth 38 m.
REPATRIATION: No particular facilities existing; but necessary repatriation can normally be arranged.
AIRPORT: Reggio Calabria Airport – distance about 10 km. From Messina, Reggio Calabria can be reached in 15 minutes by hydrofoil boats, which run every half hour (about). Flights from Reggio Airport in Winter, 1 per day; in Summer, 2 per day.
TIME: In relation to GMT local time is an hour ahead. During Summer, from June to September, clocks are put 1 hour forward.
HOLIDAYS: Work can be arranged, provided timely notice is given, in following official holidays, paying the respective increase on normal tariff:
New Year's Day (January 1st); Epiphany (January 6th); March 19th; Easter Monday; 25th April; 1st May; Ascension Day; June 2nd; June 3rd; local religious holiday; Corpus Domini; 9th July; 15th August; 1st November; 4th November; 25th December; 26th December.
POLICE/AMBULANCE/FIRE: Police, 46830; Ambulance, 45070; Fire, 30222.
TELEPHONES: No arrangements exist.
SHORE LEAVE: Allowed.
AUTHORITY: Il Comandante Colonello di Porto.

MILAZZO (Sicily): 38.13 N. 15.16 E. **(See Plan)**

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report – completed on arrival.
Maritime Declaration of Health Certificate – completed on arrival.
Ship's Certificates, including Italian Authority dues.
Vaccination Certificates for sighting.
ARRIVAL ADVICE: At least 24 hours notice of arrival to be passed to Agent in order to obtain allocation of berth from Port Authority. Consignees-Receivers as for Charter Party.
PILOTAGE: Pilot boards 1.5 miles off the berths. International Code signals used. Pilot can be contacted on VHF Channel 12. Compulsory for vessels over 500 g.r.t. (Berthing/Unberthing).
ANCHORAGE: There are 6 anchorages for tankers over 3,000 g.r.t.
No. 1 to 600 m. off the harbour green light – Bearing 034°;
No. 2 to 920 m. ,, ,, ,, ,, ,, – ,, 091°;
No. 3 to 3,870 m. ,, ,, ,, ,, ,, – ,, 097°;
No. 4 to 3,050 m. ,, ,, ,, ,, ,, – ,, 101°;
No. 5 to 1,200 m. ,, ,, ,, ,, ,, – ,, 036°;
No. 6 to 1,600 m. ,, ,, ,, ,, ,, – ,, 065°.
Anchoring prohibited within 1 mile of Refinery Wharves. Pilot can be used for anchoring but not compulsory.
RESTRICTIONS: Large tankers are berthed in daylight hours only, medium and small tankers all hours. Unberthing all hours.
MAX. SIZE: Tankers up to 326,000 d.w.t.
RADIO: Harbour Master Authority, Mediterranea Refinery, Pilot and Tugs may be contacted on VHF Channel 12. Harbour Master Authority may be contacted also on VHF Channel 16.
HEALTH: Free pratique on board may be requested on arrival by way of ship's Agents. It is perfectioning the procedure to obtain free pratique by radio. Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Holland, W. Germany and Greece.
TUGS: 6 tugs available, 2×2,500 h.p., and 4×1,000 h.p. Meet vessel 0.75 miles off berths. Obligatory, at least one for mooring/unmooring tankers over 3,000 g.r.t. Ship's lines used.
DRY CARGO FACILITIES: Ludovico Mazzullo Jetty, length 340 m., depth 22 ft.; Pennello Eolie Jetty, length 65 m., depth 23 ft.
MEDITERRANEA REFINERY FACILITIES: 10 berths for Tankers, distributed in 3 Jetties as follows:
No. 1 Jetty: (West Jetty) 500 m. long, for loading/unloading, with the following berths:
Berth No. 1 (West side – Outer end) – depth 48 ft.
Berth No. 2 (East side – Outer end) – depth 48 ft.
Berth No. 3 (West side – Inner end) – depth 16 ft.
Berth No. 4 (East side – Inner end) – depth 20 ft.
Arms: 12 in. and 8 in. – Ballast lines 2×10 in. – Cargo lines 20, 16, 12 and 10 in.
No. 2 Jetty: (Middle Jetty.) 650 m. long, for loading/unloading, with the following berths:
Berth No. 5 (West side – Middle) – depth 55 ft.
Berth No. 6 (East side – Middle) – depth 55 ft.
Arms:12 in. – Ballast line 1×20 in. – Cargo lines 2×40 in. (Crude oil) – 20, 16, 12 in. (Fuel oil) – 20 in. (Gasoil) – 12 in. (Virgin Naphtha) – 10 in. (Super Gasoline) – 10 in. (Normal Gasoline) – 10 in. (Kerosine).
Berth No. 5 bis (West side – Outer end) – depth 83 ft.
Berth No. 6 bis (East side – Outer end) – depth 75 ft.
Arms: 16 in. – Crude oil lines 2×40 in.
Berth No. 7 (West side – Inner end) – depth 20 ft.
Berth No. 8 (East side – Inner end) – depth 20 ft.
No. 3 Jetty (East Jetty) 558 m. long, for loading/unloading under construction, with following berths:
Berth No. 9 (West side) – depth 45ft.
Berth No. 10 (East side) – depth 45 ft.
No. 1, 3, 4, 7 and 8 berths also LPG lines.
Vessels berth head out. Lines run to mooring dolphin ahead and astern. Anchor is compulsory only for small tonnage tankers. Tankers may use wire ropes only on the jetty mooring hook. On the bitts may use wire ropes only if the eyes are made of manila or nylon. For tankers alongside the jetty it is compulsory to have ahead and astern, outside, wire ropes with eye back.
FIRE WATCHMEN: Compulsory for tankers alongside the Refinery Mediterranea jetties. Number of watchmen onboard is variable, according to the cargo Class ("A", "B" or "C") loading/discharging and to the tankers g.r.t.
GANGWAY/DECK WATCHMEN: Watchmen service available. It is, however, recommended but not compulsory.
FRESH WATER: Boiler and drinking water supplied from the jetty. At anchorage by barge. Max. pumping rate 50 t.p.h.
FUEL: All grades available at Mediterranea Refinery berths, subject to prior notice. Also available at Milazzo Dry cargo harbour berths all grades available by tank or truck.
BALLAST: Ballast facilities available at Mediterranea's berths. Reception 1,000 t.p.h. No restrictions on capacity.
IDENTIFICATION CARDS: Shore passes given by local police.
TIME: GMT plus 1 hour. Summer-time: May to September GMT plus 2 hours.
HOLIDAYS: Cargo work can be arranged on every day.
REPAIRS: All types of deck/engine repair possible. Experienced and established marine workshops available.
CUSTOMS ALLOWANCES: 50 cigarettes are allowed per man per day for the first 2 days.
CONSULS: No Consul in Milazzo. The nearest are in Messina for the following countries: Peru, Great Britain, Argentine, Norway, Uruguay, Chile, Denmark, Germany, Australia.
AIRPORT: The nearest is at Reggio Calabria where there are 3 regular flights per day. Reggio Calabria can be reached by car and by hydrofoil in about 2 hours. Catania airport also nearby, and may be reached by car or train in about 2 hours.
TELEPHONE: Connections possible at Refinery Wharves.
MEDICAL: All facilities available.
GARBAGE: Boats are available, and compulsory for vessels 24 hours after arrival.
SHORE LEAVE: Allowed but transit through the refinery area not permitted except in emergency. Boats are available for hire from wharves and anchorage to the landing pier in the port of Milazzo. Shore passes given by local police.
AUTHORITY: Ufficio Circondariale Marittimo and Mediterranea-Raffineria Siciliana Petroli, S.p.A.

MONFALCONE: 45.48 N. 13.32 E.

PORT LIMITS: A vessel is considered to be an "arrived ship" when it arrives within the anchorage zone, S.W. of Duino.
DOCUMENTS:
Arrival Report.
Crew List.
Passenger List.
Customs Documents.
Health Documents (only for vessels that are not arriving from the United States, and are members of the West European Union).
PILOTAGE: Pilotage service is the responsibility of the Harbour Office, and is carried out by local Pilots. Pilots are not supplied with radio equipment. Pilotage service has to be requested by radio via Trieste radio station, to the Harbour Office. Pilotage is compulsory for vessels over 400 g.r.t. Pilot boat is equipped with VHF and is stationed along the access channel or near to the channel entrance buoy. Pilot boards about one mile from the entrance buoy.
ANCHORAGE: Vessels awaiting entry to the port are required to anchor between Duino and Sistiana, about 3 miles from the entrance. At the port entrance the depth is about 10 m. The anchorage provides good shelter from winds from the first and fourth quarters. Good anchorage in sand and gravel.
RESTRICTIONS: Entry to port is permissible from daybreak to sunset. Entrance channel has depth of 12 m.
MAX. SIZE: Maximum permissible draft 24 ft. 3 in.
HEALTH: Vessels calling from countries that are not members of the West European Union are required to provide a Maritime Declaration of Health. In the event of any disease or epidemic on board, advice has to be sent to the Maritime Health Office by radio.
RADIO: Nearest coast station is Trieste Radio, through which all radio messages should be routed.
TUGS: Tug service is optional, but the Maritime Authority can make service temporarily compulsory.
BERTHING: 630 m. of berth length for discharging generals, and 120 m. berth length for discharging cereals. Depth alongside berths approximately 7 m. Berths are equipped with mobile cranes.
BUNK HANDLING FACILITIES: Silo berth is well equipped for discharging cereals.
TANKERS: The port receives tankers with cargoes for Enel.
DENSITY: Average 1027.
FRESH WATER: Available at all berths.
FUEL: Bukering is by barge or tank truck only.
CONSULS: None at Monfalcone, but available at Trieste.
REPAIRS: Minor repairs only.
GANGWAY/DECK WATCHMEN: Not compulsory, but available through Agent.
OPENING/CLOSING HATCHES: Opened and closed by ship's crew.
AIRPORT: Distance to airport 5 km. Two flights a day to Rome.
HOLIDAYS: 1st and 6th January, 19th March, 25th April, 1st May, 2nd and 29th June, 15th August, 1st and 4th November, 25th and 26th December, first day after Easter, Ascension Day, Corpus Domini Day.

POLICE/AMBULANCE/FIRE: Police 113 or 72715. Ambulance 72249. Fire 72222.
TELEPHONES: Not available to be placed on board.
SHORE LEAVE: Permitted.
AUTHORITY: Harbour Master.

NAPLES: 40.50 N. 14.17 E. (See Plan)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report – completed on arrival.
Maritime Declaration of Health Certificate – completed on arrival.
Ship's Certificates, including Italian Authority Dues.
Vaccination Certificates for sighting.

PILOTAGE: 15 Pilots and 3 motor launches. Pilot station Tel. 322.832 and 312.604.
ANCHORAGES: Approximately 70, having depths ranging from 11 to 15 m.
RESTRICTIONS: 2 port entrances of which the Western is 300 m. wide, the Eastern is 250 m. wide.
MAX. SIZE: Tankers up to 45 ft. draft.
HEALTH: Free pratique may be requested by radio to "Sanimare Naples" between 12 to 6 hours before arrival advising vessel's name, nationality, last port, number of passengers and crew, and state of health on board, Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Holland, W. Germany and Greece.
TUGS: 19 tugs available as required to assist berthing.
BERTHING:

	Berth No.	*Depth*
Molo Angioino Ponente	5	33 ft.
	6	35 ft.
	7	35 ft.
Molo Angioino Testata	8	35 ft.
Molo Angioino Levante	9	35 ft.
	10	35 ft.
	11	32 ft.
Calata Piliero	12	28 ft.
	13	28 ft.
	14	26 ft.
Pontile Immacolatella Vecchia	15	28 ft.
Calata Porta di Massa	16/17	30 ft.
	18	27 ft.
	19	27 ft.
	20	27 ft. 6 in.
Pontile Pisacane Ponente	21	31 ft.
	22	31 ft.
Pontile Pisacane Testata	23	31 ft.
Pontile Pisacane Levante	24	27 ft.
	25	28 ft.
Villa Popolo Ponente	26	24 ft.
Pontile Silos Ponente	27	32 ft.
Pontile Silos Levante	27	30 ft.
Villa Popolo Levante	28	28 ft.
Molo Carmine Ponente	29	29 ft.
	29	30 ft.
	30	29 ft.
Molo Martello	—	30 ft.
Molo Carmine Levante	31	25 ft.
	32	—
Testate Bacini	32	30 ft.
Cesario Console Ponente	33	26 ft.
Cesario Console Levante	34	26 ft.
	35	26 ft.
Calata Marinella	36	—
	37	27 ft.
	38	—
Vittorio Emanuele Ponente	39	—
	40	27 ft.
Vittorio Emanuele Levante	42	30 ft.
	43	29 ft.
Vittorio Veneto Calata	44	29 ft.
Flavio Gioia Ponente	45	27 ft.
	46	27 ft.
Flavio Gioia Testata	47	28 ft.
Flavio Gioia Levante	48	28 ft.
	49	30 ft.
Calata Granili	50	29 ft. 5 in.
Bausan Ponente	51	31 ft.
	52	31 ft.
Bausan Testata	53	31 ft.
Bausan Levante	54	29 ft.
	55	29 ft.
Calata Pollena	56	35 ft.
Calata Vigliena Ponente	57	27 ft.
Darsena Pellegrino	57	18 ft.
	57	18 ft.
Calata Vigliena Levante	58	28 ft.
Vigliena Ponente	59	31 ft.
	60	31 ft.
Vigliena Testata	61	25 ft.
Vigliena Pennello	62	25 ft.
	63	33 ft.
Vigliena Levante	64	38 ft.
	65	38 ft.
	66	38 ft.
Calata Progresso	67	25 ft.
Calata Progresso	68	25 ft.
Molo Progresso Ponente	69	47 ft.
Diga Curvilinea	—	17 ft. depth
Molo San Vincenzo	—	at 5 m. from quay

CRANES:
Electric: 17 at 3 tons, 19 at 6 tons, 6 at 15 tons and 1 at 40 ton capacity.
Floating: 1 of 100 ton (Italian Navy) and 1 of 60 ton (SEBN).
BULK HANDLING FACILITIES:
Coal: Four 6 ton units with hourly payload of 400 tons.
Cereals: Five units with hourly payload of 520 tons.
Containers: One 40 ton container bridge crane at Flavio Gioia Pier, capable of a lift every 2 minutes.
TANKERS: The petroleum port is located at the far East area of the port of Naples and consists of the Vigliena Pier, Calata Progresso and Progresso Pier. The petroleum port is exclusively used for handling crude oil and petroleum products at its 11 berths, and several pipe-lines connect these berths with the Naples Refinery of Mobil Oil Italiana, the plant of Mobil Chimica Italiana and the bulk plants of Agip, Esso Standard Italiana and IIP (ex-Shell Italiana) which are all located in industrial area of Naples adjoining the petroleum port at a distance not exceeding 4 miles. The maximum size of crude tankers, fully loaded, which can be accommodated at Progresso pier is 90,000 d.w.t.
FRESH WATER: Water pipe-lines are connected to all wharves and piers in Port. Water barges available.
FUEL: All grades available. Delivered by barge subject to advance notice given.
REPAIRS: All types of ship repairs can be carried out by the shipyards of Soc. Esercizio Bacini Napoletani and Soc. Cantieri Pellegrino, at Pontile Vigliena.
DRY DOCKS: 3 graving docks with dimensions as follows:
Length 202 m., width 28.9 m.
Length 113 m., width 20.5 m.
Length 349 m., width 45 m.
In addition 2 floating docks:
Length 228 m., width 24 m.
Length 233 m., width 37 m., lifting capacity 28,000 tons
CONSULS: The following countries are represented in Naples:

Argentina	Greece	Spain
Belgium	Indonesia	Sweden
Brazil	Liberia	Switzerland
Denmark	Netherlands	Turkey
Finland	Norway	U.A.R.
France	Panama	U.S.A.
Germany	Portugal	Uruguay
Great Britain		

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.
IDENTIFICATION CARDS: Shore passes given by local police.
AIRPORT: Capodichino Airport, situated 8 km. from city. Full international services.
POLICE/FIRE/AMBULANCE: Police Tel. 315032; Fire 330210; Ambulance 351450.
TELEPHONES: Telephone system permits the connecting up of the ships in all berths with the city network.
TIME: GMT plus 1 hour. Summer-time: May to September GMT plus 2 hours.
HOLIDAYS: Local and national holidays: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and day after Easter; Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); Local Saints' Day (19th September); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); and 26th December.
DEVELOPMENTS: Over the three-year period 1975–1978 the port will be equipped with a container terminal. The facility will include: Quay of 650 m. Depth of water 12–15 m. (Bausan Quay). 2 anchorages West of Flavio Gioia Quay with a depth of water of 12 m. Container park of 35,000 sq. m. (S. Erasmo). A link with the National Railway Network. 2 cranes for 20 ft. and 40 ft. containers at Bausan Quay East and 2 cranes for 20 ft. containers at Bausan Quay West. A trans-European railway terminal operated by International Containers S.A. fitted with a Paceco-Vickers transtainer of 35 tons, lateral cranes of 35 tons and 7 tons, and fork-lift trucks.
AUTHORITY: Consorzio Autonomo del Porto di Napoli.

OLBIA Sardinia: 40.45 N. 09.31 E.

DOCUMENTS:
For Maritime Authority:
Arrival Report.
Crew List.
Passenger List.
Ship's Certificates, for sighting.

For Port Health:
Maritime Declaration of Health (2 copies).
Vaccination Certificates, for sighting.
For Customs:
List of Supplies and Engine Stores.
Cargo Manifest, enclosing Bills of Lading.
For Police:
Passenger List (2 copies).
Crew List (2 copies).
Shore Passes for all passengers and crew.

PILOTAGE: Pilots are requested by international code signals – Telegraphic address: Pilot – Olbia, at least 2 hours notice of arrival required. VHF of 15 Watt on pilot boat (Watch on Channel 16 – Working on Channels 6, 9, 12, 14) with service from 0500 hrs. till 0100 hrs. Pilot launch is wooden motor boat of 145 h.p. – speed 12 knots. Pilot boards 1 mile from lighthouse Isola Bocca. Vessels may anchor temporarily to await Pilot.
ANCHORAGE: In the roads of Golfo Aranci.
RESTRICTIONS: Between 0530 and 0630 hrs.; 2230 and 2330 hrs., kept free for entrance and exit of liners.
MAX. SIZE: Isola Bianca, max. draft 22 ft. Inner port, max. draft 20 ft.
HEALTH: Before arrival vessel to advise Agents if free pratique required, indicating state of health on board.
RADIO: The Port Authority listen on Channel 16 (VHF, range about 30 miles).
TUGS: 1 available, 1,050 h.p. service is optional, tug normally meets vessel in vicinity of Isola Bianca.
CRANES: 2 of 6 tons on rails in the inner port (at the Benedetto Brin Quay). 1 mobile of 15 tons.
STEVEDORES: Agents require ETA 24 hours before arrival in order to arrange gangs.
MEDICAL: Hospital facilities available. Vaccinations and inoculations can be done, except for yellow fever which must be done in Cagliari.
FRESH WATER: Available in inner port and Isola Bianca.
FUEL: Available only by barge, subject 2 to 3 days notice.
DEVELOPMENTS: Planned to dredge entrance to 10 m. depth.
GANGWAY/DECK WATCHMEN: Service is optional.
OPENING/CLOSING HATCHES: Work is exclusively done by stevedores.
CUSTOMS ALLOWANCES: For first 48 hours, 50 grammes tobacco per person and 20 gm. for each successive day. Not permitted to take tobacco out of the docks. Reasonable amount wine/spirits allowed for normal consumption on board.
IDENTIFICATION CARDS: Shore passes required.
CONSULS: No local representatives.
AIRPORT: Olbia Airport is Olbia – Costa Esmeralda, 3 km. away. Regular services with Rome, Milan, Pisa, Bologna, and Nice (this last one in Summertime).
TIME: GMT plus 1 hour. Summertime GMT plus 2 hours from June to September.
HOLIDAYS: New Year's Day (1st January); Epiphany (6th January) St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter Monday, Ascension Day, Corpus Domini (variable date); Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B. V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).
Sundays – tariff plus 50%. Holidays – tariff plus 150%.
POLICE/AMBULANCE/FIRE: Police, 22081; Ambulance, 22394; Fire, 22222.
SHORE LEAVE: Allowed.
AUTHORITY: Capitaneria di Porto.

ORISTANO BAY, Sardinia: 39.45 N. 08.30. E.

Shipmasters Report:

Oristano Bay has many shallows none marked with buoys. A good anchorage was obtained 2.5 miles from the port. The Bay is completely open to the West and with a S.W. to West wind the swell builds up. The perlite loading berth is a pier and a ship berths across the 'T' end of it, the ship being parallel to the beach. The berthing part itself is 120 ft. long and the loading chute can be raised to a height of 8 m. A vessel has to move on the pier for loading in different hatches, as the chute has a fixed base. I understand that although at the time there was hardly any swell in Bay, alongside there was considerable movement. The loading rate as quoted by the Agent is 500 t.p.h. Good communications were obtained with link calls on VHF through Cagliari Radio to the Agents. No answer was obtained on VHF to a Pilot or port service.

A new harbour is being built in the Bay as observed on the ship's radar. This consists of 2 breakwaters and a third breakwater extending at right angles across the entrance, with opening at both ends. In the Southern part of the Bay, there is a no anchoring and fishing area.

In the opinion of the Master the berth is not practical during the Winter months, as delays are caused by swell coming into the port. 1 vessel was at anchor for 3 days and sailed finally without loading.

PALERMO (Sicily): 38.07 N. 13.20 E.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Authority Dues.
Vaccination Certificates for sighting.

PILOTAGE: Compulsory for vessels over 499 gross tons. Pilot joins vessel 1 mile off port entrance. Pilot can be requested by International Code Signals. Pilot station and every Pilot equipped with walkie-talkie VHF set. In case of rough weather pilot boat will be in the bay and will lead ships through port entrance where Pilot will be able to board.
ANCHORAGE: It is advisable to use Pilot for anchoring in Palermo Bay.
RESTRICTIONS: No entry restrictions, but there is a daily mail boat service to and from Naples arriving about 0800 hrs. and sailing at 1915 hrs. No vessel is allowed to leave or enter the port half an hour before arrival or sailing of this vessel.
MAX. SIZE: Draft max. is up to 44 ft. (13.40 m.) according to the quay. Tankers up to 15 m. draft.
HEALTH: Free pratique may be requested by radio to "Sanimare", Palermo, between 12 to 6 hours before arrival advising vessel's name, nationality, last port, number of passengers and crew, and state of health on board. Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Holland, W. Germany and Greece.
RADIO: Naples Radio, call sign IQH, Roma Radio, call sign IAI, Cagliari Radio, call sign IDC.
TUGS: 6 to 8 tugs are available with up to 800 horse power. Tugs normally join vessel in the Bay. Ship's lines are used.
BERTHING:

Pier	*Length*	*Maximum draft*	
		ft.	*m.*
Puntone	400	44.0	13.4
S. Lucia – South side	150	37.5	11.4
Crispi 1	115	37.5	11.4
Piave – North side	325	37.5	11.4
Piave – East side	85	37.5	11.4
Piave – South side	325	37.5	11.4
Crispi 2	110	37.5	11.4
V. Veneto – North side	325	37.5	11.4
V. Veneto – South side	325	27.5	8.4
Crispi 3	115	24.5	7.4
Sammuzzo	350	26.0	7.9
Molo South/North end	380	21.0	6.4

There are 6 roll-on/roll-off terminals and others are projected.
S. Lucia. Max. draft 27 ft. and used for discharge of timber, generals, iron, steel and grain.
CONTAINER HANDLING FACILITIES: At Puntone Quay, where depths are 14 m. from the other port. One 35 ton container crane with outreach of 25 m. An additional larger Crane will be available in the near future. Also one mobile crane with capacity of 40 tons for moving containers within the terminal.
BULK HANDLING FACILITIES: There are 23 silos at Piave Pier with a total capacity of 23,950 tons. Discharge rate 120 t.p.h.
Wine: 11 storage tanks with total capacity of 1,500 cu.m.
Fat Acids: 8 storage tanks with total capacity of 3,000 tons.
CRANES: 4 electric cranes with capacity of 15 tons, max. outreach 25 m. and min. 7 m.
10 mobile cranes with capacities from 1–20 metric tons.
STEVEDORES: Gangs arranged through agent. To be ordered before 0800 hrs. to start work in the morning, and not later than 1100 hrs. to start work at 1300 hrs.
Port Labour Capacity: (quantities of goods loaded/unloaded in 8 hours daily work employing all stevedores available).
Bulk cargo – 1,700 tons.
General cargo – 700 tons.
Containers – 100.
Full loaded trucks and vans carried by roll-on/roll-off ships – 240.
MEDICAL: Assistance will be given upon request. English-speaking doctors available.
TANKERS:
Oil Products and Crude Oil: Agip. Max. length 185 m., draft 32 ft., 25,000 d.w.t. Tankers drop anchors and are tied up at 2 buoys astern. Discharge rate 200–400 t.p.h.
Islom. Max. length 260 m., draft 40 ft., 96,000 d.w.t. Vessels are berthed alongside. North breakwater is used for loading and discharging fuel oil at discharging rate of 400 t.p.h.
Esso. Max. draft 15 m., no limitation for length. Vessel drops anchor and ties up at 2 buoys by stern. Discharging rate 600–700 t.p.h.
DENSITY: 1025.
FRESH WATER: Available at any quay by hoses or barges. By hose at 25 t.p.h., by barge 45 t.p.h.
FUEL: Fuel oil, gas oil and marine diesel available at the quays and by barge.
GANGWAY/DECK WATCHMEN: Not compulsory; usually number of watchmen required depends upon the Master.
OPENING/CLOSING HATCHES: Crew usually carry out this operation.
CUSTOMS ALLOWANCES: 40 cigarettes and one opened bottle wine/spirits per man.
IDENTIFICATION CARDS: Shore passes given by local police.

TIME: GMT plus one hour. Summertime: May to September, GMT plus 2 hours.
CONSULS: Belgium, Holland, France, Germany, Norway, Panama, Portugal, Spain, U.K., United States.
REPAIRS: Any type of repairs undertaken. Facilities are provided by Cantiari Navali Riuniti, and the shipyard employs over 5,000 workmen. There are four building slips, two of which can take vessels of 250 m. length. The slipways are serviced by cranes of up to 45 tons capacity, and which allow handling of prefabricated units up to 70 tons weight. There is a plate shop capable of machining about 80 tons a day, and which is equipped with all the latest machine, drilling and welding units. The engineering works are also equipped with the latest types of machinery enabling total dismantling and reassembly of engines.
DRY DOCKS: Floating dock, length 285 m., breadth 46 m. Suitable for up to 150,000 d.w.t.
Floating dock, length 194 m., breadth 30 m. Suitable for up to 36,000 d.w.t.
Graving dock, length 172 m. breadth 28 m. Suitable for up to 30,000 d.w.t.
Also see "Developments".
AIRPORT: Distance from Punta Raise Airport is about 20 km. Airport served by regular services.
REPATRIATION: Good facilities exist.
HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter Monday; Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Holiday (26th December).
Cargo work can be arranged on the above days.
POLICE/AMBULANCE/FIRE: Police, 233333; Ambulance, 231166; Fire, 212222.
TELEPHONES: Available if required, but only for local use.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A graving dock suitable for up to 500,000 d.w.t. is under construction. Length of the new dock will be about 384 m. and breadth about 60 m. Also 1 drydock under construction for vessels up to 160,000 tons.
AUTHORITY: Comandante di Porto.

PIOMBINO: 42.56 N. 10.33 E.

DOCUMENTS:
3 copies of Crew List.
3 copies List of Passengers in Transit or Disembarking.
1 Customs List, including ship and crew articles (Master is responsible for any excess, less or more).
1 copy of Manifest and B/L of Cargo Discharging.
1 copy of Manifest for Cargo in Transit.
PORT LIMITS: Within one mile of Breakwater light.
PILOTAGE: ETA to Agent in local time (GMT plus one hour). Summer-time May to September (GMT plus two hours).
Pilots embark E.S.E. from breakwater light, distance 1 mile or less according to weather conditions. Pilotage usually available at greater distance on request of ship or Agent. Being an open road, care should be given to provide shelter to Pilot embarking/disembarking facilities, especially in Southerly winds or a swell.
Pilot ladder according to Convention Safety of Life at Sea, and EMPA recommendations.
Southerly gales may prevent Pilot from embarking or even from approaching the ship; in this case pilot boat may guide limited size vessels to sheltered water and then embark Pilot (signals by lamp or flags "UF").
Pilots VHF will be activated in near future.
ANCHORAGE: Outside the harbour leaving entrance of dredged channel clear and ample sea room to intense traffic of car ferries to and from Island of Elba.
Pilot not compulsory, but available day and night on request of ship or Agent.
RESTRICTIONS: Berthing of ships over 35,000 d.w.t. unadvisable in darkness. Berthing may be restricted by Southerly gales also for smaller vessels. No restrictions on sailing but may be necessary to disembark Pilot at Portoferraio (Island of Elba). Considerable swell in the harbour during gales.
MAX. SIZE: Max. draft 39 ft., length 260 m., no breadth restriction. Can accommodate vessels up to 50,000 d.w.t.
HEALTH: Free pratique automatic for vessels coming from Continent, "Q" flag not to be flown on entering. From other countries, including Spain and Portugal, usual procedure applies. Not coming from Continent it is possible to request free pratique by radio to "Sanimare", Piombino, between 12 to 6 hours before arrival.
RADIO: Civitavecchia or Leghorn Radio.
BERTHING: "Acciaierie di Piombino" (ex-Italsider) pier equipped for quick discharging of ore, coal, scrap, etc. – Berth No. 4 depth 39 ft. Berth No. 3 depth 35 ft. 6 in. Other commercial berths, max. depth 29 ft., equipped with mobile crane 10 tons. One berth (21 ft.) with roll-on/roll-off facilities.
STEVEDORES: To enable Agent to order gangs, it is important to radio accurate ETA. Latest time to order gangs: shift 0600–1400 hrs., 1700 hrs. day before, shift 2200–0600, 1700 hrs. same day, shift 1400–2200 hrs., 1100 hrs. same day. Failure to give precise ETA may result in ship losing 12–24 hours, and the cost of the gang not employed, about 70.000 lire.
MEDICAL: Doctor and dentist can attend sick crew. For yellow fever and smallpox vaccination doctor comes from Leghorn.
FRESH WATER: Available at any pier, by pipe-line.
FUEL: Available by barge from Livorno.
OPENING/CLOSING HATCHES: Normally carried out by crew (if stevedores, extra charge).
CERTIFICATES:
Certificate of Registry.
Load Line.
Safety Equipment.
Radio Certificate.
Deratisation Certificate.
CONSULS: No Consuls.
REPAIRS: Small repairs only undertaken.
REPATRIATION: It is possible to arrange repatriation.
HOLIDAYS: Cargo work can be arranged on all official holidays.
POLICE/AMBULANCE/FIRE: Police 31111 or 32222; Ambulance 36022; Fire 33333; Emergency call (all services) 113.
SHORE LEAVE: Allowed.
AUTHORITY: Il Comandante, Capitano di Porto.

PORTO EMPEDOCLE: 37.17 N. 13.32 E.

BERTHING: Two quays with max. draft 21 ft., and one pier max. draft about 28 ft. Berths used for loading salt, fertilisers and generals, and for discharging bulk phosphate. Salt is discharged at rate of about 250 tons per hatch/day using ship's gear, and about 1,000 tons per day ex-silos.

PORTO TORRES (Sassari): 40.51 N. 08.24 E.

DOCUMENTS:
4 Crew Lists.
1 Passenger List.
1 Maritime Health Declaration.
1 Arrival Report.
1 Crew Declaration.
PILOTAGE: International Code Signals are used to call Pilot. Pilot station telegraphic address, Corpo Piloti Porto Torres, tel. P. Torres 54936. The pilot boats carry international pilot signals. The Pilot normally boards about 1 mile from port entrance. On request, vessel can be boarded 3 miles off port entrance. Also see VHF.
RESTRICTIONS: The oil terminal is exposed to winds and swell from N.W. to N.E. Heavy N.E. swell may delay berthing of larger vessels. Vessels should be ready to leave the berth if necessary due to adverse weather conditions.
ANCHORAGE: About 1 mile from the green light on head of West Mole in depths of 25 m.
MAX. SIZE: Inner port: length 120 m., draft 7 m.; Outer port: length 150 m., draft 8 m.; West Mole: length 150 m., draft 8–10 m.
S.I.R. Terminal: Pier A, length no limit, draft 9 m.; Pier B, length no limit, draft 12 m.; Pier C, length no limit, draft 15 m.; Pier E, length no limit, draft 8 m.
S.B.M. mooring: up to 300,000 tons.
HEALTH: Pratique is given by the Port Medical Officer who boards all vessels coming from foreign ports. No Radio pratique at present. Pratique not required for vessels arriving from Common Market countries.
RADIO: Coastal radio station, Porto Torres Radio P.T., call sign "IZN", operating on 2182 kHz. A continuous service.
VHF: Pilots work on Channels 12 and 16. Launch service from anchorage to Oil berths work on Channel 6. It is also possible to call Porto Torres Radio on VHF Channel 16 (Calling and Safety), with continuous service on Channels 25, 26 and 27.
Captain of the Port on VHF Channels 16, 12, and 9 and 14 from 0800 hrs. – 2000 hrs.
TUGS: Join vessel about 0.5 mile from port or from S.I.R. Piers. Ship's lines normally used. 4 tugs available.
TANKERS: S.B.M. located about 1.7 miles N.N.W. of S.I.R. Terminal in approx. position 40.52.5 N. 08.21.5 E. Suitable for up to 300,000 d.w.t.
New Port, consisting of the S.I.R. jetty with berths A, B, C and E and depths of water varying to allow ship drafts of between 9 and 15 m.
There are two lines of 20 in. and 10 in. diameter for deballasting ashore.
Old Port, the West Mole which forms the seaward limit of the (Outer) port has tanker berths in a depth of 7 m.
BERTHING: Tankers are only permitted to berth between sunrise and sunset, but may unberth at any time.
Dry-cargo vessels may enter at any time.
There are two ports, viz. New Port and Old Port. The New Port is comprised of the S.I.R. jetty, and the Old Port is that area bounded by the East and West breakwater moles, within which are the Inner and Outer harbours. The Inner harbour is composed of the general cargo wharves which have in service electrical cranes up to 9 tons capacity, and a heavy lift gantry crane of 30 tons capacity. The Outer harbour has oil berths at the West Mole, and general cargo berths at the East Mole in depths of up to 8.23 m.
STEVEDORES: There are two ordering times each day. The first at 0800 hrs. and the second at 1330 hrs. It is possible to order gangs outside normal working hours through ship's Agents.

MEDICAL: All facilities available. Nearest hospital located at Sassari, 18 km. away.
DENSITY: Salt water.
FRESH WATER: Can be supplied in limited quantities to vessels in port and in the roads. All berths are fitted with fresh-water connections, but supply is unreliable due scarcity. Advance notice is required for deliveries by barge or from tugs.
FUEL: All grades available by pipe-line at S.I.R. piers. Elsewhere, can be supplied by barge, subject advance notice of 12 hours.
GANGWAY/DECK WATCHMEN: Authorised shore service available.
OPENING/CLOSING HATCHES: Normally done by crew, can be done by stevedores on request.
CUSTOMS ALLOWANCES: 40 grammes tobacco per man. Normal daily consumption wine/spirits allowed.
IDENTIFICATION CARDS: Not required.
CONSULS: No local consular representation.
REPAIRS: Only minor repairs can be effected locally.
REPATRIATION: Can be arranged through Agents.
AIRPORT: Nearest at Alghero-Fertilia, 34 km. away. Daily flights to main Italian cities.
TIME: GMT plus 1 hour. Summer-time, clocks advanced 1 hour between 24th May and 21st October.
HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Patron Saint (22nd May); Easter Day, Ascension Day, Corpus Domini (variable date); Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B. V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).
POLICE/FIRE/AMBULANCE: Police tel. 54888; Fire, 31421; Ambulance, 54973.
SHORE LEAVE: Allowed. Shore passes are issued by Immigration.
AUTHORITY: Capitaneria di Porto Torres.

PORTO VESME (Sardinia): 39.12 N. 08.24 E.

DOCUMENTS: See "Genoa".
TUGS: Vessels normally require two tugs. One tug is available from Porto Vesme, and the second usually comes from Cagliari at a charge of about Lit. 800.000 per trip plus Lit. 40.000 per hour from two hours after arrival at Porto Vesme.
BERTHING: All bauxite cargoes are discharged at Eurallumina Quay, including all cargoes discharged for account Comalco. This is a private installation, operating with own personnel on a 24-hour shift basis. Out-turns may reach 10/15,000 tons per day. Depth of water on approach to Eurallumina reported to be 13 m., and permitted draft alongside the quay is 10.97 m. (36 ft.).
FUEL: Not available.
FRESH WATER: Available, but in short supply. Preferably vessels should arrive with sufficient water on board in order to avoid the heavy charges incurred in deliveries by tank-lorries.

SHIPMASTER'S REPORT:

HARBOUR: The harbour is protected by two moles between which there is a wharf. A channel marked by buoys leads to the entrance.
DOCUMENTS: On arrival the following documents are required.
Declaration of Health.
2 Crew Lists.
1 Copy of last Port Clearance.
1 Copy Vaccination List.
2 Store Lists.
2 Personal Effects Lists.
1 Valid Derat Certificate.
All other ship's documents.
RADIO PRATIQUE: Unavailable.
PILOTAGE: For ships arriving the Pilot boards at 39.14 N. 08.19 E., but in severe N.-Easterly gales the Pilot will board in Palmas Bay, position 39.00 N., 08.30 E. When leaving Port the Pilot leaves the ship abeam of Ghingetta Is., 3 cables off, position 39.11.5 N., 08.22.25 E. There is no Pilot V/L, the Pilot boards from a tug.
RADIO: Cagliari (IDC). No VHF service for pilotage.
TUGS: Two permanent tugs of 1,750 h.p. are operating and other tugs are available from Cagliari when necessary, and advising four days before ship's ETA.
MOORING BOAT: Available.
DEPTHS OF WATER:

In the Channel	14 m.
Eurallumina Quay	12 m.
Alsar Pier	8.5 m.
Trade Quay	8.5 m.

BERTHINGS: *Eurallumina Quay* (unloading point of bauxite vessels). Length 442 m. Height on surface of water 3.6 m. Large rubber sprung fenders 150 ft. apart are fixed to the quay. Double bollards 150 ft. apart.
Vessels using this quay usually berth starboard side to using the port anchor which is let go well off the berth.
Bauxite Discharging Rate: 10,000 m. tons/day. Discharging by grab.
FRESH WATER: Available at the Trade Quay by tank cars. At Eurallumina Quay available at 15 cu. m./hr. (Boiler Water only). No fresh water available at Alsar Pier.
BUNKERS: Available by barge from Sarroch, about 70 miles from Porto Vesme.
REPAIRS: Limited minor repairs only and giving notice by radio. For Radio and Radar available at Cagliari.
SHIP CHANDLER: Available advising Agent.
CONSULS: No foreign representation.
LAUNDRY: Available advising Agent.
PROVISIONS: Fresh foods available but notice must be given immediately on arrival.
AIRPORT: Cagliari about 90 km. from Porto Vesme. International schedule flights and domestic flights over the Italy Area.
MEDICAL: Qualified doctors available ashore and also equipped hospitals. In emergency doctor will board ship.
REPATRIATION: Arrangements must be made with Agent in advance by cable or immediately on arrival.

QUILIANO TERMINAL: 44.17 N. 08.28 E.

(See Plan)

LOCATION: Terminal is located in Vado Ligure Bay in approx. Lat. 44° 16′ 48″ N., Long. 08° 27′ 42″ E. between Savona Harbour and Capo Vado.
DOCUMENTS:
2 copies Store List.
2 copies Curios List.
8 copies Crew List.
4 copies Passenger List.
Clearance, not required.
1 copy Cargo Manifest.
Health Declaration. International Health Form to be filled out by Master on arrival.
Consignee Papers:
Bills of Lading (original and copy).
Certificate of Origin (original and copy).
Ullages report at the loading port.
PILOTAGE: Also see "Mooring".
Pilotage is compulsory. Vessels proceeding to the terminal must call off Savona Harbour to pick up Pilot.
Pilot station is located one mile off Savona Harbour breakwater in position approx. Lat. 44° 19′ 00″ N., Long. 08° 31′ 24″ E. and maintains VHF radio-telephone service (Channel 13).
Vessels are requested to have a proper pilot ladder securely rigged and long enough to reach the pilot launch; during night-time, adequate light must be rigged overboard for the Pilot to approach the side of the vessel and safely climb the ladder.
Vessels partially loaded must have the pilot ladder rigged in conjunction with the accommodation ladder.
When the vessel is berthed, the Port Authorities require the accommodation ladder on the starboard side.
ANCHORAGE: For vessels awaiting berth, the anchorage area is off Savona Harbour breakwater, or in the area East of berth in position approx. Lat. 44° 17′ 00″ N., Long. 08° 28′ 05″ E.
MAX. SIZE: The berth is established for a 70 ft. draft vessel, with min. keel clearance of 15 ft., making the safe manoeuvring depth 85 ft. (26 m.).
HEALTH: Master to request free pratique by radio 24 hours prior arrival to "Sanimare Savona".
RADIO/VHF:
Master to Radio "Sarpom Quiliano"

AAA	Blading quantity in long tons.
BBB	Slops, quantity water percentage, tank number.
CCC	ETA Quiliano upon departure last port.
DDD	Any ETA change exceeding 12 hours.
EEE	ETA Quiliano 72–24 hours prior arrival.
FFF	Draft of arrival at berth.

Ship-to-shore communications
Ship-to-shore communications, while the ship is berthed will be by portable VHF radio units used by Sarpom Marine Terminal Supervisor only. The use of the ship's radio station (except VHF set) and/or battery charging equipment is prohibited for safety reasons during cargo-ballast transfer operations. In event of normal ship-to-shore communications failure, an emergency system will be operated.
Free pratique. See "Health".
Radio Message
Local Agent will transmit the following standard message to all inbound vessels:
Standard Message No. 1 Sarpom Quiliano
Master . . . . . .
Please advise ETA draft other requirements stop please urgently inform:

AAA	Have two 16 in. ASA connections ready on standard manifolds all other flanges to be blanked and fully bolted stop if 16 in. not available advise size manifold connection.
BBB	Have boom hoisted on starboard side able to work abreast of main cargo manifolds certified lifting capacity 10 tons.
CCC	Vessel will be moored at a 7 buoys SBB using both bow anchors with . . . . shackles each side stop advise details/availability your mooring system stop mooring lines/wires of 150 fathoms each are required stop terminal preventer wires may be required.
DDD	Accommodation ladder to be ready on starboard side on arrival stop have pilot ladder ready on stbd side in connection with the accommodation ladder.
EEE	During entire stay at berth engine to be always on readiness and steam on deck to be kept open.
FFF	Have ullages, cargo temperatures and water measured and ready before arrival.

GGG Advise main cargo pumps total water rate capacity stop failing to answer above details may result in operational delays accountable to vessel.

Important that a reply to this message be sent soonest after receipt.

TUGS: Tugs are generally stationed in Savona Harbour. In view of required time to reach the Terminal Area (about 20 minutes time in good weather conditions) sufficient notice should be granted.

The principal characteristics of tugs are:

Luigi Noli: motor, 3000 h.p. – 50 tons bollard pull (Korte nozzle). *Fire equipment:* Equipped with "Sourbel" fire-fighting articulated arms. 1 monitor fore mast, 23 m. above sea level; 2 monitors main mast, 16 m. above sea level, water/foam range 120/90 m.

Carmelo Noli: Motor, 1,700 h.p. – 20 tons bollard pull. 1 monitor fore mast – 12 m. above sea level. 2 monitors main mast – 9 m. above sea level. Water/foam range 90/70 m.

Giuseppe Piaggio: Motor, 1,600 h.p. – 17 tons bollard pull. 2 monitors main mast – 9 m. above sea level. Water/foam range 90/70 m.

Capo Vado: Motor, 1,250 h.p. – 15 tons bollard pull. 2 monitors main mast – 9 m. above sea level. Water/foam.

Leon Pancaldo: Motor, 808 h.p. – 10 tons bollard pull. No monitors – fire hoses only.

Priamar: Motor, 650 h.p. – 9 tons bollard pull. No monitors – fire hoses only.

Riviera: Motor, no monitors – fire hoses only.

MOORING: The vessel will be boarded before mooring operations by a Sarpom Marine Terminal Supervisor (S.M.T.S.) who is an experienced captain. He will remain on board up to the time the harbour Pilot boards the vessel for unmooring operations and he will also act as co-ordinator of all ship/shore operations, providing local advice to the Master in any emergency that may arise.

Responsibility for the safe conduct of operations on board while in berth or in the area of Terminal rests with the Master, as solely responsible on behalf of the Owners of the vessel.

Vessels will be boarded by the harbour Pilot off Savona Harbour breakwater or at anchorage. All manoeuvring of ships proceeding to the Terminal and within the Terminal area will be done in accordance with the harbour Pilot advices. Vessels will proceed subsequently to Vado Bay with a course parallel to the coast, about 1.2 miles from shore, up to the terminal area.

A starboard turn will be taken, steering on the "approaching range line", leading to the buoys field. Another range line, crossing with above line, marks the position where the starboard anchor should be dropped. With the assistance of 4 to 5 tugs the vessel then backs into the berth.

The position of anchors is assumed for vessels of 980 ft. LOA and 13 shackles in the water. The Pilot according to current information can also do anticlockwise manoeuvring instead of above clockwise, in this case the first anchor to be dropped will be the port anchor.

It is recommended that at least the following number of shackles in the water should be used according to size of vessel:

(1) VLCC's above 140,000 d.w.t.	13
(2) Vessels 80 to 140,000 d.w.t.	11
(3) Vessels 50 to 80,000 d.w.t.	9

According to existing local weather conditions the first line to be sent out is generally on buoy N.7 or 6 (port side of vessel). The sequence of mooring operations will take place as suggested by harbour Pilot.

In expected or bad weather conditions, preventer wires will be picked up.

For vessels in the range of 50,000–90,000 d.w.t., according to existing and foreseen weather conditions and other factors, only five buoys instead of seven will be used.

Vessels must be moored to the entire satisfaction of the Pilot and Sarpom Marine Terminal Supervisor and must be ready at all times to put out more lines, to take in preventer wires using messenger lines, or to adjust lines or leave the berth as required by S.M.T.S. due to any change in the weather.

The Master of the vessel shall notify the Pilot of any special conditions, difficulties or peculiarities, such as defective equipment lines or gear, which might impose special hazards in connection with handling, mooring or discharging the vessel.

It is required that vessels test steering gear, engine room telegraph, whistle and all navigational equipment before any manoeuvre to or from the berth. The Pilot will decline to moor vessels if they are not equipped with satisfactory mooring equipment, lines, gear, etc.

The mooring boat has the following characteristics: LOA 12 m. – beam 4.20 m. – displacement 17 tons. Motor Diesel *Deutz* 150 h.p., can be overpowered up to 200 h.p.

A successful test of the boat power was carried out by towing 250 m. of two 38 mm. dia. wires at the same time.

N.B. Being an open roadstead, vessels must keep engines on stand-by during their stay in the moorings. No repairs to main engine may be undertaken in berth. Steam must be kept on deck in case an adjustment to anchor cables or mooring lines is found necessary.

The vessel's personnel are responsible for the safety of the vessel and must take all necessary precautions, whether or not so advised by the Pilot or S.M.T.S., having in mind the hazards of the operations because of the product being discharged, weather conditions and any other circumstances requiring special care or caution.

While a vessel is moored, all the vessel's personnel and vessel's operations must comply or be in accord with the Safety Rules as per form 1–49 Mar–B and others handed to Master on arrival, to ensure as far as possible the safety of the ship as well as the properties of Terminal. Unsatisfactory conditions will be reported to Sarpom Marine Terminal Supervisor who is empowered to reject the ship for future calls unless the reported deficiencies have been remedied.

Note: If in the opinion of the harbour Pilot and/or Sarpom Marine Terminal Supervisor the vessel is not equipped with adequate mooring facilities, lines or gears he will so inform the ship's Master and in such event the ship shall not be brought into the mooring until facilities, lines or gear, are deemed satisfactory.

BERTH: The sea bed at the berth is firm sand overlain by 1 to 2 m. of mud.

The berth is a conventional buoy mooring consisting of seven Langmar buoys designed for a 125 short ton load. Each buoy is equipped with a 40 mm. diameter preventer wire. Vessel is berthed with two anchors ahead and seven mooring lines to buoys round the stern. Moored vessels have their bow seaward heading S.E., 155° true.

As the mooring buoys are at distances from 500 to 650 ft. away when the ship is in position, vessels should have ropes of 200 fathoms ready for running out on each side of the after deck to warp ship into position. Where vessels are not so equipped, two ropes of 150 fathoms (or of such a length as to have the eye splice on board when in position), should be married together and flaked out on deck clear of all obstructions and ready for running.

Vessels not equipped with wire winches should have at least 15 mooring lines aft with diameter appropriate for the size of the vessel and a min. length of 150 fathoms with lashings ready for marrying one rope to another for running out. Combinations of wire synthetic lines are acceptable on the basis that 2 synthetic lines replace 1 wire.

Speed of running out and warping are often of vital importance when berthing, and experience has proved that the smaller diameter synthetic ropes of equivalent strength not only improve mooring time but often make mooring possible when the larger ropes fail. Max. circumference of such ropes should be 10 in.

Mooring wires on ship's winches are favoured at this terminal but it is recommended that the wire be not less than 1.625 in. diameter and at least 150 fathoms long, preferably 200 fathoms. Such winches must be solidly locked when in moorings; the tension feature is not acceptable. It is also recommended that the wire be secured on the drum in such a manner that it can be slipped without endangering personnel.

Where nylon tails are used, they should be spliced on the wire round a thimble.

When slipping wire has been found necessary, the mooring company launch will make every effort to recover and return it to the vessel.

Chain stoppers must be ready both sides of vessel and aft.

DISCHARGING: Ships will discharge through 2 strings of hoses, i.e.:

String No. 1	9 lengths	25 ft.×20 in. dia.
	2 lengths	25 ft.×16 in. dia.
	1 length	30 ft.×16 in. dia.
String No. 2	10 lengths	25 ft.×20 in. dia.
	2 lengths	25 ft.×16 in. dia.
	1 length	30 ft.×16 in. dia.

The weight to be lifted on each string is about 9 tons: they are invariably taken up on the starboard side. Both headers are equipped with fast uncoupling devices.

The submarine line connected by manifold to the above strings consists of 2 lines (one 32 in. dia. one 36 in. dia.) of about 3.470 m. length reaching the shore installations (Sarpom Depot) which has, at present, the capacity of 387.500 cu.m.

The max. discharging rate allowed is 13,000 cu.m/hr.= 81,600 bbls/hr. with a max. pressure at ship's rail of 150 p.s.i.=10.6 kg/sq. cm.

Raising, connecting, disconnecting and lowering of the hoses will be performed by shore personnel (7 men), who will remain on board throughout discharging operations, using a special motor-boat chartered by Sarpom.

The boat is fitted with anti-oil-pollution equipment. Vessel's crew are required to assist shore personnel handling the boom winch and to carefully inspect their hose boom equipment before arrival.

It is recommended that vessels send max. flow possible with due regard to safety, in order to expedite turn-around time, as well as to provide ballasting as quickly as possible.

N.B. The Sarpom Terminal maintains a vigorous tanker discharging safety programme. S.M.T.S. is authorised to suspend discharging operations in the event of any of the safety rules not being observed, or if any other danger is believed to exist. Tankers are expected to follow all safety regulations generally accepted and practised in the marine transport industry (IOTTSG Safety Guide).

The S.M.T.S. will advise the Cargo Officer or a responsible officer in due time when the switching of shore tanks, changes in discharging rates, etc. are required by the shore installation operations and for any emergency stop.

BALLAST: Vessels provided with segregated ballast will start ballasting as soon as possible during discharge operations. All vessels that are able to handle cargo and ballast simultaneously will be authorised to do so, after S.M.T.S. is satisfied that no sea pollution or cargo contamination might occur.

All efforts must be made to avoid the vessel remaining in completely light condition. Should a vessel neither be fitted with segregated ballast nor be able to simultaneously handle cargo ballast, S.M.T.S. in agreement with the Master may ask the vessel to stop discharge operations and start ballasting, after having inspected the tanks involved.

Ballast operations after completion of discharge must be reduced to the min. required for safe handling of the vessel out of

berth, which in fair weather conditions can be: propeller submerged and vessel trimmed 10 ft. by the stern. Ballast operation can continue at reduced speed during unmooring.

While the vessel is ballasting the S.M.T.S. in agreement with the Master will start singling-up by letting go all preventer wires and any other additional mooring lines not strictly required for a safe mooring. This, of course, taking in due consideration all weather and current conditions.

WEATHER: The bay, although sheltered from the strongest winds blowing from the fourth quadrant by high mountains coming down close to the coast, is subject to strong wind gusts from this quadrant, and the relative wind direction varies considerably in different parts of the bay at one time due to irregularities of the coastal heights.

The bay is open to southerly winds and seas, and it is from this direction that seas and swells caused by strong wind between S.E. and South may interrupt marine operations. Delays in this area are mainly due to the impossibility of mooring a vessel under certain weather conditions than to withstand elements once she is moored. The berth current is part of the general offshore current stream and is not wind blown or tidal; its predominant direction is toward the South-west and the maximum speed is 0.8–1 knots; generally currents do not exceed 0.5–0.6 knots. The faster currents are likely to occur more frequently during the winter period; occasionally they reverse and set N.W. with a reduced velocity.

Tide is negligible and fog is rare.

In general, weather in the bay is seasonal. From May to October it is very good. The worst period is from October to December when winds and seas from South cause the maximum number of port closures.

From December to May the strongest winds are experienced from third and fourth quadrants but sea is usually smooth.

12 and 24 hour weather forecast data is available on request on a round-the-clock basis at the Terminal Office. In addition the Office is provided with "Murfax" type continuous long-range weather recording data, waverider receiver, and anemometer.

Broadcast weather reports for Mar Ligure, North Tirreno and Corsica are prepared by Navy Dept. of La Spezia and Air Force Weather Bureau. For Mar Ligure, they refer to Capo Mele (West of Vado Bay). Radiotelephone information concerning weather is also given on 2182 kc/sec. (Genova Radio Station). Weather reports transmitted on 1722 kc/sec. at 0135–0735–1935 hrs. GMT.

Weather forecast covering the following 12 hours is transmitted at 0135 hrs. and 1335 hrs. GMT.

VHF-weather information can be received through Genova Radio Station on Channel 25 at same periods as for radiotelephone.

Special Gale Reports:

Wireless After 15/18 min. and 45/48 min. every hour on 500/487 kc/sec.

VHF On Channels 16 and 25 at same times as above.

SIP (Telephone) – Genoa Weather Report, prepared by Air Force Dept. at Genoa Airport, is based on the Genoa Radio information plus local information received by planes or vessels along the coast from Capo Mele to La Spezia. The report is inserted on a tape recorder and it is amended according to latest information received.

This report can be received by telephone by simply dialling 010-5605 at the following times:

from 31/5 to 26/9 at 0600–0900–1200 hrs. (forecast validity up to 2400 hrs. same day)
at 1800–2000–2400 hrs. (forecast validity up to 0600 hrs. following day);

from 27/9 to 30/5 at 0600–0800–1400 hrs. (forecast validity up to 2400 hrs. same day)
at 2000–2400 hrs. (forecast validity up to 0600 hrs. following day).

In case of necessity the Air Force Weather Bureau can be called by 'phone (010-420341 ext. 275) at any time of the day or night, to obtain additional information about developments of the exisiting situation and forecasts.

FRESH WATER: Fresh water is supplied at the berth, with no limitation, through a 3 in. flexible hose (international flange) at rate of about 60 t.p.h.

FUEL: Bunkers are supplied by barge which moors portside alongside the vessel. Bunker requirement must be radioed to local Agent at least 48 hours in advance. For vessels expecting to arrive on Saturday or Sunday, the requirement must be forwarded not later than Thursday afternoon.

CUSTOMS: Present regulations allow each seaman to retain in his possession a max. of 40 cigarettes or the equivalent of tobacco or cigars, and 1 open bottle of spirits. The balance of all smoking items and spirits must be collected, listed and locked, and included in the Stores List.

MEDICAL: Doctors and hospital facilities are available at Savona.

CONSULS: Consulates for most nations maintain offices in Genoa (about 50 km. from Savona).

REPAIRS: Repair shops for minor repairs are available. For electronic equipment repairs, notice should be sent to the local Agent in due time.

SHORE LEAVE: Launches are sailing from Chevron Pier (located about 1 mile North of berth) and keep regular connection with tankers berthed at Sarpom's berth.

During bad weather the service is performed sailing from Porto Vado.

Sufficient personnel must be aboard at all times for letting go lines so that the vessel can clear the berth whenever required.

AGENCY: Sarpom does not perform any vessel agency functions. Owners of vessels calling at Sarpom Terminal must arrange their own ship's Agent.

AUTHORITY: Port Captain.

RAVENNA: 44.25 N. 12.12 E.

DOCUMENTS:

For Maritime Authority:
- Ship Safety Certificates.
- 3 Crew Lists.
- 3 Passenger Lists.

For Customs:
- 1 Crew List.
- 1 Passenger List.
- Cargo Manifest.
- Bills of Lading.
- 1 Provisions List.
- 1 Customs Declaration of each Crew member.

For Maritime Health:
- 1 Crew List.
- 1 Passenger List.
- Derat Certificate or Exemption.
- Maritime Health Declaration.

For Police:
- 1 Crew List.
- 1 Passenger List.

PILOTAGE: Ordered by Agent in advance. Contact by radio telephone: Nos. 430453 and 430204 during office hours. Cables to Piloti del Porto, Marina di Ravenna. Pilot station and both pilot boats equipped with VHF, Channels 16, 9, 6 and 12. Pilot is embarked not less than 1 mile from head of breakwater. Vessel awaiting Pilot may anchor 1.5 miles from breakwater head. This anchorage is not secure in bad weather. Vessel bound for SAROM installation, embark Pilot at least 0.5 mile from the berths. Pilot launches have black hull with white band, white superstructure, 10 or 14 m. in length.

ANCHORAGE: Anchorage prohibited in vicinity of submarine pipelines and cables. Vessels waiting for a berth may anchor at a distance more than 1.5 miles from the outer breakwater head according to their draft and subject to weather conditons.

RESTRICTIONS: Berthing in daylight only. The channel to the inner port is navigable one way only. Traffic signals are displayed to indicate when channel closed to incoming vessels.

MAX. SIZE: *Inner Port*, draft limited from 17 ft. to 17 ft. 6 in. depending on vessel's beam.

San Vitale, max. draft 28 ft. allowed from port entrance to San Vitale Basin.

Sarom (Oil Platform), length not limited, max. draft 36 ft.

Sarom (Oil Berth), length not limited, max. draft 36 ft.

SBM Terminal, length not limited, max. draft 44 ft.

HEALTH: Pratique given by radio, on request to Sanimare Ravenna. Pratique is automatic for vessels coming from ports in Italy, United Kingdom, France, Belgium, Netherlands, Germany and Greece.

RADIO: Messages via Ancona Radio, Venezia Radio, or Trieste Radio. Ravenna VHF Radio Station operates on Channels 16, 25, 26, and 27.

TUGS: Available, join vessel in outer port. Ship's lines are used.

STEVEDORES: To be ordered before 1030 hrs. for afternoon work, and before 1630 hrs. for following morning.

MEDICAL: All facilities available.

TANKERS: No slop discharge facilities available. Dirty ballast may not be discharged within 50 miles of the port.

S.B.M. TERMINAL:

No. 3 Terminal (Ocean Berth) lies in position Lat. 44° 29′ N., Long. 12° 25′ E. It can accommodate vessels of any length but there is a max. draft of 44 ft.

Discharging by 10-in. flexible hoses connected to ship's port manifold.

Vessel lies stern to buoy heading Northward, using both anchors. These are backed up with a shore wire on each bow. At the stern shore wires are used and there are two breast lines on either side.

If the vessel has to anchor, this should be to the North of the buoy and not less than 3.5 miles from the coast. This gives good holding in mud and clay if plenty of cable is used, as there is occasionally a 2.5 to 3.0 knot Southerly current. Vessels should not anchor South of the buoy due to the presence of telegraphic cables and pipelines.

DENSITY: 1024.

FRESH WATER: Only available ex-wharf at San Vitale and at inner port piers. Barge available for deliveries to the Silos Piers and tanker terminals.

FUEL: Available by barge.

FIRE PRECAUTIONS: Tankers are given copy of port fire regulations on arrival. No repairs or gasfreeing to be carried out without permission of Port Authorities.

DEVELOPMENTS: The buoy berth about 9.5 miles East of Ravenna in a depth of 75 ft. is expected to be operational during 1974.

GANGWAY/DECK WATCHMEN: Optional, can be employed from shore if required.

OPENING/CLOSING HATCHES: Can be performed by ship's crew or by stevedores.

CUSTOMS ALLOWANCES: 50 cigarettes per man for first day in port. Wine/spirits, allowance is made for normal daily consumption on board.

IDENTIFICATION CARDS: Shore passes given by police.

CONSULS:

Norway	tel. 24.5.47
Sweden	tel. 22.6.39
Spain	tel. 24.0.14

REPAIRS: Minor engine repairs can be effected. Floating dry-dock available for up to 1,000 tons displacement.
REPATRIATION: Can be arranged.
AIRPORT: Forli Airport situated 25 km. away, with daily flights to Rome and Milan.
TIME: GMT plus 1 hour. From May to September, GMT plus 2 hours.
POLICE/FIRE/AMBULANCE: Police, tel. 22.4.66; Ambulance, 22.3.11; Fire, 22.2.22.
TELEPHONES: Cannot be installed on board.
SHORE LEAVE: Allowed. Launch service available for vessels in the roads.
AUTHORITY: Capitaneria di Porto Ravenna.
AGENT: Gastaldi and Co., S.p.A., c/o Marittima Ravennate, 23 Via Carducci, P.O. Box 391, Cables "Dick Ravenna". Tel. 23505. Telex 55183.

SALERNO: 40.40 N. 14.45 E.

DOCUMENTS: As for all Italian ports, i.e. all ship's documents in valid condition and Arrival Reports, to be filled upon arrival with the Port Authority's representative.
PILOTAGE: Master may communicate with Pilot in the normal way. Either by hoisting "G" flag, or by calling him on "ALDIS" if night time.
ANCHORAGE: Position of anchorage, about 1.8 miles S.W. of the intermittent red light. Depth of water 12 m.
RESTRICTIONS: Vessel cannot enter or sail from the harbour between 2100 and 0500 hrs.
MAX. SIZE: Vessel allowed to enter port should not exceed 150 m. in length or 23 ft. draft.
HEALTH: Free pratique not obtainable by radio. Usual formalities on berthing.
RADIO: All cables should be sent via "Napoli Radio" call sign "IQH".
No VHF Station exists.
TUGS: Lines must be supplied by the ship. Tugs position is near the intermittent light (red).
BERTHING: Five berths with depths from 19 ft. to 23 ft.
STEVEDORES: Stevedores are to be informed 24 hours prior to vessel's arrival.
MEDICAL: Medical Service should be requested in advance. Hospital facilities are obtainable.
DENSITY: Average salinity is 1025 inside port.
FRESH WATER: Fresh water available at all berths.
FUEL: Bunkers may be supplied from Naples by truck or barge. If large quantities are requested supply will be effected by barge from Naples.
DEVELOPMENTS: Presently some works are in progress in order to obtain a further berth with deeper draft.
CUSTOMS ALLOWANCES: Only 40 cigarettes on vessel's arrival. This applies to officers and crew. The remaining stock will be sealed in vessel's bonded store.
CONSULS: No consular representatives exist in Salerno. Nearest at Naples.
REPAIRS/DRY DOCKS: No dry dock exists. Only small workshops attending minor repairs.
AIRPORT: The nearest airport is at Naples. Distance 70 km.
TIME: One hour ahead of GMT.
HOLIDAYS: Other than the national festivities, 21st September, a local holiday, being the Name Day of the town's Patron Saint.
TELEPHONES: Emergency phone number is: 113.

SAVONA (including Vado Ligure): 44.18 N. 08.29 E.

DOCUMENTS:
Arrival Report for Port Authority.
Cargo Manifest.
Provisions and Crew Personal Effects Manifest.
8 Crew Lists.
Safety Certificates.
PILOTAGE: Ordered through Agent. Telegraphic address: Piloti Porto di Savona. Pilot launch is black with white band. To call Pilot, use flag or light signals according to International Code. For vessels bound for Savona or Vado Ligure, Pilot boards about 0.5 to 1 mile S.E. of the red light at Savona port entrance.
ANCHORAGE: Depths of 25 m. Important limit: it is forbidden to anchor North of bearing 270° from red light between 1st October and 14th May. It is forbidden to anchor East of bearing 360° from the white light between 15th May and 30th September.
RESTRICTIONS: Night entrance is considered for each case depending on type of mooring and vessel's draft. At Savona berths, vessels on maximum draft berth in daylight at high tide. No restrictions on un-berthing.
MAX. SIZE: Savona inner port, max. draft 9 m.; Savona Silos, max. draft 10.50 m.; Vado Ligure Roads, depending on berth depth.
HEALTH: Request free pratique by radio from Sanimare Savona prior arrival.
RADIO: Genova Radio or Roma Radio, VHF at Harbour Master's Office (Tel. 386656).
TUGS: Available, join vessel in vicinity of Savona port entrance or at Vado Ligure just off the berth. Ship's line usually used. If tug line used, tariff plus 20% is charged.
BERTHING:
Savona: Funivie (S. Giuseppe), 32 ft. depth; Savona Silos S.p.A., 30 ft. depth.
Vado Ligure: Fornicoke Pier, 38 ft. depth; Esso berth, 32 ft. depth; Vadoil berth, 39 ft. depth; Shell berth, 31 ft. depth; Chevron berth, 31 ft. depth. Sarpom buoy berths, see "Quiliano Terminal".
BULK HANDLING FACILITIES: Grain: discharged at berth No. 17, rate 500 t.p.h.
Coal: discharged at Funivie, discharging rates ranging between 7,500 and 16,000 tons per day, depending on suitability of vessel for discharging facilities.
TANKERS: Sarpom Sea-Line Terminal, see "Quiliano Terminal".
At Chevron, Shell and Vadoil berths, tankers are moored stern to quay.
No slop discharge facilities available.
STEVEDORES: Ordered by ship's Agent, no separate ETA required.
MEDICAL: All facilities available.
DENSITY: 1025.
FRESH WATER: Obtainable at berths by pipe-line. Barge available for quantities in excess of 60 tons.
FUEL: All grades available by barge.
FIRE PRECAUTIONS: Watchmen on board tankers or vessels handling dangerous cargo.
OPENING/CLOSING HATCHES: Can be handled by ship's crew or stevedores.
CUSTOMS ALLOWANCES: Bond Sealed. Small quantity cigarettes and spirits permitted for consumption while in port.
IDENTIFICATION CARDS: Shore passes given by local police.
CONSULS:

Finland	Norway
France	Spain
Netherlands	Sweden

REPAIRS: All types of repairs possible.
HOLIDAYS: 1st January; 6th January; 19th March; 25th April; Easter Monday; 1st May; 7th May; 28th May; 2nd June; 29th June; 15th August; 1st November; 4th November; 8th December; 25th December and 26th December.
POLICE/FIRE/AMBULANCE: Police, Tel. 28868; Ambulance, 20104; Fire, 801801–802441.
TELEPHONES: Can be connected on board.
SHORE LEAVE: Allowed.
AUTHORITY: Capitaneria di Porto.

TARANTO: 40.29 N. 17.15 E.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Anchorage Dues.
Vaccination Certificates for sighting.
PILOTAGE: Piloting in Port of Taranto is compulsory to all vessels over 500 g.r.t. Vessels are taken 1 mile off S. Vito Cape Lighthouse. Also for shifting from berth to berth Pilot assistance is compulsory.
RESTRICTIONS: Entry allowed day and night.
MAX. SIZE: Tankers up to 72 ft. draft may berth at buoy mooring.
Bulk carriers up to 50 ft. draft may berth at Italsider Pier.
HEALTH: Free pratique is automatic for vessels coming from Italy, France, Great Britain, Ireland, Germany, Belgium, Holland and Greece. From other countries it may be obtained via radio, by applying to "Sanimare Taranto" between 12 and 6 hours before arrival.
Smallpox vaccinations available. Yellow fever vaccinations could be arranged by calling Bari port doctor to Taranto with two days notice.
TUGS: Towage service is not compulsory and is supplied by one tug of 1,350 h.p., 2 tugs of 1,000 h.p., and one of 1,035 h.p. belonging to Rimorchiatori Napoletani. It is expected that the service will be improved in the future with a further tug of 1,920 h.p.
BERTHING: *Outer Harbour:* Quays No. 1/2, combined length, 1,050 ft. (32 m.); max. draft, 26 ft. 3 in. (8 m.); Quay No. 3, length, 820 ft. (250 m.); max. 27 ft. 10 in. (8.50 m.).
Italsider Pier: *Eastern side* (for discharge of ore, coal, steel scrap): length, 4,456 ft. (444 m.); depth alongside 52 ft. 6 in.; max. draft allowed 50 ft.
Western side (for discharge and loading of finished goods): length, 1,566 ft. (477 m.); depth alongside 33 ft.
Safety. During Winter time, berths are subjected to heavy swell which may force vessels to leave same, as the breakwater effectively protects only the Eastern side. However, work is now in progress to lay new breakwater, which should also render safe the Western side.
Head of the Pier: Width, 448 ft. (136.55 m.); max. length of vessel, 459 ft. (140 m.) or up to 525 ft. (160 m.), subject to vessels laying at Western and Eastern sides being berthed at not less than 164 ft. (50 m.) from head of pier; depth alongside, 32 ft. 8 in. (10 m.).
Cement Pier: Max. depth is 8.50 m.; suggested max. draft 8.20 m. (26 ft, 10 in.); max. vessel length acceptable, 120 m.; rate of loading (in bulk): up to 280 m./t.p.h.; (in bag): up to 35 m./t.p.h.
TANKERS: *Aviation Gasoline Oil Jetty.* Tankers moor with two anchors and with stern made fast to four buoys. Connection by

stern. Vessel lifting up hoses (9 in.) from the jetty (breadth 9 ft., length 1,476 ft.). Length of pipe-line from 0.5 to 1.5 miles.

Access to vessel by boat. No water or bunkers available. Max. draft 25 ft. Night crossing of Mar Piccolo up to and from jetty is not allowed.

Navy Oil Jetty: Pier, terminating in two quays, which may accommodate two vessels each. Max. draft 33 ft., hoses 300 mm. Night movements allowed.

Petroleum Pier: Exclusively used for handling petroleum products at its four berths and is connected by several pipe-lines with Shell Italiana Refinery, as well as with the bulk plants belonging to Agip, and Industrie Chimiche De Gaeta, which are all located in the industrial area of Taranto adjoining to the petroleum port. Access to the pier is through a dock 350 m. long and 33 m. wide. The pier itself is 560 m. long.

Berth No. 1 and 2 (aft berths), max. length of vessel, 175 m. (557 ft. 3 in.); max. draft, 9.50 m. (31 ft. 2 in.). Max. depth, 10 m. (32 ft. 9 in.). Bunkers from line, (8 in. hose, 10 in. pipe-line). Water, by barge. Loading arms, 2 of 10 in., 3 of 8 in.

Berth No. 3 and 4 (fore berths), max. length of vessel, 208 m. (682 ft. 5 in.); max. draft, 10.50 m. (34 ft. 5 in.); max. depth, 11.00 m. (36 ft. 1 in.). Bunkers and water, as per berths 1 and 2. Loading arms, 6 of 10 in.

Pier is fitted with one line for each product to be loaded (14 lines) and a 20 ft. line for ballast discharge. Any quantity of ballast may be received by the pier. Access to the pier for provisions only via boats.

Shell CBM. Shell terminal for discharge of crude oil is situated in Mar Grande North-east of St. Paul's Island. Distance 3,000 m., and bearing 048° from light at the head of St. Paul Breakwater. Vessels moor at five buoys with port anchor down. Buoys are equipped with intermittent red lights and quick-release hooks.

The hoses (two of 12-in.) are signalled by marker floats and have to be lifted by vessel with derrick capacity at least 8 tons. The terminal is connected with the refinery by a 34-in. pipe-line, 5 km long. Max. length acceptable 330 m., max. draft 72 ft., max. d.w.t. 200,000 tons.

Two tugs recommended for berthing with good weather and without North-westerly winds. Night mooring and unmooring allowed.

Agip/Anic Terminal: Vessels moor with two anchors and with stern made fast to four mooring buoys.

Maximum draft 26 ft. 3 in. (8 m.). Under rough weather conditions vessels may have to leave the terminal, position being exposed. No mooring at night allowed, while unmooring is permitted. Supplies, bunkers, water, and connections with vessel by barge.

For methanol, tank inspection is usually carried out in the road, before berthing.

Pozzi Ferrandina SPA Terminal: Three sea lines, the hoses of which must be lifted from the sea bottom by ship's gears. One sea line (6 in.) is used to load methanol and one (6 in.) to load soda. Third (3 in.) sea line is for water. Port side hose connection. Pipe-line length 0.25 mile.

Vessels moor with starboard anchor and made fast to three buoys astern and one port. Night movements are not allowed. Max. draft 22 ft. Max. length 85 m.

Industrie Chimiche Di Gaeta, G.I.D. Terminal: Situated further West of Pozzi Terminal, it has three sea lines with hoses of 6 in. and 10 in., which have to be lifted from sea bottom.

Vessels moor with port anchor and make fast to three buoys astern and one buoy forward starboard. Max. draft 22 ft. Night movements not allowed.

BRIDGES: One bridge in inner harbour. Opening times: 0020–0420 hrs., 0830, 1510, 2110 hrs. Opening on Agent's request to Harbour Master (24 hours notice requested for day opening time). Max. speed in the canal, 6 knots.

STEVEDORES: Available. Normal working hours are from 0700 to 1500 hrs. For work performed in overtime/and/or holiday, the "Tariffs to the Workers" are increased as follows:

Day	*Shift*	*Increase*
Weekday	1500–2300 hrs.	40%
	2300–0700 hrs.	80%
Saturday	1100–1500 hrs.	40%
	1500–2300 hrs.	40%
	2300–0700 hrs.	80%
Sunday	0700–1500 hrs.	50%
	1500–2300 hrs.	80%
	2300–0700 hrs.	100%

DENSITY: 1029 and 1031. Tides negligible. Maximum variation 1 ft.

FRESH WATER: Available at all quays from 0700 to 1700 hrs. Also available by barge of up to 190 tons capacity.

FUEL: Available by barges from Agip; Shell and Sincat. 48 hours notice requested, aside from usual stemming.

Lubricating Oil. Available from Shell, Mobil and Esso.

FIRE PRECUATIONS: Performed by fire brigade and compulsory to all tankers undergoing repairs/dry docking. It is requested and paid for by the shipyard, which afterwards charge same directly to the Owners.

GANGWAY/DECK WATCHMEN: Available. Hourly cost, lire 450 per watchman used (lire 500 on Sunday and holiday).

OPENING/CLOSING HATCHES: Usually carried out by crew, but stevedores also carry out this operation at 1,202 lire per hatch.

CUSTOMS ALLOWANCES: 40 cigarettes and one opened bottle wine/spirits per man.

IDENTIFICATION CARDS: Required. Shore passes issued by local police.

CONSULS: Spain, France, Panama and Norway.

REPAIRS: All major repairs undertaken.

DRY DOCKS: Two floating docks owned by Stabilimenti Navali with dimensions as follows:

	Dock No. 1	*Dock No. 2*
Length at support level	699 ft. 8 in.	808 ft. 4 in.
Length overall	765 ft. 4 in.	869 ft. 4 in.
Breadth at support level	121 ft. 3 in.	137 ft. 1 in.
Depth	29 ft. 8 in.	27 ft. 9 in.
Lifting capacities	28,000 tons	40,000 tons

Max. draft acceptable in channel leading to the shipyard is 33 ft.

REPATRIATION: Good facilities exist.

AIRPORT: Located at Grottaglio, 20 minutes by car from the city. It is served by four daily connections with Rome, and one to Naples.

TIME: GMT plus 1 hr. Winter. GMT plus 2 hrs. Summer.

HOLIDAYS: New Year's Day (1st January); Epiphany Day (6th January); Saint Joseph's Day (19th March); Liberation Anniversary (25th April); Easter Monday; Ascension Day (19th May); Corpus Domini Day (9th June); Labour Day (1st May); Republic Foundation's Day (2nd June); Saint Peter and Paul's Day (29th June); Assumption Day (15th August); All Saints' Day (1st November; National Unity Day (4th November); Immaculate Conception Day (8th December); Christmas Day (25th December); Saint Stephen's Day (26th December); Town Saint Patron's Day 10th May, at Taranto).

SERVICES: Compass adjusting, etc. available.

SHORE LEAVE: Allowed.

AUTHORITY: Il Comandante Colonello di Porto. Ministero della Marina Mercantile.

TORRE ANNUNZIATA: 40.45 N. 14.27 E.

DOCUMENTS and all General Information – refer to "Naples".

RESTRICTIONS: Mainly a fishing port with few facilities for larger vessels. Reported not to be suitable for larger vessels during winter months due to frequent high winds and heavy swell within the harbour.

MAX. SIZE: Length 472 ft., draft 30 ft.

TRIESTE: 45.39 N. 13.45 E. (See Plan)

PORT LIMITS: From Barcola (4 km. East of Capo Miramare) to Zaule, in the Muggia Bay. The roadstead is 18/24 m. deep. If readiness is declared before 1200 hrs. laytime commences at 1300 hrs. If readiness is declared between 1200 hrs. and 1700 hrs. laytime commences at 0800 hrs. the following day. The declaration of "readiness" is made when the ship docks at the operative pier or when the ship anchors in the roadstead.

DOCUMENTS:

For Customs:
- 2 Cargo Manifests.
- 1 Stores List.
- 1 Provisions List.

For Port Authorities:
- Arrival Report.
- 2 Crew Lists.
- 3 Passenger Lists.

For police:
- 1 Crew List.
- 1 Passenger List.
- Shore Passes, provided by Agents.

For Port Health:
- Maritime Declaration of Health.

PILOTAGE: Compulsory for vessels over 499 g.r.t. Location of Pilot station for large tankers is in approximate position 45° 37′ N., 13° 43′ E.

For smaller vessels Pilot boards in approximate position 45° 39′ N., 13° 44′ E.

ANCHORAGE: No Pilot required to anchor in roads. Normal anchorage for vessels awaiting entry is to the West of Luigi Rizzo Breakwater where the holding ground has been reported to be poor.

MAX. SIZE: Tankers up to 1,000 ft. LOA, draft 54 ft. 3 in. and 160,000 S.D.W.T. at Siot Terminal berths No's 3 and 4.

HEALTH: Free pratique is granted by the local Health Officers who board the vessels on arrival together with Port Authorities. The pratique can also be requested by cable, addressed to "Sanimare – Trieste" and stating the port of origin, the number of crew and general health condition on board.

RADIO: Trieste radio call sign IQX, operating continuously. Radio Telephony and/or telegraphy can be used. RTF Channels 8, 12, 16, and 500. ETA to be sent 48 hours in advance to Agent. Any change of ETA of more than 1 hour should be reported.

TUGS: 10 tugs available up to 3,000 h.p. Tugs normally join vessel at pilot boarding station. Ship's lines used. Tug assistance is compulsory for tankers. Tugs equipped with VHF and foam fire fighting equipment.

BERTHING: Max. draft allowed at berths as follows:

Punta Franco, Vecchio, ore pier, 28 ft.; Other berths, 21 ft. Punto Franco, Nuovo, ore pier, 30 ft. silos, 31 ft. 5 in.; general cargo, 31 ft.

Punto Franco, Scalo Legnami, 24 ft. Molo Martello, 30 ft., max. length of ship, 171 m. Italsider, berths, 45 ft.

Siot Terminal, 54 ft 3 in. Pontile Aquila, oil pier, 38 ft. Italcementi, berths, 30 ft. Vetrobel, berth, 30 ft. A.F.A., berth, 21 ft.

Mole No. 7 (Container Terminal)-, max. draft 52 ft.

SPECIALISED CARGO HANDLING FACILITIES: Wheat storage-bin for cereals and oil-seeds, capacity 30,000 tons, with 4 pneumatic unloaders. Auxiliary set, capacity 16,000 tons, with 3 pneumatic dockers.

Coals and minerals plant, Molo VI North, with 7 cranes and 2 bridge cranes.

Coals and minerals plant Italsider pier with two 25-ton unloaders.

Unloading, loading, alcohol and other liquid stowage plant, capacity 5,340 cu.m.

Maturity, conservation and disinfestation fruits and vegetables plant.

Refrigerant, capacity 3,700 tons.

Container Terminal: Quay length 650 m., total area 20 ha. 3 rail-mounted 42-ton gantry cranes (portainer) and other modern and special installations for unloading/loading, moving and parking containers.

Roll-on/Roll-off: 2 ramps.

STEVEDORES: The working hours for the harbour operations are: 1st turn from 0730 to 1400 hrs. 2nd turn from 1400 to 2030 hrs. On Sundays and holidays the 2nd turn is limited to ferry boats, container ships, unloading/loading of live animals, and to perishable goods operations. Customers can take advantage of a possible 3rd turn in the labour days, Monday to Friday, from 2100 to 0330 hrs.

Night work, Sundays and holiday work, the 2nd turn of Saturday and the continuation of the turn is considered as overtime work.

MEDICAL: All facilities available. Preferable order in advance if required on holidays.

TANKERS: No slop discharge facilities; no repairs allowed to tankers at loading/discharge berths; no trucks or lorries allowed at Aquila Oil Pier which can only be approached by motor boats.

Transalpine Pipe-line Terminal (Siot). The piers are orientated 067.5°–247.5° in direction of prevailing winds. Currents do not affect the berths sensibly.

Berths No. 1 & 2 (No. 1 Finger pier 1420 ft. LOA). Max. LOA 950 ft. Max. draft 54 ft. 3 in. Max. d.w.t. 100,000.

Berths No. 3 and 4 (No. 2 Finger pier, 1,475 ft. LOA). Max. LOA 1,000 ft. Max. draft 54 ft. 3 in. Max. d.w.t. 160,000.

Discharge of crude or products is via 3×16 in. unloading arms at berths No. 1, 2 and 3 and via 4×16 in. arms at berth No. 4. The shoreline is 36 in. at foot of pier enlarging to 42 in.

Discharge rates of 14,000 cbm/hr. are possible. Max. permitted pressure 150 p.s.i.

Fuel oil and marine diesel bunkers are available at all berths through 10 in. loading arms on each side of the discharging rack.

Fresh water available all berths and should be ordered through the Agent.

DENSITY: 1025.

FRESH WATER: Available by pipe-line at all berths. No barges available.

FUEL: All grades available, loading rate about 250 t.p.h. 48 hours notice required.

DEVELOPMENTS: New dry dock 350 m. length under construction.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Optional, but stevedores usually perform this operation for convenience.

CUSTOMS ALLOWANCES: 50 cigarettes for each man and one bottle wine/spirits between 5 men. Only one allowance given while vessel in port.

IDENTIFICATION CARDS: Shore passes are issued by local police.

CONSULS:

Austria	tel. 90891	Holland	tel. 61690
Belgium	tel. 37073	Honduras	tel. 95225
Brazil	tel. 35317	Lebanon	tel. 37370
Chile	tel. 28960	Sweden	tel. 29182
El Salvador	tel. 36556	Turkey	tel. 24393
Germany	tel. 37141	Uruguay	tel. 31664
Great Britain	tel. 35760	U.S.A.	tel. 30221
Greece	tel. 28278	Yugoslavia	tel. 24969
Guatemala	tel. 29551		

REPAIRS: All kinds of hull, deck and engine repairs can be carried out by Arsenale San Marco, Cantieri Alto Adriatico and other yards.

DRY DOCKS: 4 dry docks available, the largest of which is 206.96 m. long; 30.0 m. wide, 27.60 m. depth and 8.25 m. sill depth.

REPATRIATION: No facilities.

AIRPORTS: 30 miles distant. Two flights daily to Venice/Milan and Rome for international connections.

TIME: GMT plus 1 hour. Summertime: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Good Friday, Easter Monday, Ascension Day, Corpus Domini (variable dates); Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B.V. Maria (15th August); All Saints' Day (1st November); St. Giusto (3rd November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December); Cargo work can be arranged on the above days.

POLICE/FIRE/AMBULANCE: Police, tel. 113; Fire, 2222; Ambulance, 68888.

TELEPHONES: Can be installed on board.

SHORE LEAVE: Allowed.

AUTHORITY: Ente Autonomo del Porto di Trieste.

VENICE: 45.26 N. 12.20 E.

DOCUMENTS: Minimum number of ship's papers required upon arrival:

By Port Health
2 copies Passenger List.
2 copies Crew List.

By Police
2 copies Passenger List.
2 copies Crew List.

By Ship's Agents
2 copies Passenger List
2 copies Crew List.
2 copies Cargo Manifest.

By Customs
2 copies Cargo Manifest.
2 copies Provisions and Stores List.

PILOTAGE: Pilot boards 2 miles from breakwater. Master can contact Pilot by VHF.

ANCHORAGE: Anchorage for large tankers will depend upon Master's discretion. However there is a good anchorage in position 45.23.30 N. 12.34.00 E.

RESTRICTIONS: Advisable to enter during daytime and with favourable tide. Vessel up to 29 to 30 ft. draft can enter at high water. Vessel of this size can berth alongside with use of a pontoon. Tankers; normally restricted to 31 ft. draft. Also see "Tankers".

HEALTH: Health Officer boards as soon as vessel is berthed. Pratique can be obtained by radio prior arrival. Radio request to Sanimare Venice through Trieste Radio.

TUGS: Tugs are available in plenty and will join vessel at breakwater and/or off Lido when proceeding to S. Nicolo. Ship's lines have to be used.

BERTHING: Banchina Piave have a total quayage of 2,760 ft. long with a depth of water varying from 25 to 26 ft. at low water.

Banchina Tagliamento have a total quayage of 2,500 ft. long with a depth of water varying from 26 to 29 ft. at low water.

Testata Marmi have a total quayage of 720 ft. long and 26 ft. depth of water.

Banchina Palazzo have a total quayage of 525 ft. long and a depth of water of 26 ft.

Banchina Isonzo have a total quayage of 2,360 ft. long with depth varying from 24 to 30 ft. at low water.

Testata Silos have a total quayage of 330 ft. long with a depth of water 21 ft. at low water.

Banchina S. Marte e Magazzini Generali Punto Franco (Free Port) have a total quayage of 2,950 ft. long with a depth of water varying from 21 to 23 ft. at low water.

Porto Marghera:

Leghe Leggere with a depth of water 27 ft. at low water.

Radice Molo "A" with a depth of water 27 ft. at low water.

Banchina Veneto with a depth of water varying from 22 to 25 ft. at low water.

Banchina Lombardia with a depth of water 28 ft. at low water.

Banchina Piemonte with a depth of 30 ft. at low water.

BULK HANDLING FACILITIES: Bauxite discharging at Montecatini and Molo Commerciale in Porto Marghera.

Discharge by crane grabs at rate of 2,000 tons per day at Montecatini, and 1,500 tons per day at Molo Commerciale. Vessels up to 28 ft. draft can be accommodated.

STEVEDORES: The Provveditorato al Porto Venice are exclusively entitled to manage all the commercial work in the harbour including stevedores. Vessel should en route ETA cable to Agent at least 48 hours prior vessels arrival to arrange gangs.

MEDICAL: Hospital facilities always available. No notice required in advance.

TANKERS: Tank washings cannot be disposed of inside port. Diameter of loading discharge lines 8 to 12 in.

One berth for tankers at San Leonardo can accommodate vessels up to 85,000 d.w.t. Max. draft is 43 ft. 3 in. Good discharging and no back-pressure. Speedboats up to Venice take about 40 minutes.

Discharging berths for tankers at Porto Marghera:

Darsena IROM, length 570 m., depth 30 ft. Tankers over 31 ft, draft require special approval.

Esso Pier: depth alongside 30 ft.

Shell Pier: depth alongside 30 ft.

Agip Pier: depth alongside 23 ft.

Port entrance of Malamocco, at point of the island of Lido, has been reopened where a canal 12 m. deep leads to Port of Marghera. This canal allows large tankers to proceed to coastal storage tanks without passing through urban centre of Venice.

DENSITY: Average salinity of water inside port 1020.

FRESH WATER: Plenty available.

FUEL: All grades available and delivered by barge.

CUSTOMS ALLOWANCES: The Customs require from the ship a complete list in duplicate of Provisions and Stores. It is particularly important that the quantities of items such as tobacco, cigarettes, spirits, coffee, matches, pepper, salt, spices, cars, chocolate, should be given accurately. Customs Officers will supervise the issue while ship is in port. Amount of tobacco allowed out of Bond: 50 cigarettes per man for all foreign vessels except British and U.S.A. flags. 20 cigarettes per day per man on British and American flag vessels.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CONSULS: Following are Consulates maintaining their offices at Venice.

Argentine	Germany	Panama
Austria	Greece	Peru
Belgium	Guatemala	Portugal
Denmark	Lebanon	Spain
Finland	Liberia	Sweden
France	Norway	Switzerland
Great Britain	Holland	Uruguay

REPAIRS/DRY DOCKS: There are ample facilities for repairs. Following are particulars of Venice dry docks:

Minore	*Maggiore*	*Principe*	
298.8 ft.	526.3 ft.	820.3 ft.	extreme length
58.4 ft.	79.8 ft.	117.8 ft.	breadth of entrance
1.0 ft.	1.0 ft.	3.1 ft.	height of sill above bottom dock
19.7 ft.	29.6 ft.	36.0 ft.	depth on sill at high water.

AIRPORT: International Airport Marco Polo about 10 km. from Porto Marghera. Served by regular airlines.

TIME: GMT plus 1 hour. Summer Time from June to September.

HOLIDAYS: The public and port holidays are the following: 1st January; 6th January; 19th March; 25th April; Monday after Easter Day; 1st May; Ascension Day; Corpus Christi Day; 2nd June; 29th June; 15th August; 1st November; 4th November; 21st November; 8th December; 25th December; 26th December.

TELEPHONES: Telephones will be placed aboard the ship.

AUTHORITY: Il Comandante di Porto.

AGENT: Bassani S.p.A., Venice – Via 22 Marzo, 2414, PO Box 484. Tel. 20340 – 22771. Telex 41066. (Subagents of Gastaldi & Co) Cables: "Dick Venice".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Ivory Coast

ABIDJAN: 05.18 N. 04.00 E.

DOCUMENTS: "All ships calling at Abidjan to discharge cargo will have to supply on arrival altogether 13 sets of cargo manifests and 4 sets of freighted manifests for each port of loading, as the administration no longer accepts reproductions of documents supplied by the agents. Furthermore, Masters are reminded to hand to agents on arrival, 6 crew lists, 4 stores lists, 4 bonded stores lists, 4 crew declarations, 6 passenger lists (even if nil), 5 animal lists (even if nil), 5 narcotics lists, (even if nil), 5 lists of ports of call and 1 vaccination list. Furthermore, the attention of Masters is drawn to the fact that the Customs Services are strictly enforcing the control regulations on incoming vessels and very heavy fines are imposed in cases of omission or mistakes in declarations of slop chests, stores lists etc".

PILOTAGE: About 1 hour before arrival ships equipped with VHF shall confirm to the Pilot station their correct hour of arrival off the roads; then the boarding time for Pilot shall be communicated. It is essential that these times are clearly understood both by ship and Pilot station.

Ships shall stay in a position so they keep across the swell and the wind which both generally come from the South and they shall put the pilot ladder at the lee, i.e. Port if steering Eastward, Starboard if steering Westward.

Pilotage is compulsory, except for shifting alongside quays. For ships leaving harbour or shifting within harbour limits, request for a Pilot should be made at the Harbour Master's Office at least 3 hours before sailing or shifting. For a night sailing or shifting, request must be made before 1700 hrs.

Warning: when embarking Pilot, keep well clear of sandbank extending from entrance to Vridi Canal.

RESTRICTIONS: Ships may leave or enter Abidjan only between certain time limits. These limits are transmitted by Abidjan-Radio: on 500 kc/s on request; on short wave, at the beginning of each watch period.

MAX. SIZE: Max. draft 32 ft., max. length 200 m.

HEALTH: Request for free pratique is given by the Agent to port Health Authority, who will board vessel on arrival.

RADIO: Captains should radio their ETA and draft to "Comport Abidjan". When at anchorage off Vridi canal, they should watch for signals from Vridi signal station, which keeps continuous watch, and advise them regarding the time the Pilot will board their ship. Port Captain's office and Vridi signal station keep a permanent watch on 156.6 Mc/s and 156.8 Mc/s. Agents may be obtained through Abidjan-Radio on 2182 kHz. Abidjan-Radio answers on 1813 kHz.

VHF: 16 and 12 Channels are used: 16 for security and 12 for general traffic. It is strongly advised to use Channel 12. This channel is strictly reserved for the harbour traffic and ships wishing to talk to each other should do so on a ship to ship Channel (6 or 8).

PORT RADAR: Is installed in the Harbour Master's office. Vessels can contact port radar by VHF calling Comport Abidjan on Channels 16, 12 and 11, or through Abidjan Radio, which keeps watch on Channel 16.

TUGS: Tugs join vessel at the port entrance. Towing lines are provided by the tug.

BERTHING: At the Tanker berth in the Vridi channel, berthing is effected at slack water and unberthing is effected at the end of flood tide. Mooring at the sea line buoys at Port Bouet is only made at certain stages of the tide determined by the Pilot.

SPECIALISED CARGO HANDLING FACILITIES:

Cranes: Two sheer-legs for unloading heavy lifts, capacity 150 and 25 tonnes.

2 gantry cranes for timber handling, capacity 10 and 20 tonnes.

Grain: Priority berthing at No. 1 berth where silos and handling equipment available.

Containers: Discharged by vessel's derricks and removed by trailers. Proper container handling berths available in near future with container park of 30,000 sq. m.

Bananas: 1 specialised berth with accommodation for two vessels, max. draft 7 m.

Ore: 1 berth available, max. draft. 10m.

Timber: 2 berths. One with length of 300 m. and max. draft 2.50 m. and the other length 380 m. and max. draft. of 0.70 m. Timber is lowered into the water by gantry cranes and floated out to vessels.

TANKERS: 1 Private berth in the Vridi Channel, max. draft 30 ft. *Shipmaster's Report: The Sea Line Berth at Port Bouet near Abidjan.*

(a) Introduction: Vessel ordered to part discharge 21,000 tons of crude. With a max. draft of 48 ft. 6 in., this was the largest vessel to use these facilities; the previous largest being about 60,000 d.w.t. (1973).

(b) Approach from sea: Coast line is low with few distinguishing marks. Outline picked up at about 18 miles range (using Marconi Raymark), at about the same time as 100 fathom line was crossed. Coast is very steep-to with a pronounced rift in sea bed leading to canal entrance in Abidjan.

(c) Anchorage: Vessel anchored about 2 miles from sea line terminal at Port Bouet. The usual anchorage is to West of canal, which would permit a more suitable approach to the berth.

(d) Berth: The sea berth is situated about 1 mile S.S.E. of Port Bouet light. According to chart prepared by terminal authorities Societe Ivoirienne de Raffinage (SIR), the depths of water in the berth are 16 m. aft and 19 m. for'd, at chart datum. Members of the diving team and terminal representatives are of the opinion that there is greater than 1m. more water than indicated; this is backed up by observed soundings of for'd depth of 21 m., with a rise of tide of 0.5 m.

Moorings consist of four 6 in. shore wires from buoys aft; 4 similar wires for'd, 2 from buoys, 2 from the sea bed; both anchors are used with about 8 or 9 shackles of cable on each.

Hoses are made fast on port side, 2×12 in. leading to a 1×24 in. × 5 km. sea line. Back pressure is limited to 7 kg./sq. cm. (about 100 lb. sq. in.). Berth is aligned to head into the prevailing Southwesterly wind. Unfortunately this places the vessel beam on to the current which is unpredictable in both magnitude and direction. After 9 years' experience at the berth, the diving team are unable to predict for a particular time if the current will run at all, or in what direction or at what strength. Current velocities of up to 2.5 knots are normal. If the current starts to run at this strength at an early stage of a berthing operation it is probable that the operation will have to be abandoned.

(e) Berthing: Approach to the berth is made on a heading of 145° in line with buoys A and B on SIR chart. During much of the approach the vessel is within 5 cables of the shore, but, with one exception, the depth of water is adequate.

When the vessel was between 1 and 2 ship's lengths from buoy A, in Grid reference position 579.030 393.280 on SIR chart, the under keel clearance was 15 ft., for several minutes. There was a very low, barely discernable, swell running, but the approach to the berth runs with this swell directly abeam, causing the vessel to roll an estimated 5°; the effect of this was to give a min. bilge clearance of 10 ft.

Berthing operation is routine, with some shore labour assisting with wires. No carpenters' stoppers are provided for wires, but two each end can be made fast on to the storage drums of the winches.

(f) Discharging: Limiting back pressure maintained by two cargo pumps running at 1,200 r.p.m. Discharge rate achieved was 2,237 t.p.h., which is usual for this berth.

(g) Bunkering: Bunkers are available in the berth in amounts greater than 500 tons. As bunkers are taken via the same sea line as cargo is discharged, the operation is somewhat clumsy and time consuming: crude in the sea line is displaced by fuel oil; the hose is shifted to bunker connection; bunkers are taken; the hose is re-connected to cargo manifold; the fuel oil in the sea line is displaced by crude oil. This sequence of operations took a total of eight hours. If a total discharge was planned, it might be advisable to take bunkers in the middle of the discharge, in order to obviate the need to use stripping pumps to displace the fuel oil in the sea line, amounting to some 1,200 tons.

STEVEDORES: Gangs must be ordered before 1700 hrs. on the previous day.

MEDICAL: All medical services and hospitalisation can be arranged without difficulty. Crew members are obliged to have valid certificates against smallpox and yellow fever.

DENSITY: Varies from 1025 in January to 1000 in November.

FRESH WATER: Supplied from the quay at the rate of 40 t.p.h. per hydrant. Can be supplied by barge.

FUEL: 1500 secs. fuel available from Abidjan Refinery. Advance notice required.

WATCHMEN: Services of shore watchmen are recommended.

HATCHES: Normally opened and closed by stevedores.

CUSTOMS ALLOWANCES: Each man allowed to retain 200 cigarettes and 1 bottle of alcohol.

IDENTIFICATION CARDS: Should be carried by crew going ashore.

CONSULS: The following countries are represented locally:

Algeria	Germany	Morocco
Belgium	Ghana	Netherlands
Brazil	Great Britain	Nigeria
Colombia	Italy	Norway
Congo	Israel	Sweden
Denmark	Japan	South Vietnam
Ethiopa	Korea	Tunisia
Finland	Lebanon	U.A.R.
France	Liberia	U.S.A.
Gabon	Mauretania	U.S.S.R.

REPAIRS: All types of repairs can be effected. There is a floating dock with lifting capacity 2,000 tons.

REPATRIATION: Can be arranged.

AIRPORT: Local international airport with connections to all parts of the world.

TIME: GMT. No alterations during the year.

HOLIDAYS: 1st May and 7th December no work can be carried out. Other holidays which may be worked at overtime rates are: 1st January, Easter Monday, Whit Monday, Ascension Day, 1st November, Christmas.

POLICE/FIRE/AMBULANCE: Police, tel. 35.57.57; Fire, tel. 238/82; Ambulance, tel. 238/82.

TELEPHONES: Can be connected on board if requested for vessels moored at quays No. 1, 2, 4 and 5.

SHORE LEAVE: Allowed without restriction.

DEVELOPMENTS: Additional berths to be constructed at Vridi Jetty.

A container park of 30,000 sq.m. to be constructed.

The access channel to be deepened and widened to allow vessels of 37 ft. 6 in. draft to enter. Channel width to be 130 m.

AUTHORITY: Direction du Port D'Abidjan, Commandant du Port.

AGENT: Socopao Cote D'Ivoire, B.P. 1297. Tel. 32 02 11. Telex 745, 755, 413. Telex (Maritime): 562. Cables: "Freight Abidjan".

Jamaica

KINGSTON: 17.57 N. 76.47 W.

DOCUMENTS:

For Customs Port Royal

2 Health Certificates (obtainable from Customs Port Royal).
2 Crew Lists.
2 copies Passenger Lists.
2 Dangerous Cargo Lists.
1 Ship's Register.
2 Crew Declaration (obtainable from Customs Port Royal).
2 Stores List.
International Certificates of Vaccination for each Crew member.

For Immigration

2 Crew Lists.
2 Passenger Lists.

For Agent

Bills of Lading covering all cargo on board.
2 Crew Lists.
2 Stores Lists.
5 Manifests.
Ship's Register, Safety Certificate and Load Line Certificate.

For Quarantine

1 Derat. Certificate.
International Certificates of Vaccination for Crew members.

PILOTAGE: Forty-eight hours advance notice to Agents required. Pilot boards vessel about 2 miles S.E. of Plumb Point Lighthouse. Vessels required to anchor at Port Royal whilst Customs board to grant pratique and seal stores. Contact Pilot station VHF Channel 11. Several small Pilot boats in use at present which come out from Kingston as required.

ANCHORAGES: Depth of ship channel 35 ft. recommended. 4 specified anchorages, namely A, B, C, D – these having to be reserved in advance. Also unlimited anchorage space towards Eastern end of harbour. Positions of these 4 specified anchorages as follows:

Anchorage A 221° distant from R.C. Cathedral Dome 14.4 cables.
Anchorage B 180° distant from R.C. Cathedral Dome 11.0 cables.
Anchorage C 168° distant from R.C. Cathedral Dome 10.7 cables.
Anchorage D 155° distant from R.C. Cathedral Dome 11.0 cables.

RESTRICTIONS: Entry – day or night. Rise and fall of tide, average range 10 in., occasionally 16 in. Strength of current in harbour 1.5 knots in some places. Main direction and average speed of prevailing winds E.S.E. 20 m.p.h. Months of max. rainfall (i) April/May, (ii) Sept., Oct. and Nov. Hurricane period June 15–November 15.

MAX. SIZE: Recommended max. draft into Port Royal 40 ft. for vessels of unlimited size. Main ship channel has max. recommended draft of 36 ft. 6 in. and is 800 ft. wide. Depth 39 ft. at MLO. Newport West has recommended draft of 32 ft. 6 in. with a turning basin of 1,500 ft. Esso Terminals has recommended max. draft of 34 ft. 6 in. Max. recommended draft of 32 ft. 6 in. to proceed Eastwards, from Esso Terminals, in harbour to anchorage or berths. Newport East has max. recommended draft of 27 ft. 6 in.

HEALTH: See "Documents".
Radio Pratique may be granted.

Pratique Procedure: The Customs Officer who boards vessel will indicate to Master when pratique granted, after he has checked all documents and placed under bond all excess tobacco and liquor on board. In respect of vessels arriving from restricted areas (e.g. Texas, U.S.A.) vessel will not be granted pratique at Port Royal but at berth after being sprayed (at berth) by Quarantine Officer. A vessel with suspected fever or disease on board should inform Agent before arrival. The Agent will advise Customs at Port Royal and Quarantine. The Quarantine Officer will tell Master whether to proceed to Quarantine Anchorage or to berth direct.

If a vessel obtains pratique at Kingston, automatic pratique granted to proceed to any other port in Jamaica.

RADIO: Cable Agents giving ETA, Draft, Passengers (if any), cash required. Call sign "KNRDO 6YI".

VHF: VHF Channel 16 – Kingston Radio. VHF Channel 11 – Pilotage.

TUGS: Tugs optional. Tug joins incoming vessel near berth. In case of emergency tug joins vessel wherever requested by master. Usually ship's lines used, but if tug's lines used there is no extra cost.

BERTHING: No specific requirements for berthing. If explosives on board a special permit is required from Harbour Master and Customs. Extract from Gunpowder and Firearms Law:

"Twelve hours' notice shall be given by Agent of ship to Harbour Master or Principal Officer of Customs, as case may require, of intended arrival of a ship with Gunpowder and/or Dangerous Explosives on board, and such ship shall not be permitted to come alongside a wharf or any ship in Harbour or to break bulk until Harbour Master or Chief Officer of Customs, as case may be, is satisfied that Gunpowder and/or Dangerous Explosives are of such character and are so stowed, or are in opinion of Harbour Master or Collector of Customs, in such trifling quantity as not to be an element of danger, when proper Officer shall certify –

(a) that in consideration of character, method of stowage, or quantity of such Gunpowder and/or Explosives it is safe for such ship to berth and proceed to discharge cargo without special precaution, or

(b) that having regard to considerations aforesaid such ship should discharge such Gunpowder and/or Explosives into lighters or at place appointed under rules for special landing before being allowed to berth or break bulk in connection with landing or shipping of other cargo."

L Kingston has a new port development in harbour West of the city. There are nine berths (numbers 1–9) operated by two private wharf companies. All berths equipped for Ro/Ro traffic. Max. depth of water in channel approaching and alongside berths is 35 ft. Recommended draft is 32 ft 6 in. Bunkering facilities available at all new berths.

		Length	*Depth*
Old Port:	No. 1 Pier	580 ft.	24–37 ft.

Newport West: Operated by Western Terminals.

Berth No.	Length	Depth
No. 1	525 ft.	26 ft.
No. 2	600 ft.	35 ft.
No. 3	600 ft.	35 ft.
No. 4	600 ft.	35 ft.

Operated by Kingston Wharves.

No. 5	600 ft.	35 ft.
No. 6	600 ft.	35 ft.
No. 7	600 ft.	35 ft.
No. 8	600 ft.	35 ft.
No. 9	600 ft.	35 ft.
No. 10	600 ft.	40 ft.
No. 11	600 ft.	40 ft.

STEVEDORES: To enable Agent order gangs important to obtain accurate ETA from vessels. Time: 1200 hrs. the working day before vessel arrives. Shifts: 0700–1400 hrs., 1400–2100 hrs. Mondays to Fridays; 0700–1200 hrs. Saturdays. Sundays – full overtime.

Stevedores normally rig and open, but crew open McGregor hatches. All necessary gear supplied by stevedores except rain tents and special lifts requiring special gears, which vessel must supply. Average unloading rate 10/15 tons per gang hour for general cargo.

CARGO HANDLING: Wherry Wharf (a Sufferance Wharf) maintains a pier at Newport East for unloading lumber, corn and animal feed ingredients. The wharf is 200 ft. long and a depth of 29 ft. and an apron of 200×60 ft.

Jamaica Gypsum Limited: Jamaica Gypum Limited operates a wharf at Harbour Head for the export of gypsum rock only.

There are 3 steel and concrete dolphins and 1 wooden dolphin. The concrete and steel dolphins are the principal docking structures. They are 161 ft. apart. The minimum draft currently available is 26 ft., but this could be increased at short notice to 29 ft. Vessels of 440 ft. length and 64 ft. beam are normally loaded. Bulk rock loading facilities capable of loading crushed gypsum at an average rate of 700-1000 t.p.h. are available.

There are no specialised berths on the public wharves for handling bulk cargoes. Although sulphur salt, caustic soda and grains have been discharged, consignees make their own discharging and storage arrangements.

Grains for the flour mill and feed factory are discharged at Shell Oil Pier and conveyed by the plant's own system into the factories. Berths 1 to 9 in Newport West are equipped for roll-on/roll-off traffic and containers. There is a mobile crane stationed on the docks capable of lifting 140 tons max. Liquid chemicals and LPG are handled by the oil companies at their private docks.

MEDICAL: Agents to be advised before arrival of vessel if emergency medical attention required. Hospital facilities available. If inoculation required Master to advise Agents prior arrival of vessel.

TANKERS: No specific requirements applicable to oil carriers. Reducers available to fit 12 in.–4 in. load/discharge lines. Slop (residue) discharge facilities available taking maximum 500 gallons. Gas free certificate required for tankers laying alongside Public Wharves in Kingston.

Texaco Caribbean Inc.:
Texaco Caribbean Inc. operates 2 wharves:

Eastern Terminal: Jetty 325 ft. long. Takes vessels up to 18,000 tons (gross). Maximum draft is 28 ft. at low tide, Berthing facilities provide 2 concrete dolphins supported by steel piles and 4 mooring buoys. 6 pipe-lines are run on the jetty for the receival of bulk petroleum products and the bunkering of vessels. No packaged goods are handled at this berth. Fresh water supplies are available.

Western Terminal: Jetty 643 ft. long. Takes vessels up to 18,000 tons (gross). Constructed with 2 concrete dolphins and wooden dock head. Berthing facilities provide 2 mooring buoys. Maximum draft at low tide is 28 ft. 6 in. Four product lines are run on the jetty to receive cargoes only. Fresh water is not available at this jetty. No packaged goods are handled at this berth. However, this berth is inactive at present.

Shell Company (W.I.) Limited: The Shell Company (W.I.) Ltd. has bunkering facilities at 2 wharves:–

Shell Installation: The wharf has a maximum draft of 32 ft. It is used for loading and unloading of goods in connection with the petroleum operations in Jamaica of the Shell Company (W.I.) Ltd. and also loading and unloading of goods in connection with Jamaica Flour Mills Limited. A complete range of bunkers is available.

Shell Bunkering Depot Newport West: A hydrant system with outlets at each berth provides a complete range of bunkers.

Esso Standard Oil S.A. Limited: Esso Standard Oil S.A. Limited operates 2 wharves:–

Esso Marketing Terminal: Maximum length of vessels – 600 ft. Maximum safe draft – 29 ft. Both day and night berthing possible. Fresh water is available. Bunkers available here are Heavy Fuel Oil (Bunker C), Marine Diesel, Auto Diesel and a wide range of intermediate bunkers.

Esso bunkering facilities are available at Newport West. Pipe-lines run from the nearby Esso Kingston Terminal to the berth at Newport West providing Heavy Fuel Oil, Diesel Oil and intermediate ranges of bunkers.

Esso West Indies Limited (Refinery):
Operates 2 Wharves:
Esso Refinery Marine Dock:
Maximum length of vessels – 690 ft. Maximum safe draft 34 ft. 6 in. Fresh water is available and day and night berthing possible. The Esso Refinery Pier is used for receiving crude petroleum from tankers as feed stock for the Refinery through a 20 in. undersea pipe-line. A wide range of finished products is also delivered into tankers for export as well as for discharge at other ports on the island.
Esso Refinery Dry Cargo Dock: Maximum length of vessels – 400 ft. (Freighters) and 475 ft. (Tankers) with maximum safe draft of 18 ft. Fresh water is available. This dock is used for loading packaged and drummed lubricating oil on freighters for export to various countries throughout Central America and the Caribbean.
Other material exported here are lubricating oil in bulk and various grades of asphalt in drums.
DENSITY: Average density 1026. No tide.
FRESH WATER: Fresh water avaiiable at berth. Average rate of delivery 20 t.p.h.
FUEL: All grades (viscosities) available. At least 2 days advance notice required.
FIRE PRECAUTIONS: Fire boat available equipped for fighting harbour fires 24 hours per day. Also equipped fire engines situated within easy reach of docks available 24 hours a day.
GANGWAY/DECK WATCHMEN: Services of watchmen are recommended.
OPENING/CLOSING HATCHES: Hatches covered by Pontoon and Hatch Boards opened and closed by stevedores. McGregor hatches handled by crew.
CERTIFICATES:
Safety Certificate.
Ship's Register.
Load Line Certificate.
Test Certificates for derricks and cargo handling gear.
CUSTOMS ALLOWANCES: Tobacco, 2 oz. tobacco in any form (2 oz. pipe tobacco or 40 cigarettes) per day. Wine and/or spirits, 6 oz. or 0.5 reputed pint of spirit per day. 1 pint wine allowed Master and Officers only or as stated in the Articles under flag they fly.
CARGO GEAR: The usual certificates covering testing and inspection of all gear and equipment as required under Docks Regulation 1934 of Great Britain or by International Labour Organisation, will be acceptable.
IDENTIFICATION CARDS: No Identification Cards required.
CONSULS: Consuls not available on Saturdays and Sundays, except by special request.

	Kingston Tel. No.
Consular Offices	
British Information Service	24135, 22711
Canadian High Commissioner	65726–0
Trinidad and Tobago High Commissioner	65739, 65730
Embassies	
American Embassy	26341–0
Argentine Embassy	77616
Chinese Embassy	78161
Dominican Embassy	66676
French Chancery Embassy	79811
German Embassy	26551
Mexican Embassy	66891
Netherlands Embassy	69026–8
Panamanian Embassy	70042
Venezuelan Embassy	65519–0
Consular Offices	
Argentine Consulate	77616
Austrian Consulate General	25623
Belgium and Luxembourg Consulate	0353–259
Colombian Consulate General	42004
Costa Rican Consulate General	67285
Cuban Consulate	84564
Danish Consulate	36737
Finnish Consul	23006, 22519
Germany Embassy–Consular Section	26551–3
Greek Consul	23685
Guatemalan Consul	42966
Haitian Consulate General	25888
Hondurian Consul Ad Honorem	67285
Israeli Consul	26671
Italian Consul	66981
Jordanian Consulate	82661
Lebanon Consulate	76465
Liberian Consul	27169
Mexican Consulate	66891
Nicaraguan Consul	22856
Norwegian Consul	22151
Peruvian Consul	76565
Salvadorian Consul	25780
Spanish Consul	22856
Swedish Consulate	36737
Swiss Consulate General	23347

REPAIRS: Minor deck and engine repairs possible by 2 firms. Pre-advice of 3 days recommended.
DRY DOCKS: No dry dock facilities available.
REPATRIATION: Facilities available for effecting crew changes.
AIRPORT: 10 miles from port and is served by regular airlines.
TIME: Local time is GMT minus 5 hours.
HOLIDAYS: Days when work is performed only on overtime rate: New Year's Day; Ash Wednesday; Easter Monday; National Heroes Day (third Monday in October); Boxing Day. Days when ports closed, no work performed: Good Friday; National Labour Day (May 23rd); Independence (first Monday in August); Christmas Day.
POLICE/AMBULANCE/FIRE: Emergency tel. numbers: Police 116; Ambulance 110; Fire 110. Commissioner of Police 79858–0. Radio Control Room 81261–2. Fire Brigade 22121. Fire Boat Station 27018.
TELEPHONES: Arrangements exist for placing telephones on board. The Jamaica Telephone Company to be advised by Agents 2/3 days before vessel arrives.
GENERAL: Bunkering Facilities: Bunkers are supplied by three firms: The Shell Oil Co. (West Indies) Ltd. Texaco Caribbean Inc. Esso Standard Oil S.A.
Ship's Chandlers: 3 ship's chandlers available.
Communications: Regular air services daily to London, New York and other European and American cities, and is therefore in excellent position to offer emergency facilities to vessels requiring urgent spares, crew replacements, etc. Vessels can anchor at Port Royal close by airport.
Customs: Vessels are searched thoroughly by Customs for *firearms* and contraband. Masters are held responsible by Customs for security of bonded stores, etc. Masters are therefore alerted to check security arrangements and to keep watch on bond whilst in port.
SERVICES: Compass adjusting services available. Although routine repairs to radar, radios and other electrical equipment are possible, technical services generally limited.
SHORE LEAVE: Crew members allowed on shore after vessel cleared by Immigration. Vessels arriving from some countries require special Government approval before shore leave permitted, but no restrictions are normally placed on vessels arriving from Western European, American or African countries.
REGULATIONS: Dogs are not permitted to land unless they have undergone quarantine or are imported from United Kingdom.
DELAYS: Normally there are no delays to vessels calling at the port.
AUTHORITY: The Harbour Master, Kingston.
AGENT: Jamaica Freight and Shipping Co. Ltd., 80-82 Second Street, Newport West, Kingston 11. P.O. Box 167, Kingston, Jamaica. Tel. 923-9271-6 (six lines). Telex 2260. Cable address: Jashipco Kingston.

MONTEGO BAY: 18.30 N. 77.56 W. (See Plan)

DOCUMENTS, PILOTAGE and all general information: refer to "Kingston".
ANCHORAGE: There is one anchorage in Montego Bay which must be booked through the Harbour Master in Kingston. Depth 5 to 6 fathoms.
RESTRICTIONS: Entry – day and night. Rise and fall of tide, average range 10 in. No current in harbour. Main direction and speed of prevailing wind, N.E., 10 m.p.h. Subject in January–February to occasional 2–3 day spells of squalls with driving rain known as Northers which makes lying at the anchorage uncomfortable, but there is virtually no swell alongside the berths.
MAX. SIZE: Unlimited water at anchorage. The 1,500-ft.-long 400-ft.-wide straight channel has a min. depth of 34 ft. MSL, as does the 1,600 ft. diameter turning basin.
CLEARANCE: Customs, Health, Immigration offices are maintained at the port.
BERTHING:
Montego Freeport is a new port developed with 3 berths operated by Montego Wharves Limited, P.O. Box 303, Montego Bay.
Berth 2–600 ft. long, 34 ft. min. depth alongside, 7.5 ft above water line.
Berth 3–588 ft. long, 25 ft. min. depth alongside, 6.5 ft. above water line.
Berth 4–387 ft. long, 25 ft. min. depth alongside, 6.5 ft. above water line.
These berths are reached through a 1,500 ft. long straight channel 400 ft. wide dredged to a min. depth of 34 ft. There is 23,000 sq. ft. warehouse and an 87,000 cu. ft. cold storage facility adjacent to berth 2 with a wharf apron of 75 ft. Berths 3 and 4 are designed for roll-on/roll-off with 13 acres of bonded storage space adjacent. Berth 4 is used principally by cruise ships and is connected to a 5 acre duty free shopping complex by a 200 ft. long tree-lined walkway.
Montego Freeport Limited intends to build berth 1 in the next few years which will be a continuation of berth 2, creating 1,300 ft. of continuous berth face with ample space behind for expansion. The cold storage is planning on doubling its capacity.
TANKERS: No specific requirements applicable to oil carriers. Reducers available to fit 12 in.–4 in. load/discharge lines. Slop (residue) discharge facilities available taking maximum 500 gallons. One tanker berth, berth No. 2 minimum depth alongside 34 ft. MSL. Gas-free certificate required for tankers laying alongside.
DENSITY: Average density 1026. No tide.
FUEL: All grades (viscosities) available. At least four days notice required.
FRESH WATER: Can be supplied from the dock. 30 t.p.h.
MEDICAL: All facilities at St. James's Hospital.
SECURITY: Under the jurisdiction of the Montego Bay Police and also 24-hour patrols in the port area by private security guards.
CONSULS: No consular offices in Montego Bay. See "Kingston".
STEVEDORES: The Port is open 24 hours of the day. To enable Agents to order gangs, it is important to obtain accurate ETA from vessels. Time: 1200 hrs. the day before the vessel arrives. Shifts: 0700–1400 hrs., 1400–2100 hrs. Mondays to Fridays with option to

extend the first shift to 1700 hrs. at single time; 0700–1200 hrs. Saturdays, thereafter at overtime. Details can be obtained from Montego Stevedoring Limited, P.O. Box 303, Montego Bay.
FIRE PRECAUTIONS: Equipped fire engines situated within easy reach of docks 24 hours per day.
IDENTIFICATION CARDS: Recommended for crew.
REPAIRS: There are no dry dock facilities, but minor repairs can be effected alongside.
AIRPORT: 5 miles from port. Sangster's International Airport served by regular airlines.
POLICE/AMBULANCE/FIRE: Police, tel. 119; Ambulance, tel. 110; Fire, tel. 110.
AUTHORITY: Montego Freeport Limited.

OCHO RIOS: 18.25 N. 77.072 W.

GENERAL: Reynolds Jamaica Mines must act as Agents for all vessels using the pier at Ocho Rios. *(a)* Tel. Ocho Rios 603. *(b)* Cable address is "Mines" Ocho Rios, Jamaica. *(c)* 72 hour and 24 hour ETA requested. *(d)* Radio telephone 2738 Kc/s open when calls expected at 0700, 1100, and 1500 hrs. local zone time.
PILOTAGE: Compulsory. Pilot meets vessel 1 mile N.E. of sea-buoy. On rare occasions when a local Pilot is not available expenses and detention must be paid for an outside Pilot.
FRESH WATER: 50 c. per ton supplied from pipe-lines on the pier.
FUEL: Bunker"C" Fuel Oil – daily prevailing rate Kingston Harbour. Diesel Fuel Oil – per oil company suppliers Kingston.
REGULATIONS: (1) If any captain of any vessel or any other person shall throw or deposit, or permit to be thrown or deposited *(a)* any rubbish, earth, mud, stone, sand, ballast or other similar matter; or *(b)* any oil or mixture containing oil or oil residues, in any channel leading into or out of any harbour, or in any place within the limits of any harbour other than such place therein as shall be set apart for such purpose he shall be liable to a penalty not exceeding one thousand pounds. (2) No siren or steam whistle shall be sounded on any vessel in any harbour except for the purpose of making signals as laid down in the regulations for preventing collisions at sea, provided that any vessel may sound one warning blast of not more than five seconds duration before sailing. Any person committing a breach of the rules is liable for a penalty not exceeding 1,000 Dollars.
CARGOES: The Reynolds Jamaica Mines Pier is occupied about twice each week by ore carriers for 8 to 12 hours and about twice a month by sugar ships for indefinite periods.
TOURIST VESSELS: Tourist ships are accepted at Ocho Rios without Ministry of Finance approval in accordance with verbal instructions of the Collector at St. Ann's Bay, 19th September 1966, subject to the availability of berth at Reynold's option and: *(a)* Any guarantee to be only for Monday through Friday and for the hours 0700 to 1800. *(b)* Ocho Rios must be the first port of call in Jamaica of the ship on any particular voyage. *(c)* Signature of release form.
PASSENGERS: *(a)* Passengers disembark via shore gangways (2 if requested) direct to wharf situated in fence enclosed compound with guarded gate. Where lighterage is required a landing is available at the back of the wharf sufficiently large to be used by a 45 ft. tug. *(b)* Entry and clearance by Customs and Immigration are made at the pier. *(c)* Taxis are kept outside the gate. *(d)* Normally the Ocho Rios Chamber of Commerce set up a table on the wharf for the purpose of providing information and distributing literature on local musical groups to spend some time playing on the wharf for the benefit of the passengers.
AGENCY: *(a)* Normally Reynolds Jamaica Mines acts as sub-agent in Jamaica for vessels calling at Ocho Rios and bills for disbursements are directed to the Island agent for payment. *(b)* In cases where Reynolds Jamaica Mines acts as sole Agent for a vessel, a sum of money adequate to cover vessel's disbursements is requested from the owner or charterer to be deposited to Reynolds Jamaica Mines' account in advance.

PORT ESQUIVEL: 17.53 N. 77.08 W.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Customs Documents:
4 Stores Lists.
Crew's Manifest of Declaration outside of Personal Effects.
4 Load Line Certificates.
4 Small Parcels Lists.
4 Customs Clearance from last port of call.
Health Documents:
International Certificate of Vaccination of all Crew members.
Maritime Declaration of Health.
Crew's Declaration of Health.
6 Manifests.
4 Bills of Lading.
Ship's Documents:
3 Stowage Plan of Cargo.
2 Deadweight Survey (Bulk carriers only).
Charter Party and any other specific documents of instructions relating to the loading or discharging of cargo.

PILOTAGE: Pilotage compulsory. Compulsory pilotage limit 2 miles to seaward of line drawn from Polink Point to Bare Bush Cay to Portland Cay to Portland Point. Cable advice 48 and 24 hours ahead of vessels ETA at Pilot station must be sent to vessel's Agent at Kingston, Jamaica.
One pilot boat *Silver Spray*, launch equipped with ship-to-shore radio communication: *(a)* One Marconi VHF – FM 30-watt output multi-channel set. *(b)* One Marlin HF – AM 75 output multi-channel set.
VHF shore set manned 24 hours per day. Contact with Port or launch can be made on three international Channels – 16, 2 and 6.
ANCHORAGES: A. Seaward to East of Pilot station, depth in excess of 36 ft. B. Leeward of Pigeon Island – depth 36 ft. min. C. Eastward of entrance of main channel – depth 37 ft. 06 in. min.
RESTRICTIONS: Restriction of permissible draft to max. of 35 ft.
MAX. SIZE: Max. permissible length 650 ft. and draft 35 ft. at low tide.
HEALTH: Pratique procedure requires presentation of undermentioned health documents: *(a)* International Certificate of Vaccination of all crew members. *(b)* Maritime Declaration of Health. *(c)* Crew's Declaration of Health. In event any suspected communicable disease or fever on board, Master required to advise Agents in advance.
RADIO: JAMINTEL "KNRDO 6YI".
TUGS: Pilot boat will be on standby during berthing operations of all vessels to assist in placing ship's lines on to pier.
BERTHING: Facilities for 2 berths – Eastern side and Western side of pier. Alumina bulkloading facilities on Western berth. Bulk alumina vessels given priority on Western berth. Both sides of pier used otherwise for vessels handling general cargo, loading or discharging fuel oil, caustic liquor, etc. Length of pier, East side 550 ft., West side, 600 ft.
Dolphin constructed at Head of pier for convenience of vessels turning around on arrival and departure. Dimensions 35 ft. long by 80 ft. wide. Additional berth, 250 ft. long, South-Western shoreline, with max. permissible draft of 17 ft. for this berth only.
SPECIALISED CARGO HANDLING FACILITIES: Eastern and Western berths equipped to handle receival of bulk cargoes, e.g. grain, fertilisers, sulphur, etc., by using shore crane with grabs, vacuvators, vessel discharging by grabs or conveyor system. Bulk liquid chemicals handled as shown under "Tankers". Additional berth on South-Western shoreline now being used to handle containerised cargo and can be utilised for handling of roll-on/roll-off traffic.
STEVEDORES: Cable advice to Agents in Kingston, Jamaica, 48 and 24 hours ahead of vessel's ETA at Pilot station for arrangements to provide stevedore and dock labour.
MEDICAL: Agents to be advised 48 hours ahead of vessel's ETA Pilot station of medical attention required, details of inoculations, vaccination/fever certificates, etc. Free ambulance service provided. Nearest hospital approximately 15 miles.
TANKERS: Both sides of pier equipped to handle receival and delivery of Bunker C oil, caustic liquor, sulphuric acid and molasses. Diameters of the load/discharge lines are:

Bunker C Oil	8 in.
Caustic liquor	10 in.
Sulphuric acid	4 in.
Molasses	12 in.
Water	4 in.

Max. permissible draft 35 ft.
DENSITY: 1025 subject to slight variation during heavy rainfall.
FRESH WATER: Max. of 300 metric tons available. Delivery made from storage tank at a rate of 40 to 50 metric t.p.h.
FUEL: Bunker C fuel oil is available from dock. Application to be made to Esso (W.I.) Ltd., through ship's Agent for supply of bunkers. Pumping rate approx. 130 metric t.p.h. Specification – Group 0 or Group 1 – Viscosity SSF at 122° F; 180–180 Flash P – M 190°F plus. Arrangements to supply other grades of fuel oil can be made on request of local Agents to Esso.
FIRE PRECAUTIONS: Strategically located fire hydrants throughout port and on pier. No special precautions apart from "No smoking" rule.
GANGWAY/DECK WATCHMEN: Service of watchman optional but not necessary. During time vessel is in port there is Customs guard on pier and strict security measures are carried out by port Security Force on personnel entering or leaving port compound which is surrounded by a chain-link security fence.
OPENING/CLOSING HATCHES: For bulk alumina vessels, opening and closing of hatches is done by crew members. For general cargo vessels, opening and closing of hatches may be done by crew members or on request to Agents, by stevedores.
SHIP CERTIFICATES:
Load Line Certificate.
Registration Certificate.
CUSTOMS ALLOWANCES: Tobacco: Each crew member including ship's officers, normally allowed by local customs authority 2 oz. of tobacco or 2 pk. of 20 or 25 cigarettes per day released from bond. Wine and/or Spirit: No limitations to use of wine on board. For spirits each crew member is allowed a part bottle per man.
CARGO GEAR: Local Agents provide necessary cargo gear. These are tested every 6 months in accordance with Factory Law and certificates issued for respective maximum lifting capacities.
IDENTIFICATION CARDS: Not necessary as the Passport will serve this purpose.
CONSULS: No consuls are available. Consular offices are located in Kingston approximately 30 miles away.
REPAIRS: Limited repairs may be undertaken.
DRY DOCKS: None.

REPATRIATION: Upon request, local Agents arrange crew changes and any necessary repatriation.
AIRPORT: Norman Manley International Airport approximately 40 miles away.
TIME: GMT minus 5.
HOLIDAYS: New Year's Day (1st January); Ash Wednesday (in accordance with calendar); Good Friday (in accordance with calendar); Easter Monday (in accordance with calendar); Labour Day (23rd May); Independence Day (first Monday in August); National Heroes Day (third Monday in October); Christmas Day (25th December); Boxing Day (26th December). These holidays are sometimes subjected to change in accordance with Government Proclamations.
1. No work is carried out on Good Friday and Christmas Day.
2. Work on vessels loading bulk alumina and discharging Bunker C oil and caustic liquor is usually carried out on other public holidays.
3. For general cargo vessels work is optional on public holidays except Good Friday and Christmas day, and only carried out on Master's request or in accordance with Terms of Charter Party.
POLICE/AMBULANCE/FIRE: Old Harbour Constabulary tel. 983–2255; Old Harbour Fire Brigade tel. 983–2276. An ambulance service is available for any crew member requiring medical attention. Several qualified doctors within a 6-mile radius of port. There is also a fire station.
TELEPHONES: Facilities do not exist for placing of telephones on board ship other than Magneto telephones. International telephone services available and scale of rates is as per schedule listed in Jamaica Telephone Company's Directory.
GENERAL: Port normal working days Mondays-Fridays 0730 to 1630 hrs. Overtime in excess of 8 hours per day or 40 hours per week, Monday-Friday at time and a half normal rate; Saturday between midnight and midnight time and a half normal rate, double time for hours worked on Sundays and two and one half times for hours worked on public holidays, between midnight and midnight. Rail facilities exist on Western side of the pier. Distance from fender to centre of rail line 17 ft. 09 in. Ship chandlering or any other requirements may be acquired through local Agents.
SERVICES: Special services are limited. Arrangements can be made through vessel's Agents for the port or local contractors to undertake these jobs.
SHORE LEAVE: Crew members usually granted shore leave by Immigration Authority for period vessel remains in port. Immigration Authority can, however, withdraw permission of shore leave to any individual crew member who, in their opinion, may be a security risk.
REGULATIONS: No unusual regulations.
DELAYS: The normal delays in berthing, loading or discharging or bunkering can be expected when the two berths are occupied.
AUTHORITY: *(a)* Alcan Jamaica Limited, Port Esquivel.
(b) The Port Authority, Kingston.
AGENT: See Jamaica Freight and Shipping Co. Ltd. Kingston.

PORT KAISER: 17.52 N. 77.37 W.

DOCUMENTS:
6 Crew Lists.
4 Stores Lists.
Declaration of Crew Personal Effects.
Customs Clearance from Last Port.
Maritime Declaration of Health.
Vaccination Certificates for all crew members.
Cargo Documents.
PILOTAGE: Compulsory. Pilot boards about 1 mile seaward of the jetty. International code Pilot signals used.
ANCHORAGE: Recommended 1.5 to 2 miles off end of finger pier from South to S.W.
MAX. SIZE: Tankers up to 40 ft. draft.
HEALTH: Pratique granted by customs officers who board on arrival, after Master has completed Maritime Declaration of Health, and Crew's Declaration of Health. All crew members require valid vaccination Certificates. In event of suspected disease or fever on board Agent should be advised full particulars by radio before arrival.
RADIO: "KNRDO 6Y1."
TUGS: None available.
BERTHING: Tanker berth at the end of a finger pier. Pier head is adequately fendered and a holding off buoy is utilised if necessary because of swell. Vessels berth portside to the jetty. Both anchors used.
Finger pier is 610 ft. long. The berth is being dredged to 50 ft. depth.
TANKERS: Fuel and gas oil discharged, 8 in. hoses. No slop facilities.
DENSITY: 1025.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: 25 cigarettes and part bottle spirits per day per man.
CONSULS: Nearest at Kingston.
TIME: GMT minus 5 hours. No changes.
SHORE LEAVE: Allowed.
AUTHORITY: Port Authority, Kingston.

PORT RHOADES, Discovery Bay: 18.29 N. 77.25 W.

DOCUMENTS:
5 Crew Lists.
2 Stores Lists.
1 Customs Clearance from last port.
2 Declaration of Crew Personal Effects.
1 Maritime Declaration of Health (available on arrival).
Vaccination Certificates for all crew members.
1 Copy of each cargo document.
PILOTAGE: Compulsory. ETA's should be cabled to "Kaisbaux Discovery Bay", 48, 24, and 12 hours before arrival.
Pilot will board vessel on arrival 2 miles outside channel, if berth is available.
ANCHORAGES: No designated anchorage. If berth is occupied, vessels will remain within a 3-mile area of the channel until berth is available.
RESTRICTIONS: Entry may be at any time of day or night throughout the year.
MAX. SIZE: Max. permissible length, 660 ft.
Max. permissible breadth, 90 ft.
Max. permissible draft, 37 ft.
PRATIQUE: Pratique inspection and clearance given on berthing. Notify "Kaisbaux, Discovery Bay" as soon as possible before arrival full details of any suspected disease or fever on board.
There is no radio pratique.
RADIO: Route all ETA's and cables via Kingston Radio or nearest radio station.
TUGS: None available. Pilot launch will assist in taking ship's lines during docking if required.
BERTHING: One finger pier, adequate fenders, used by bauxite ships and tankers alike.
Ships loading bauxite must dock with the top of the hatch covering of the first hold to be loaded not more than 35 ft. above sea level.
Bauxite loading rate 4,000 t.p.h.
All loading hatches to be opened for inspection if weather permits.
Gangway to be rigged ready for lowering immediately on berthing.
STEVEDORES: All arrangements are made by Kaiser Bauxite Company for unloading/loading any general cargo.
MEDICAL: Medical facilities and hospital available in the vicinity.
TANKERS: Two fuel lines, hose 8 in. (pipe-line 12 in.) diameter. Back pressure 150 lb. One gas oil line, hose 8 in. (pipe-lines 6 in.) diameter. Back pressure 150 lb.
Tankers use same berth as bauxite vessels. It may be necessary at times for tankers to wait on bauxite vessels loading, or arriving, and tankers may have to vacate the berth before completion of discharging to make way for bauxite vessels which have absolute priority.
DENSITY: 1025.
FRESH WATER: Not available.
FUEL: Not available.
FIRE PRECAUTIONS: Usual non-smoking precautions with respect to tankers. Portable fire extinguisher available on pier.
GANGWAY/DECK WATCHMEN: To be provided by vessel.
OPENING/CLOSING HATCHES: To be done by ship's crew.
CERTIFICATES REQUIRED:
Load Line Certificate.
Registration Certificate.
Derating Exemption Certificate.
CUSTOMS ALLOWANCES: Tobacco: Each crew member, including officers, normal allowance 2 oz. tobacco or 2 pks. of 20 cigarettes per day released from bond. Wine: no limitations on use of wine on board. Spirits: Officers only are allowed part bottle.
IDENTIFICATION CARDS: Not required.
CONSULS: Nearest Consuls are in Kingston, 80 miles distant.
DRY DOCKS: No facilities in Jamaica for other than the smaller types of vessel (e.g. tug).
REPATRIATION: Can be arranged through ship's Agent.
AIRPORT: Montego Bay, 40 miles away; Kingston, 90 miles away.
Both are international airports, with several scheduled flights per day to U.S.A. and Europe.
TIME: GMT minus 5 hours.
TELEPHONES: No arrangements for ship-board connections.
AUTHORITY: Kaiser Bauxite Company, Discovery Bay, Jamaica.

SALT RIVER: 17.50 N. 77.10 W.

DOCUMENTS: Health Certificate. Crew List. Manifest. Bills of Lading and other ship's papers for cargo shipped, prepared by Wisco Wharves Limited, a subsidiary of The West Indies Sugar Company Limited.
PILOTAGE: Latest 24 hours prior arrival off Pilot station. Cable "Monymusk Lioneltown" giving name of vessel, ETA, date of arrival. Pilotage – optional, Barebush Cay; Compulsory, Pigeon Island; pilot boat at Salt River.
ANCHORAGE: 17° 49.58′ N.; 77° 8.40′ W.
RESTRICTIONS: No restrictions.
MAX. SIZE: Draft 30 ft.
HEALTH: Customs grant pratique.
RADIO: Cable Agents via Kingston Radio/6YI.
TUGS: Not applicable.
BERTHING: No berthing facilities.
STEVEDORES: 48 hours notice prior arrival of vessel. Commodity bulk sugar. Loading rate approximately 1,800 tons per day.

MEDICAL: No advance notice required.
FRESH WATER: Can be arranged if given sufficient notice.
FUEL: None available at port but can be arranged.
GANGWAY/DECK WATCHMEN: Customs guards.
OPENING/CLOSING HATCHES: Normally done by crew.
SHIP CERTIFICATES: Registered tonnage certificate on first call. Master's and Chief Engineer's certificates of Competency, also Loading Line Certificate.
CUSTOMS ALLOWANCES: Tobacco, determined by Customs. Wine and/or Spirit, determined by Customs.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Palisadoes International approximately 50 miles away and served by regular airlines.
TIME: GMT minus 5 hours.
HOLIDAYS: New Year's Day; Ash Wednesday; Good Friday; Easter Monday; Labour Day (23rd May); National Heroes Day; Independence Day; Christmas Day (25th December); Boxing Day. Work can be arranged on all public holidays except Good Friday and Christmas Day.
POLICE/AMBULANCE/FIRE: Police Vere 233; Ambulance Vere 337; No port fire brigade.
TELEPHONES: Radio communication ship to wharf can be arranged.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Delays can be expected.
AUTHORITY: The West Indies Sugar Co. Ltd.
AGENT: The West Indies Sugar Company Limited, 5 Trevennion Park Road, PO Box 174, Kingston 5, Jamaica, W.I. Tel. 65927–8. Telex 13. Cable address: Head Office: "Wisco Kingstonja". Home Office: "Monymusk Lioneltown".

SAVANNA LA MAR: 18.12 N. 78.09 W.

DOCUMENTS: Declaration of Health Certificate forms obtainable from Supercargo. 4 copies Crew List, Stores List. Manifest, Bills of Lading and other ship's papers for cargo shipped prepared by Sugar Shipping Limited, a subsidiary of The West Indies Sugar Company Limited.
PILOTAGE: Latest 24 hours prior arrival off Pilot station. Cable "Wicaroo Frome" giving name of vessel, ETA, date of arrival, cash required. Diesel powered 88 h.p. launch painted black hull, red deck, white wheelhouse. District – Compulsory and Optional.
ANCHORAGE: 18° 11.27′ North; 78° 8.20′ West.
ENTRY RESTRICTIONS: No night entry or sailing.
MAX. SIZE: Draft 19 ft.
HEALTH: Maritime Declaration of Health prepared by Master and lodged with Customs. MOH is notified of any suspected illness and action taken. Pratique automatic.
RADIO: Cable Agents via Kingston Radio 6YI.
TUGS: Not applicable.
STEVEDORES: No particular ETA advice required. Commodity, bulk sugar. Average loading rate 1,500 tons per day.
MEDICAL: No advance notice required. Hospital facilities available. Smallpox vaccination by MOH and certificate issued.
FRESH WATER: No facilities.
FUEL: No port facilities, but can be arranged.
GANGWAY/DECK WATCHMEN: Customs guards.
OPENING/CLOSING HATCHES: Normally done by crew.
SHIP CERTIFICATES: Registered tonnage certificate on first call. Master's and Chief Engineer's Certificates of Competency, also Loading Line Certificate.
CUSTOMS ALLOWANCES: Tobacco, determined by Customs. Wine and/or Spirit, determined by Customs.
CARGO GEAR: No additional requirements. In use, grabs operated by ship's winches.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Montego Bay International approximately 32 miles away and served by regular airlines.
TIME: GMT minus 5 hours.
HOLIDAYS: See "Kingston".
POLICE/AMBULANCE/FIRE: Police Savanna la Mar 621; Ambulance 533; Fire 666 and 540.
TELEPHONES: Radio communication ship to wharf can be arranged during day only.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Delays can be expected.
AUTHORITY: The West Indies Sugar Co. Ltd.
AGENT: The West Indies Sugar Company Limited, 5 Trevennion Park Road, PO Box 174, Kingston 5, Jamaica, W.I. Tel. 65927–8. Telex 13. Cable address: Head Office: "Wisco Kingstonja". Home Office: "Wicaroo Frome".

NOTES

Please also advise Shipping Guides (Services) Ltd.

Japan

GENERAL: *Radio Pratique:* At ports where Radio Pratique is possible, vessels must be in possession of the Japanese Sanitary Inspection Certificate to obtain Radio Pratique and night-time entry. The certificate is only obtainable in Japan and is valid for one year.

Pollution: Effective 16th January, 1975, the Marine Pollution Prevention Law requires any tanker of 150 tons gross and above which is loaded with an oil cargo to have materials for oil removal either on board, or aboard escort boats, or at a depot base. Depot bases are understood to have been established, and in this connection Owners, Timecharterers, or Masters are strongly recommended to contact their Agents at least ten days prior to vessels' arrival Japan.

Requirements of Travelling Documents to Japan for Crew/Superintendent:

Crew Joining vessel Max. Stay ashore	Travelling Document	Visa	Remarks
(1) Ordinary Case			
within 5 days	Seaman's Book or Passport	No	Special Landing Permit issued but valid for crew travelling direct to port where crew join ship.
over 5 days	Passport	Req'd	See names of Countries for which visa exempted
(2) New building			
within 30 days	Seaman's Book or Passport	No	See (1) Remarks
over 30 days	Passport	Req'd	See names of Countries for which visa exempted
(3) Purchase/Delivery			
Crew arrival before ownership changed within 10 days	Seaman's Book or Passport	No	Max. 10 days stay ashore permitted subject to Agents' submission of Sale of Contract and Export Licence. See (1) Remarks
Crew arrival before ownership changed over 10 days	Passport	Req'd	See names of Countries for which visa exempted
Crew joining ship before ownership changed	Passport	Req'd	See names of Countries for which visa exempted
Crew arrival after ownership changed	Same as (1) Ordinary case		
Superintendent *(4) All cases*	Passport	Req'd	See names of Countries for which visa exempted

Names of countries for which visa not required:
Within 30 days New Zealand.
Within 90 days Argentina, Bangladesh, Belgium, Canada, Chile, Colombia, Costa Rica, Cyprus, Denmark, Dominican Republic, El Salvador, Finland, France, Greece, Holland, Honduras, Iceland, Iran, Israel, Italy, Luxembourg, Malta, Norway, Pakistan, Peru, Portugal, San Marino, Singapore, Spain, Sweden, Tunisia, Turkey, Uruguay, Yugoslavia.
Within 180 days Austria, Federal Republic of Germany, Ireland, Mexico, Switzerland, United Kingdom.
Remarks: The above schedule is made out by Dodwell Tramp Agencies on general understanding with Immigration Authorities. However, the above details are not expressly stated in the text of the law but based on Immigration Control Order Article 16 which reads:
Article 16. Permission for landing for Reshipping.

1. The Immigration Inspector may, in case an alien crewman desires to pass through Japan in order to reship on board another vessel in another port of entry in Japan, upon application of the carrier operating the vessel on which the alien crewman has arrived, and in case the alien crewman desires in order to become a crewman of a vessel in Japan, to land from another vessel, etc. and pass through Japan, upon application of the carrier operating the vessel in Japan, permit the landing for reshipping respectively.

2. In case the permission provided for in the preceding paragraph is given, the Immigration Inspector shall issue a permit for landing for reshipping to the crewman concerned.

3. In case the permission provided for in paragraph 1, is given, the Immigration Inspector may impose upon the crewman such restrictions regarding period of stay in Japan, route to be followed in transit, and any others which he may deem necessary in accordance with Ministry of Justice Ordinance.

In view of the foregoing, the contents of the schedule is not absolute and may be altered. In order to ensure that crew members are permitted to land Japan to join ships, please send Agent information well in advance on personal data of crewmember such as Full Name, Rating, Date of Birth, Passport or Seaman's Book Number together with Flight No. and Ship's ETA/calling port.

PILOTAGE: It is *compulsory for vessels over 10,000 g.r.t.* to take a Pilot to navigate the Uraga Channel. Application for this Pilot service must be made 24 hours and 6 hours in advance of actual ETA to the Uraga pilot station. At the same time compulsory pilotage has been extended to certain other areas in Tokyo Bay.

AIOI: 34.46 N. 134.28 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agents will prepare: Inward/Outward Declaration. 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34.38 N.; 135.11 E. Telegraphic address: "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel.) Position 33.13 N.; 131.54 E. Telegraphic address "Anjin Saganoseki".In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33.56.24 N.; 131.03.12 E.

Aioi Dock Master not licensed to pilot vessels from outer harbour and boards at anchorage.

ANCHORAGES: Inside Aioi Bay. Max. 18 ft. draft.
A. True bearing 250° from Kabeshima post, distance 350 m.
B. True bearing 217° from Kabeshima post, distance 730 m.
C. True bearing 313° from Kasamatsu Iwa bench mark, distance 620 m.

RESTRICTIONS: Vessels may anchor any time day or night. Draft to be adjusted to enter dry dock per dockyard recommendation as follows:

Name of Dock	*Trim Recommendation*
No. 1 & 2 Dry dock	$\frac{\text{Vessel's LOA (mm.)}}{200}$ plus 500 mm.
No. 3 Dry dock	$\frac{\text{Vessel's LOA (mm.)}}{300}$ plus 500 mm.

MAX. SIZE: Max. size of ships to be accommodated as follows:

Dock	*LOA*	*LBP*	*Breadth*	*Draft*	*DWT (L/T)*
No. 1 dock	238 m. 780′ 9″	230 m. 754′ 7″	33 m. 108′ 3″	5.5 m. 18′	73,000
No. 2 dock	156.1 m. 512′ 1″	145 m. 475′ 8″	19.5 m. 63′ 11″	5.5 m. 18′	14,000
No. 3 dock	341 m. 1118′ 9″	328 m. 1076′ 1″	54 m. 177′ 1″	6.0 m. 19′ 8″	300,000

HEALTH: Pratique to be obtained at another Port prior arrival Aioi.

At first port of call in Japan, vessel must obtain free pratique. Quarantine officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agents prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi and Northbound to Nagasaki Radio respectively.

TUGS: Normally join vessel at anchorage inside Aioi Bay. Tug's lines always used without charge.

TANKERS: Must be fully gas-freed before arrival. No facilities for tank cleaning or gas freeing.

DENSITY: Average 1025/1026 Winter, and 1018/1020 Summer.

FRESH WATER: Available from jetty/dock. Cost Y120 per ton (approx.).

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

REPAIRS: Dockyard port. All repairs available. Specialist technicians obtainable from Kobe/Osaka area.
AIRPORT: Osaka (Itanii).
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police 07912 or Aioi 2-0740; Ambulance/Fire 119 or Aioi 2-7128.
TELEPHONES: Placed aboard at IHI shipyard.
SERVICES: No special services at Aioi, but available from Kobe/Osaka.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kamigori Doboku (Public works) Office.
AGENTS: See "Himeji"

AKITA: 39.45 N. 140.03 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport Nos.
5 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Ships Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory but recommended, available daylight only. Boards off Akita one mile 280° from Akita lighthouse or off Funakawa one mile 140° from breakwater end light if required. 2 Pilots board if ship's gross tonnage exceeds 18,000. Cost 180% of pilotage.
ANCHORAGE: Off Akita, 2 miles 280° from Akita Lighthouse. Depth exceeds 20 m. Bottom – soft clay with mud. No buoys.
RESTRICTIONS: Pilot available daylight only.
MAX. SIZE: Max. draft available 9.6 m. in fairway. Size at berths, see "Berthing". Min. depth at extreme low water – In fairway – 10.0 m. At Anchorage – 20.0 m.
HEALTH: Officer stationed at Funakawa. Quarantine anchorage 39° 51′ N. 139° 53′ E. When impossible to inspect at Funakawa, i.e. during bad weather, attends off Akita.
RADIO: Niigata Radio when ship coming from South. Sapporo Radio when ship coming from East/North. Choshi Radio if long distance.
VHF: VHF Channel 16–156.8 mc/s. VHF Channel 12–121.5 mc/s. Operated by Regional Maritime Safety Headquarters – Harbour Master.
TUGS: 1 tug 2,000 h.p. available owned by local government. 1 tug 800 h.p. and 4 small tugs (150-250 h.p.) available, privately owned.
BERTHING:

Wharf	*Length (m.)*	*Depth (m.)*	*Berthing Capacity (g.t.)*	*Discharging*
Nakajima No. 1	160	9.0	10,000	Phosphate, Grain, Logs
Nakajima No. 2	185	10.0	15,000	Zinc Concentrates, Logs
Nakajima No. 3	185	10.0	15,000	Zinc Concentrates, Logs
North Pier	227	7.5	5,000	Coal, Potash, Ore, Logs
South Pier	227	5.5	3,000	Manure, Ore, Logs
Ohama No. 1	185	10.0	10,000	Logs
Ohama No. 2	235	10.0	15,000	Logs
Mukaihama No. 2	130	7.5	5,000	Logs
Mukaihama No. 3	185	10.0	15,000	Logs

STEVEDORES: Working time 0830–1630 hrs. every day.
Phosphate rock in bulk: 200–270 t.p.h. by shore crane, 50–70 t.p.h. by ship's gear.
Grain in bulk: 150–170 t.p.h. by shore crane, 40–60 t.p.h. by ship's gear.
Logs/lumbers: 200,000 BM per gang per day (Nanyozai), 80,000–100,000 per gang per day (Beizai).
Potash in bulk: 150–180 t.p.h. by shore crane, 50–60 t.p.h. by ship's gear.
Fertiliser in bag: 250–300 tons per day per gang.
Zinc concentrate in bulk: 140–160 t.p.h. by shore crane. 40–60 t.p.h. by Ship's gear.
MEDICAL: Hospital and treatment available.
DENSITY: 1020–1021. Tidal range 20/30 cm.
FRESH WATER: Available at every wharf. Rate 30 t.p.h.
FUEL: Domestic bunkers available. If bonded bunkers required, brought from Niigata, Hakodate.
GANGWAY/DECK WATCHMEN: Not compulsory, but available if required.
OPENING/CLOSING HATCHES: Stevedores open and close hatches. Cost per hour depending on cargo. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete before berthing.
CERTIFICATES: Ship's register to show Customs Inspector, ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance seems poor.
CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore. No spirits.
CONSULS: No Consuls, but two notary public offices.
REPAIRS: Minor repairs only.
REPATRIATION: Possible.
AIRPORT: Flights to Tokyo 2 or 3 times per day. 12 km. from port.
TIME: GMT plus 9 hours. No alterations during year.
HOLIDAYS: Local holidays: January 2nd, 3rd, July 21st, August 13th (p.m.), 14th, December 31st (p.m.) Other Sundays/Holidays Non working days.
POLICE/AMBULANCE/FIRE: Contact through Agents.
GENERAL: *Harbour Protection* – Breakwaters, South and North.
Weather Conditions past two years

	Spring	*Summer*	*Autumn*	*Winter*
Temp. on average	8.5°C	21.7°C	13.0°C	−0.5°C
Rainfall on average	122 mm.	171.3 mm.	120.5 mm.	133.5 mm.
Wind force and direction	4.0 E.S.E.	3.3 E.S.E.	4.1 E.S.E.	5.2 N.W.

Warehouse/Silo – 31 Warehouses/silos, area 28,450 sq.m. including fumigating warehouse/silos.
Stock Yards – 7 yards, 82,520 sq.m. for coal, ore, etc. 100,000 sq.m. for lumber/timber.
Services – Provisions – Available. Hold Cleaning – Available. Surveyor – from Funakawa/Niigata.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension if ship stays longer.
AUTHORITY: Akita-Kencho, Akita City.
AGENT: Sub-Agents of Dodwell & Co. Tokyo. Akita Kairiku Unso Co. Ltd. 5–9 Nishi 2-chome, Tsuchizaki-Minato, Akita-shi, Akita-ken. Tsuchizaki P.O. Box 8 Tel. Akita (0188) 45–0185/9. Telegraphic: "Kairiku Akita". Telex: 8422–24.

AMAGASAKI: 34.42 N. 135.24 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Usual for Pilot to embark at Kobe (Wada Point); however, if Master does not require a Pilot between Wada Point and Amagasaki, Pilot embarks off Amagasaki.
Cables: "Hanshinpilot Osaka" and "Hanshinpilot Kobe". One day's notice ETA required. Telephone through VHF. 3 Pilot boats at Osaka and 6 boats at Kobe with wireless communication with Pilot station. Pilot boards Kobe, Wada Point (Kobe quarantine anchorage). Amagasaki, 2.5–3 miles off Amagasaki. In case bad weather unable to take Pilot. Safe Pilot ladder required. Vessel waits for Pilot at anchorage as above.
ANCHORAGE: No quarantine anchorage; quarantine inspection only available at Kobe (Wada Point). Safe anchorage (approx.) position 34° 39′ 30″ N., 135° 20′ 18″ E. Draft 12.8 m.
MAX. SIZE:

	Kobe Steel Works (Ohgimachi Wharf)	*Kobe Steel Works (Ohama Wharf)*
Max. LOA	200.0 m.	176.81 m.
Max. breadth	No Limitation	No Limitation
Max. draft	11.70 m.	10.40 m.
	Public Wharf	
Max. LOA	180.21 m.	
Max. breadth	No Limitation	
Max. draft	9.60 m.	

Daikyo Oil Jetty. Max. LOA 200 m., beam no restrictions, max. draft 10.6 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
TUGS: Tug usually joins vessel at anchorage off Amagasaki. Tug's line used for operation free of charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
TANKERS: Daikyo Oil Jetty suitable for up to 33,000 d.w.t. Discharge rate 1,000 t.p.h. through one 14 in. pipe.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY:

	Ohgimachi Wharf	*Ohama Wharf*	*Public Wharf*
Winter	1023.5–1025.0	1020–1025	1025–1119
Summer	1022.0–1025.0	1013–1025	1017–1025

FRESH WATER: Available at any time.

	Kobe Steel Works Wharfs	*Public Wharf*
Methods	Shore line	Shore line
Sunday, Holiday	Daytime 40% up	40% up
	Before midnight 50% up	50% up
	After midnight 100% up	50% up

Daikyo Oil Jetty. Only available by barge from Kobe.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
Bunkering at Oil Jetty prohibited.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
Compulsory for tankers working cargo at oil jetty.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consulate in Amagasaki area.
REPAIRS: No dockyard. Minor repairs can be carried out on vessel alongside wharf.
REPATRIATION: Possible.
AIRPORT: International airport Osaka, 15 miles from Amagasaki.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: Kobe Steel (Ore/Coal) Nil. Public Wharf (Scrap) 20th July.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONE: No telephone installation service on board.
SERVICES: Compass adjustment can be carried out at anchorage.
SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: Dodwell Tramp Agencies, Osaka. (see "Osaka.)

ANAN (Tachibana): 33.52 N. 134.40 E.

DOCUMENTS: and all general information, refer to "Shimotsu".
PILOTAGE: Not compulsory. Pilot can be arranged through Agent if required.
MAX. SIZE: Max. draft 10.50 m., limited by channel depth.
PRATIQUE: Closed port. If arriving directly from abroad, vessel should proceed to Shimotsu for health clearance. Immigration authorities attend from Komatsushima if required.
TUGS: One tug of 2,000 h.p. available.
BERTHING: Nippon Denko Wharf, 12 m. depth alongside. Unloading capacity 500 t.p.h.
FRESH WATER: Available from shore hydrants only.
FUEL: By barge from Hanshin area only.
AUTHORITY: Port and Harbour Department.
AGENT: See "Nühama".

AOMORI: 40.52 N. 140.45 E.

DOCUMENTS: and all general information, refer to "Hachinohe".
TUGS: 2 tugs available, up to 500 h.p.
BERTHING: No. 2 Wharf depth 9.0 m.
depth 7.5 m.
depth 8.5 m.
Tsutsumi Wharf depth 8.0 m.
FUEL: Can be supplied by barge from nearest stock port.
FRESH WATER: Available ex-wharf.
AUTHORITY: Port Administration Office.
AGENTS: Abeki Shokai, c/o Bridgestone Ekika Gas K.K. Aomori Seizosho 84-1, Urashima, Nonai Aomori-shi, Aomori-ken. Cables: Abe Aomori. Tel. Aomori (0177) 36–3341

ATSUMI: 34.40 N. 137.04 E.

DOCUMENTS, and all general information: refer to "Yokkaichi".
PILOTAGE: Not compulsory but Atsumi Berthing Master may board vessel at Yokkaichi Quarantine Anchorage.
MAX. SIZE: *Dolphin Pier:* 70,000 d.w.t., LOA 240 m., Max. draft 11.00 m.
SBM: 210,000 d.w.t., Max. draft 13.00 m.
CLEARANCE: *Quarantine:* Quarantine Office opened at Atsumi.
Immigration: Immigration Officials attending from Gamagori.
TUGS: Minimum 2 tugs required for mooring/unmooring due to strong current.
BERTHING: *Dolpin Pier:* Lat. 34° 38′ 36″ N. Lat. 137° 04′ 54″ E. 2.5 km from installation.
SBM: Lat. 34° 39′ 47″ N. Long. 137° 03′ 56″ E. 2 km from installation.
Shoreline: Dolphin Pier 2×12 in, discharge rate 1,000 t.p.h.
SBM 2×16 in, discharge rate 7,500 t.p.h.
FRESH WATER: At Dolphin Pier ex pipe-line (boiler water only). At SBM by barge.
FUEL: Bunkering permissible only at anchorage by barge.
DENSITY: 1025 at both berths.
AGENT: See "Yokkaichi".

CHIBA (including Yahata): 35.36 N. 140.07 E.

DOCUMENTS:
Ship's Register. Last Port Clearance. 3 Crew Lists including Passport Nos. 3 Passenger Lists. 1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: See "Tokyo".
ANCHORAGES: Quarantine anchorage on Northern part of Tokyo wan. Chart No. 1061, published by Maritime Safety Agency.
RESTRICTIONS: Following signals exhibited at Chiba Lt. and Chiba Signal Station.

	By Night	*Remark*
Chiba Route	W. flash 2 secs.	Over 500 GT outwards — STOP.
	R. flash 2 secs.	Over 500 GT entering — STOP
	R. and W. flash 3 secs.	Over 10,000 GT entering or outwards — STOP.
	3R. and 3W. flash 6 secs.	Entering or outwards — STOP.
Ichihara Route	O G. O G.	Over 500 GT outwards — STOP.
	O R. O R.	Over 500 GT entering — STOP.
	O G. O G. O R.	Over 10,000 GT entering or outwards — STOP.
	O G. O G. O R. O R.	Entering or outwards — STOP.

RESTRICTIONS: Chiba Harbour route. Depth of Water — 14.0 m. Width 250.0 m. Length 7,200 m.
Ichihara route. Depth 12 m. Width 250 m. Length 2,350 m.
Anegasaki route. Depth 16 m. Width 350 m. Length 1,450 m.
MAX. SIZE:

Name of Berth	*Max. d.w.t.*	*Max. LOA*	*Max Safe Draft*
Kyokuto	100,000	270 m.	14.0 m.
Maruzen No. 2	50,000	No limit	11.8 m.
Maruzen No. 10	50,000	No limit	13.0 m.
Maruzen No. 14	8,000	120 m.	8.4 m.
Keiyo Sea Berth (W)	No limit	No limit	19.2 m.
Keiyo Sea Berth (E)	No limit	No limit	19.0 m.
Fuji Oil	110,000	260 m.	15.0 m.
Idemitsu Oil No. 1	100,000	No limit	14.5 m.
Idemitsu Oil No. 2	80,000	No limit	14.0 m.
Idemitsu Oil No. 3	20,000 (Hazardous) 30,000 (Non-Hazardous)	205 m.	11.0 m.

HEALTH: Radio pratique available, requested through Agent. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Chosi Radio or Nagasaki Radio which covers all ports in Japan. If specifically West bound vessel to Chosi and North bound to Nagasaki Radio respectively.
RADAR/VHF: No radar service. VHF call sign "Chiba Port Radio" Channel No. 12 156.6 mc/s (Simplex), Channel 14 156.7 (Simplex), Channel 16 156.8 (Simplex), Channel 20 161.6 (Duplex), Channel 22 161.7 (Duplex).
TUGS: Tugs join vessel at entrance of each waterway. Tug's line used.
BERTHING: Contact Agent for berthing arrangements on entry. No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name of Pier	Depth m.
Chiba District	
Public Piers	
Chuo Pier	10.0
Desu Pier	7.5
Private Piers	
Products Loading Pier A.	9.5
Products Loading Pier B.	10.5
Front Dolphin, No. 2	9.2
Limestone Pier	12.0
Front Pier, No. 1	9.5
Front Dolphin	9.5
Front Pier, No. 2	12.0
Limestone Pier	6.0
Scrap Pier	4.5
Soga Scrap Pier	6.0
Soga Products Loading Pier	6.0
Soga Limestone Pier	6.0
Samukawa Pier	5.0
Samukawa Pier	5.5
Samukawa Pier	5.5
Samukawa Pier	5.5
Chiba Thermal Power Pier	9.0
Mobil Oil Dolphin	5.0
Kawasaki Wharf	16.0
Nihon Silo Pier	12.0
Chiba Kyodo Silo Pier	12.0
Higashi Nihon Seito Pier	12.0
Keiyo Lumber Pier	12.0
Mitsubishi Lumber Pier	12.0
Toyo Seiyu Pier	12.0
Ichihara District	
Public Piers	
Ichihara Wharf	7.5
Private Piers	
Showa Electrification Dolphin	9.5
Showa Electrification Wharf	9.5
Showa Electrification Wharf	5.0
Showa Denko Pier	4.5
Fuji Electric Dolphin	9.0
Fujisatusi Pier	6.0
Yoneda Product Pier	4.5
Nippon Cement Pier	9.0
Goi Steam Power Pier	9.0
Goi Steam Power Loading Place	9.0
Front Dolphin	9.0
Manufacture Wharf	12.0
Imodoko Terminal	15.0
Chisso Petroleum Loading place	16.0
Asahi Glass Pier	12.0
Ube Kosan Dolphin	11.0
Kyodo Pier	10.0
Denka Pier	6.0
Wharf No. 1	15.5
Wharf No. 2	16.0
Wharf No. 3	16.0
Wharf for Products	16.0
Fuji Electric Dolphin	9.5
Fuji Sogyo Dolphin	9.0
Maruzen Wharf	5.0–14.0
Idemitsu Pier	16.0
Sumitomo Chemical	10.0
Nihon Rinsan Pier	10.5

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage) 2100–0500 hrs. next morning (130% additional) Sundays/holidays (60% additional).
MEDICAL: No advance notice required unless urgent.
TANKERS:

Berth	Product	Shoreline	Discharge Rate t.p.h.
Kyokuto	Naphtha	12″×1	1,500
	Crude Oil	12″×2	5,000
	Fuel Oil	12″×2	2,000
Maruzen No. 2	Fuel Oil	10″×1	800
	Crude Oil	10″×1	1,500
	Naphtha	6″×1	800
Maruzen No. 10	Fuel Oil	12″×1	1,300
	Naphtha	12″×1	900
Maruzen No. 14	Butadeine (Loading)	10″×1	400
Keiyo Sea Berth (W)	Crude Oil	16″×3	8,000
Keiyo Sea Berth (E)	Crude Oil	16″×3	8,000
Fuji Oil	Crude Oil	12″×2	4,000
	Fuel Oil	8″×1	1,500
	Propane	12″×1	300
	Butane	12″×1	300
Idemitsu Oil No. 1	Crude Oil	12″×2	5,000
	Minus Oil	12″×2	3,000
	Fuel Oil	12″×2	3,000
Idemitsu Oil No. 2	Crude Oil	12″×2	4,000
	Fuel Oil	12″×2	1,500
	Propane	12″×1	1,000
	Butane	12″×1	1,000
Idemitsu Oil No. 3	Fuel	8″×1	800
	Naphtha	6″×1	500
	Lub. Oil	6″×1	500

FRESH WATER: Available by barge.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Carried out by stevedores.
SHIP CERTIFICATES: See "Tokyo".
CUSTOMS ALLOWANCES: Tobacco — 200 cigarettes. Wine and/or spirits — one bottle.
CONSULS: None.
REPAIRS: All major repairs possible.
DRY DOCK: Mitsui Ship Building Yard 500,000 d.w.t. and 300,000 d.w.t. dry docks.
REPATRIATION: Possible.
AIRPORT: About 70 km. to Tokyo Airport.
TIME: Japan Standard Time (135° E.) = GMT plus 9. Permanent.
HOLIDAYS: New Year's Day (January 1st); Attaining the Age of Maturity Day (January 15th); State Foundation Day (February 11th); Vernal Equinox Day (March 21st); Birthday of Emperor (April 29th); Constitution (May 3rd); Children's Day (May 5th); Respect Day for the Aged (September 15th); Autumnal Equinox Day (September 24th); Gymnastic Day (October 10th); Civilisation Day (November 3rd); Labour Thanksgiving Day (November 23rd). Cargo work can be arranged at 50 – 100% extra on basic cost.
POLICE/AMBULANCE/FIRE: Police Tel. 110, Fire and Ambulance 119.
TELEPHONE: Facilities for placing telephones on board only at Chuo Pier.
SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.
AUTHORITY: Chiba Port Control Office.

AGENT: Sub-Agent of Dodwell & Co. Tokyo. Chiba Kaiun Sangyo Co. Ltd., 1-20, 3-Chome,Suehiro, Chiba. Cable: Chibamarine, Chiba. Tel. Chiba (0472) 61-3361. Telex: 3722–230.

ETAJIMA: 34.11 N. 132.29 E. (See Plan)

OPERATORS: Ataka Sekyo Kichi.
LOCATION: Name of berth, Ataka Sekija. Position, Lat. 34° 11′ 30″ N., Long. 132° 29′ 00″ E.
DOCUMENTS:
Certificate of Registry.
Safety Equipment Certificate.
Derating Exemption.
Clearance from Last Port.
10 Crew Lists.
2 Crew Customs Declaration (Japanese Form).
4 Stores Lists.
5 Slop Chest Lists.
1 Quarantine Declaration.
PILOTAGE: Compulsory. Pilot boards in Bungo Channel 3 miles South Seki Saki Lighthouse. Pilot station (33.13 N. 131.54 E.) equipped with light signal – no VHF. Pilot remains on board during pratique operations – also see "Tankers".
ANCHORAGE: See "Restrictions".
RESTRICTIONS: Controlling depths (MLW) are as follows: entrance 20 m.; channel 17 m.; anchorage 17 m.; berth 15 m.; The mean tidal range is 3 m. Nature of bottom is mud. Velocity of current: entrance 1 knot; channel 1.5 knots; anchorage 0.5 knots; berth 0.5 knots. Vessels may berth at any stage of the tide during the day.
MAX. SIZE: 80,000 d.w.t. Length 260 m. Draft 14 m. – 15.5 m. according to tidal conditions. Beam 40 m.
PRATIQUE: Available during daytime only in Kure or Iwakuna quarantine anchorage. Quarantine officers inspect galley, pantry and food stores. Pilot ladder used for boarding.
RADIO: Shimonoseki – Kobe.
TUGS: Two available and advised for berthing and unberthing. One forward and one aft, 3,000 h.p.
MEDICAL: Doctor available.
TANKERS: Pilot berths/unberths vessel.
It is dangerous to navigate at night.

Moorings: Forward	3 headlines	Aft 3 sternlines
	2 breast lines	2 breast lines
	2 spring lines	2 spring lines

Connections: 2 × 12 in. connected and disconnected by shore gang booms not necessary. Max. pressure required by shore is 7 kg/sq.cm.
Pumping rate: 5,000 k/l per hour expected.
Pipeline: Length 131.6 m.; 2 × 24 in.
Gangway: Pilot ladder used as not sufficient room for gangway.
Pollution: Berth is closed by floating pollution retain. Dimension 320 × 56 m.
Ballast: During ballast operations shore personnel remain on board to check for dirty ballast and a motor-boat watches for same purpose. There are no slop tanks or facilities for dirty ballast ashore.
Storage capacity: crude oil, 22,000 k/l × 4 tanks; heavy oil, 22,000 k/l × 2 tanks; refined oil, 22,000 k/l × 2 tanks.

DENSITY: Summer 1020, Winter 1025 average.
FRESH WATER: Available, any quantity, by water barge from Kure, 4 days notice required.
FUEL: Available.
FIRE PRECAUTION: Standard regulations.
REPAIRS: Facilities available – shore steam and electricity available.
DRY DOCKS: Available, lifting capacity 500,000 tons.
STORES: Laundry and provisions available.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits and some beer.
Customs officers inspect crew cabins.

FUKUYAMA: 34.29 N. 133.21 E.

Located on central Northern coast of Setonaikai (Inland Sea) and on border of Hiroshima Prefecture and Okayama Prefecture.
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.
1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 14″ N. 131° 03′ 12″ E.
APPROACHES: Approach channel: length: (from quarantine anchorage to "A" berth) 7,000 m.; depth: 16 m. below low water; width: 350 m.
Branch channel: (leading to NKK loading berths) depth: 11m. below low water; width: 200–300 m.
ANCHORAGES: Quarantine anchorage position: 34° 22.5′ N. and 133° 26.3′ E., an area of 750 m. radius.
MAX. SIZE:
NKK's Private Berths.

Berth	*Length and depth in metres*	*Max. vessels acceptable in d.w.t.*	*Unloaders*	*Cargoes handled*
Raw Materials Berth				
"A"	300 17	150,000	4 gantry cranes each with 1,500 t.p.h. discharging capacity	iron ore and coal
"B"	280 16	100,000		
"E"		90,000		
"F"	180 11	20,000	2 level-luffing cranes each with 300 t.p.h. discharging capacity	Coal and other raw materials except iron ore
Mooring buoy	— 11	25,000	Ship's gear	Pig iron and scrap
Scrap berth	180 13	35,000	2 level-luffing cranes each with 20 tons lifting capacity	Pig iron and scrap
Export Berths				
Berth 1	234 11	30,000	2 level-luffing cranes each with 30 tons lifting capacity	Steel coil and plate
Berth 2	230 13	35,000	1 level-luffing crane with 30 tons lifting capacity and 1 gantry crane with 20 tons lifting capacity	Steel coil and plate
Pipe berth	200 13	35,000	1 level-luffing crane with 20 tons lifting capacity	Steel pipe

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Deratting Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound, to Nagasaki Radio respectively.
TUGS: "Nikko Maru" and "Kofuku Maru" (both 3,000 h.p.) are available in the Fukuyama Harbour. Additional tugs are available from other Inland Sea terminals.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Summer 1016–1022. Winter 1025. The density not much affected by tide, which is maximum 3.84 m.
FRESH WATER: Available at any berth. Supply capacity 50 t.p.h. However, for a vessel moored to a buoy or at anchorage, water barge comes from Onomichi.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice. Bunkering barge comes usually from Mizushima (31 miles East of Fukuyama) or from Kobe (97 miles East of Fukuyama). Therefore, an advance order is required.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Only minor repairs.
DRY DOCK: None. Available at Innoshima or Mukayima.
REPATRIATION: Possible.
AIRPORT: Okayama airport 70 kms. from Fukuyama which takes about 2 hours by car. 2 flights daily.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Report to Guardmen's office located at West Gate of Nippon Kokan.
TELEPHONES: No arrangements for placing telephone on board. Private telephones connecting with offices in the compound of the Fukuyama Works are placed at each of the raw material berths.
For vessels alongside export berths, private telephone available at foremen's office located on berth.
GENERAL: Fukuyama is a local and new port, developed along with the expansion of Nippon Kokan, Fukuyama Steel Works.
Ship repairs (except small ones) for machinery, radio, radar, etc., are all arranged by firms located in Tokyo, Osaka and Kobe.
SERVICES: Hold cleaning. Labour comes from Mizushima.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo, Nissan Shipping Co. Ltd., Port Bldg., 1, Kokan-cho, Fukuyama-shi, Hiroshima-ken. Cable address: Sunsenpaku Fukuyama. Domestic Telex: 6436–11; 6436–12 Nissan J. Tel.: Fukuyama (0849) 41–0535 and 0536.

FUSHIKI: 36.49 N. 137.03 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
6 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agents will prepare Inward/Outward Declaration, 2 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot available any time during daylight. Not compulsory. No telegraphic address of Pilot station, therefore, direct advice to local Agent always required. Pilot meets vessels 209°, 2 miles off leading light, thence takes vessel to Quarantine Anchorage ground. Due to many fish-nets on both sides of fairway if requiring to come into Quarantine Anchorage without taking Pilot, necessary to advise Agent in advance. In case of bad weather and need to await outside port, recommend cruising in Toyama Bay until sea abates. Bay area too deep to anchor and also danger of fish-nets. When approaching position for Pilot, give exact ETA to Agent by using Niigataradio and/or VHF to Fushiki Harbour Master. Small wooden Pilot boat painted yellow. No particular light or sound signals required.

ANCHORAGE: Safe at all seasons with depth from 8 to 11 m. Sand and clay bottom. Room at anchorage for at least 6 vessels over 5,000 gross tons.
RESTRICTIONS: Pilot not available during darkness. No restrictions on tide, because small tide in all seasons. If draft over port limitation, vessel enters port after making adjustment by lightening in Outer Harbour.
MAX. SIZE: Length 180 m., draft 31 ft. in Summer and 30 ft. in Winter. However, depth of port not always definite, being a river port and dredging operations always carried out to keep depth all year round. Tidal range is maximum 0.45 m.
HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique.
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination certificates.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: (Also see "Pilotage".) Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Tugs normally join vessel at port entrance, but sometimes in Outer Harbour for large vessels. Narita-Maru (2,060 h.p.) and Nihonkai-Maru (1,800 h.p.) provide lines, free of charge and Raicho-Maru (760 h.p.) uses ship's line. Used only when Pilot on board.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Left No. 1 Wharf	depth 9.5 m.
Left No. 2 Wharf	depth 9.5 m.
Left No. 3 Wharf	depth 5.0 m.
Right No. 1 Wharf	depth 7.5 m.
Right No. 2 Wharf	depth 7.5 m.
Right No. 3 Wharf	depth 10.0 m.
Right No. 4 Wharf	depth 10.0 m.
Right No. 5 Wharf	depth 7.0 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Average density between 1015 and 1019 in all seasons.
FRESH WATER: Available, from left wharf No. 1 and 2, average 45 t.p.h. In other berths, to be supplied by barge, average 50 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker ports at maximum 7 days prior notice.
DEVELOPMENTS: Right No. 4 wharf reconstructed, now 175 m. long, 10 m. deep, also Right No. 5 wharf, 130 m. long, 7 m. deep. Left No. 1 pier under reconstruction, when completed will be 185 m. length, 10 m. depth. Left No. 2 pier to be reconstructed and completed to same size as Left No. 1.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: No dry docks. Nearest available in Toyama.
REPATRIATION: Possible.
AIRPORT: Toyama Airport about 35 km distance. two regular services a day. ANA only.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: 1st May and New Year's Day.
POLICE/AMBULANCE/FIRE: Police, Fushiki Police Station, Takaoka (0766) 44–1500; Ambulance, Fushiki Fire Station, Takaoka (0766) 44–1122; or 119; Fire, Fushiki Fire Station, Takaoka (0766) 44–1122.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Hold cleaning available.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Toyko. Fushiki Kairiku Unso Co. Ltd., 6–6, Fushiki-Minatomachi, Takaoka-shi. Tel. Takaoka (0766) 44–1300. Telegraphic address "Fushikikairiku Fushiki". Telex: 5155–571/572.

HACHINOHE (Hachinoe): 40.33 N. 141.30 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilotage compulsory, but arrangeable at Master's request. Pilot always arranged by Agent if Master requires, and vessel required radio Agent ETA 24 hours before arrival. Pilot boat has no facility to communicate with ship, but flies pilot flag "H". Pilot boards at Quarantine Anchorage (Lat. 40° 32′ N. Long. 141° 32′ E.).
ANCHORAGE: Open sea anchorage. Depth of water: 10–15 m.
RESTRICTIONS: Pilot arrangeable only in daytime for entry.
MAX. SIZE: Draft: 13.00 m. LOA: 296 m. Breadth: no restriction.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days., Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agents prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi and Northbound to Nagasaki Radio respectively.
TUG: Tug joins vessel inside breakwater.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Public:		
Wharf	*Depth*	*Berths*
(Cargo)		
Shirogane	10.0 m.	2
Shirogane	7.5 m.	1
Hachitaro	13.0 m.	2
	10.0 m.	2
	7.5 m.	2
(Tanker)		
Kawaragi	6.5 m.	2
Private:		
(Cargo)		
Mitsubishi	10.0 m.	1
Hachinohe	10.0 m.	1
Nitto Chemical	6.5 m.	1
(Tanker)		
Shell, Mobil, Idemitsu, Daikyo	6.5 m.	1

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: 1025.
FRESH WATER: Available from wharf and barge. 20 t.p.h. from barge (capacity: 60 tons). 30 t.p.h. from wharf. Overtime service: plus 30% for 1700–2200 hrs. and Sunday/holiday. Plus 50% for 2200–0500 hrs.
FUEL: No bonded fuel oil, but domestic diesel oil.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIR: Minor repairs such as welding, piping and lathing.
REPATRATION: Possible.
AIRPORT: Nearest airport at Misawa.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: 1st May, 21st August.

POLICE/AMBULANCE/FIRE: Police 43-4141 (Headquarters); 33-0237 (Water Police Station); Ambulance 119; Fire 119.
TELEPHONE: No facilities for placing telephones on board.
GENERAL: 1. Discharging ex-gearless vessel not available at anchorage because of no facilities. 2. In case vessel is moored to buoy, vessel required to prepare anchor chain (port or starboard anchor chain) prior to ship's arrival.
SERVICE: Surveyor: Tally. Hold cleaning. Radar service by Nippon Radar Service Co. Notary public.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
SHIPMASTERS REPORT: June 1975.
Pilotage: Compulsory. The Quarantine Anchorage is position 40° 32.9′ N. 131° 32.7′ E., bounded by a circle radius 2.5 cables. In view of the considerable new development vessels should obtain Japanese chart No. 65 if possible. Vessels navigating on B.A. charts can be met by pilot at a position 2 miles north of Same Kaku lighthouse, by prior arrangement.
Restrictions: Vessels may sail any time.
Max. Size: Draft 9.5 m. LOA 170 m. breadth no restriction (June 1975).
Health: Radio pratique can be obtained by all vessels holding valid Japanese Sanitary Inspection Certificate. (This rule applies to all Japanese Ports).
Tugs: A number of tugs are available.
Berthing: A number of new berths are now available. Dredging is in progress and available drafts can be expected to increase.
Airport: Two flights per day.
Developments: Reclamation, expansion, dredging etc., in progress.
AUTHORITY: Port Administration Office.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Abeki Shokai, c/o Nishimura Tekko K.K. 27 Ningyozawa, Shirogane-cho Hachinohe-shi. Cable Address: "Abe Hachinohe". Tel.: 0178-33-5560.

HAKATA: 33.36 N. 130.24 E. (See Plan)

DOCUMENTS:
Customs: When vessel arrives direct from foreign port, Customs officials will board vessel for search. The following documents are to be submitted.

Crew list, Passenger list, Store list, Manifest of crew personal effects (must be signed by individual crew member), Arms and ammunition list, Narcotics list, List of ports of call on current voyage, Discharging cargo manifest, Through cargo manifest, Declaration inward/outward (Form No. C2000).

The following will be checked on board:

Ship's registry, Last port clearance.

When vessel comes from Japanese port, Customs officials will not attend on board, except special case. The Master or Agents are to attend at Custom House for entry formalities with the following documents:

Discharging cargo manifest, Through cargo manifest, Declaration inward/outward, Ship's registry, Last port clearance, Documents entrusted with the Master by at previous port.

On vessel's departure, a clearance is issued by Customs, after confirming payment of tonnage dues.
Immigration: Immigration officials board vessel on her arrival in port to examine passports, discharge books and/or other equivalent travel documents and provide a 72-hour landing pass for crew members and passengers. One copy each of crew list and passenger list are required by them. Providing vessel's Agents with a Crew List beforehand will be a great help in expediting immigration business on vessel's arrival. When vessel stays in port more than 72 hours, the landing passes will be extended every 72 hours on application.

In the event that crew members, without entry visaes, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men have been booked, or unless the vessels to which they are to be transferred, arrive in Japan within 5 days.
PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks at quarantine anchorage; position 33° 38′ N. 130° 19′ 30″ E. Request for Pilot made through ship's Agent, Master reporting ship's ETA by radio giving accurate time of arrival at least 24 hours prior arrival, also any subsequent change. No VHF. In the event of rough sea, harbour tug-boat will be used.
ANCHORAGE: No anchorage in port.
RESTRICTIONS: No restrictions if vessel in free pratique and draft less than 10 m. No tide.
MAX. SIZE: No restrictions of length, breadth. Draft 10.7 m.
HEALTH: (a) Quarantine station: Sea area surrounded by the following lines.

1. The line connecting between the top of the Nokono-Shima and point "A" which is located on the sea in the direction of 90° and at the distance of 2,540 m. from the top of the Nokono-Shima. (The parallel of 33° 38′ 00″ N.)
2. The line connecting between point "A" and point "B" which is located on the sea in the direction of 0° and at the distance of 1,750 m. from point "A". (The Longitudinal line of 130° 20′ 00″ E.).
3. The line drawn towards the Nokono-Shima in the direction of 270° from point "B". (The parallel of 33° 37′ 06″ N.).
4. The coast line of the Nokono-Shima.

The centre of the quarantine anchorage: 33° 37′ 30″ N., 130° 19′ 30″ E.

(b) Quarantine service is rendered from sunrise to 1 hour before sunset.
(c) 'Q' flag should be hoisted until free pratique is granted.
(d) Vessels exceeding 20,000 gross tonnage can undergo quarantine on application when they berth alongside wharf.
(e) When vessel arrives from plague infected or suspected area within 10 days after she left such place, a 24-hour special quarantine is required. All sanitary scuppers must be closed and garbage not thrown overboard after vessel reaches 60 miles off inland sea areas.
(f) Radio pratique is applicable.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi and Northbound to Nagasaki Radio respectively.
TUGS: 2 tugs, 1,000 and 800 h.p. Normally join vessel when approaching wharf. Ship's lines used. If vessel over 15,000 g.r.t. an additional tug of 1,500-3,200 h.p. should be ordered from Moji or Wakamatsu.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Wharf	*Length (m.)*	*Depth (m.)*	*Capacity (g.t.)*
Central Pier			
Quay No. 5 and 6	362	10.0	15,000 × 2
Quay No. 4	185	10.0	10,000 × 1
Quay No. 3	165	9.0	10,000 × 1
North Quay	400	5.5	2,000 × 4
Quay Nos. 9, 10 and 11	436	7.5	5,000 × 3
East Quay	160	6.5	3,500 × 1
Suzaki Pier			
Quay Nos. 3 and 4	555	11.0	20,000 × 2
Quay No. 2	185	11.0	15,000 × 1
Quay No. 1	172	7.5	5,000 × 1
West Quay	467	5.5	2,000 × 5
Quay Nos. 5 and 6	260	7.5	5,000 × 2
Hakozaki Pier			
Quay No. 5	240	12.0	30,000 × 1
Quay No. 4	185	10.0	15,000 × 1
Quay Nos. 1, 2 and 3	390	7.5	5,000 × 3
Quay Nos. 6, 7, 8 and 9	520	7.5	5,000 × 4

CARGO HANDLING FACILITIES:
Lighters: 2, Owners Mitsubishi Warehouse Co., tonnage 490
Automatic grain discharge facilities: Type: Pneumatic conveyor.

No.	*Capacity*	*Location*	*Owners*
1	150 t.p.h.	Central pier	Tofuku Flour Mills
1	100 t.p.h.	,, ,,	Municipal Office
2	210 t.p.h. ea.	Suzaki pier	Hakata-Ko Silo Co.
2	400 t.p.h. ea.	,, ,,	Municipal Office
1	100 t.p.h. ea.	,, ,,	Nisshin Flour Mills

Shore cranes:

No.	*Capacity*	*Location*	*Owners*
4	10 tons	Central pier (movable)	Ryugumi Sankyu Unyu Hakata Unyu Hakko Unyu
2	8 tons	Central pier (movable)	Nippon Express Hakata Koun
3	7 tons	Central pier (movable)	Ryugumi Hokushin Unyu Sogo Unyu
1	5 tons	Suzaki pier (movable)	Fukuoka Soko
1	5 tons	Suzaki pier (movable)	Fukuoka Soko
1	4 tons	Suzaki pier (movable)	Mitsubishi Soko

Average performance of loading/unloading:

Discharging:	Grain in Bulk	100/150 t.p.h.	by p. conveyor
		50 t.p.h.	by winch
	Crude rubber	30 t.p.h.	
	Sugar in bulk	50 t.p.h.	
	Lumber	30/35 t.p.h.	
	Frozen Horse Meat	20/25 t.p.h.	
Loading:	Fertilizers in bulk	60 t.p.h.	
	Tyres & tubes	60/65 Ms/tons	

Grain silos:

No.	*Capacity tons*	*Location*	*Owners*
46	15,000	Suzaki pier	Hakata-Ko Silo Co.
30	7,500	Suzaki pier	Nisshin Flour Mills
2	3,800	Central pier	Tofuku Flour Mills
1	40,000	Suzaki pier	Hakata-Ko Silo Co.
1	20,000	Suzaki pier	Hakata-Ko Silo Co.
1	17,000	Suzaki pier	Kamigumi Silo
1	40,000	Suzaki pier	Genkai Silo

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Normal working hours: 0800 to 1700 hrs.

Overtime work is possible by applying to customs at the following fees:

0000–0500 hrs.	350 Yen per hour
0500–0830 hrs.	
1700–2200 hrs. and Sundays and Holidays	300 Yen per hour
2200–2400 hrs.	350 Yen per hour

No work can be arranged for on 31st December to 3rd January.
MEDICAL: No advance notice required unless urgent.
DENSITY: About 1024.
FRESH WATER: No water barge available. Hydrants: at Central and Suzaki Pier. Rate of delivery: 10/20 t.p.h.
FUEL: Bonded bunker oil is not available at this port, but is to be lightered from other port. An adequate notice should be given to the suppliers in order to avoid delay in replenishment. The rate of delivery from oil barge is 80/100 t.p.h.

Suppliers	*Installation*	*Required notice*
Shell Sekiyu K.K.	Shimonoseki	2 days
Esso Oil co.	Shimonoseki	2 ,,
	Sakai	5 ,,
Mobil Oil Co.	Kokura/Moji	2 ,,
	Oita	3 ,,
Caltex Oil Co.	Shimonoseki	2 ,,
	Kudamatsu	3 ,,
Mitsubishi Shoji	Shimonoseki	2 ,,
	Iwakuni	3 ,,
	Kanokawa	3 ,,
C. Itoh & Co., Ltd.	Matsuyama	4 ,,
	Mizushima	4 ,,
Nissho Co.	Shimonoseki	2 ,,
	Matsuyama	4 ,,
Mitsui & Co., Ltd.	Oita	3 ,,
Nippon Mining Co.	Mizushima	4 ,,
Kanematsu Gosho	Kokura	2 ,,
	Tokuyama	3 ,,
Idemitsu & Co., Marubeni Iida Co. Sumitomo Shoji	Tokuyama	3 ,,

FIRE PRECAUTIONS: Modern chemical fire service boat "Hiryu Maru" (30 tons).
CONSULS:
Hon. British Consulate, Kitakyushu Tel. 093-331-1311
American Consulate General, Fukuoka Tel. 092-751-9331
Republic of China Consular Agency, Fukuoka Tel. 092-761-3458
Republic of Korea Consulate General, Fukuoka Tel. 092-771-0461
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: American Consul, Fukuoka, tel. 092–75–9331.
REPAIRS: Local workshop (fishing-boat repairs) available only for small repairs, so Agent for ocean-going vessel in Hakata arranges repairs from Moji or Tobata.
REPATRIATION: Possible.
AIRPORT: Fukuoka airport: Distance: about 20 minutes from Hakata port by car. JAL Domestic regular airline for Tokyo and Osaka. ANA Domestic regular airline for Tokyo, Osaka. Also, CATHAY and JAL airlines for Taipei, Hong Kong 4 times a week. Korean and JAL airlines for Seoul and Pusan daily except Sunday.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police/Ambulance tel. 110; Fire 119.
TELEPHONES: May be placed on board if 48 hours notice given.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Harbour Bureau.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., Fukuoka Branch, c/o Mitsubishi Warehouse Co. Ltd., 2-30, Okihama-cho, Fukuoka. Telegraphic address "Ringer Fukuoka". Tel. 092–271 1292. Telex: 722-684 stating "For Ringer Hakata"

HAKODATE: 41.47 N. 140.46 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory, but in practice is necessary. Pilots available 24 hours a day and vessels able enter and leave port day and night. Pilots board about 1.5 miles S.W. of Breakwater Lt. Ho. Pilot-boat is small boat carrying flag "H".

The limit of Hakodate piloting district is the sea area surrounded by a line drawn from Obana Misaki to Kattoshi Misaki and the coastline.
ANCHORAGES: Quarantine anchorage outside Breakwater and care should be taken not to foul fishing nets. Good anchorage inside breakwater at East side of section 3 – depth 11 to 13 m.
RESTRICTIONS: Quarantine and Customs business between 08.00 and 17.00 hours only.
MAX. SIZE: Tankers up to 75,000 d.w.t. at S.B.M. Max. draft 13 m. Max. L.O.A. 250 m.

(a) Buoy	No. 1 Buoy	6,000 g.r.t.	
	No. 2 ,,	8,000 ,,	
	No. 3 & No. 4 ,,	10,000 ,,	
(b) Pier & Wharf	*Depth*	*Length*	*Capacity*
Central Pier (South side)	8 m.	133 m.	6,000 g.r.t. (1)
,, (North side)	9 m.	171 m.	8,000 ,, (1)

PRATIQUE: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.
If a crew or passengers on board do not possess Valid Smallpox Vaccination Certificates.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Two tug-boats available for big ships: m.s. "Hakodate Maru" 107 g.t. 800 h.p. (Hakodate Municipal); m.s. "Soryu Maru" 150 g.t. 1,100 h.p. (Kyodo-Office) Ferry Boat Co. Tug-boat waits and joins vessel near the appointed berth. Tug line generally used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's agents mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage) 2100–0500 hrs. next morning (130% additional) Sundays/holidays (60% additional).
MEDICAL: No advance notice required unless urgent.
SINGLE-BUOY MOORING: Asia Oil Company, sea berth suitable for up to 75,000 d.w.t. at Imodco Buoy.
Position: 41° 48′ 08″ N. 140° 40′ 57″ E.
Soundings: At site 15.5 m. In approaches to site, more than 15.5 m. The approach to terminal is free from obstructions.
There is one 20-in. crude line running 2,000 m. from shore to the buoy, and about 500 m. from shore line to the storage tanks.
Mooring: There is no night mooring. Unmooring is carried out from 0600 till 2400 hrs., and may be done by the Master of the ship without a Pilot.
A mooring/unmooring gang is provided for by Agent. Two launches and one tug are in attendance at the mooring. One launch will keep the hose clear while the other handles the lines. The tug is standing by and only pushes against bow or near the stern to keep the head of the vessel in position whilst mooring.
At least six good mooring lines are required, preferably each line to its own bollard. The lines are run single to the buoy. The position of the ship's bow from the buoy is about 40 m., when the distance from the buoy to ship's manifold is about 360 ft.
When mooring, it is requested that the propeller is completely stopped or otherwise turned astern.
Both bow anchors are to be hove well up in the hawse pipe and properly secured before reaching the buoy. Anchors are never to be used while on the buoy. They may foul the buoy's mooring cables and pipe-line on the bottom if released.
Floating Hose: There is one set of 12-in. floating hose for the discharge of crude only. The floating hose is about 600 ft. long from the buoy's manifold. The last two lengths are floating in doughnut-shaped plastic floats. The end is marked with an unlit marker buoy.
The hose connections are always made to the port manifold and are lifted with ship's gear. The hose when full of cargo and equipment weighs over one and a half tons. Information is required of the distance from ship's bow to ship's manifold, and the distance from ship's side to ship's manifold prior to arrival.
Standard flanges are used on the hose. OD 19 in. diameter of bolt-circle 17 in. with 12 bolt-holes size 0.875 in.
Discharging: The discharging should be arranged in such a way as to be able to take sufficient ballast into ship's tanks, when about half way during discharge; to be able to get the ship's head down to prevent the vessel from veering too widely, and run over the hose near the buoy, in case of unfavourable conditions.
Maximum allowed backpressure by shore is about 10 kg/sq.cm. During the discharge the main engine must not be immobilised as it may be used to keep the vessel clear of the buoy.
Stand-by Men: While on the buoy, the vessel will be required to

provide sleeping quarters for four men, this includes the foreman who will remain on board throughout the entire operation. It is requested that the discharge officer be provided with meals. The other men are supplied with food from shore.

Discharge Rate: 1,800 k/l per hour.

DENSITY: Average 1025.

FRESH WATER: Available at piers ex-hydrants and by barge at anchorage. Supplier, Hakodate Municipal Office.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

Fuel supplies for Hakodate are generally lightered from Tokyo Bay area and delays can be caused by weather conditions.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Custom Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.

DEVELOPMENTS: A new berth will be established for VLCC's in 1977.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Hakodate Dockyard Co., undertakes hull and engine repairs.

DRY DOCKS: No. 1. Capacity 15,000 g.t., length 180 m., breadth 22.45 m. depth 6 m. No. 2. Capacity 9,000 g.t., length 140 m., breadth 8 m., depth 6 m.

AIRPORT: Distant 20 min. by car.

TIME: GMT plus 9. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; fire 119.

TELEPHONES: Arrangeable on board.

SHORE LEAVE: Local Immigration officers issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port Administration Office.

AGENT: Sub-Agents of Dodwell & Co., Tokyo. Narasaki Sangyo Co., Ltd. c/o Kyoei Unyu Co., Ltd., No. 5–22, Kaigan-cho, Hakodate, Hokkaido. Cable address: "FUNEKYOEI HAKODATE". Domestic Telex: 9925–64. Tel. Hakodate (0138) 42–4121.

HIMEJI: (including Hirohata, Shikama, Mega and Aboshi): 34.47 N. 134.41 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: See "Kobe". Vessels take Inland sea Pilot off Wada, Hesaki or Sekisaki; or from ports of Inland sea. No exact Pilot station and no checking point at port of Himeji (Mega, Shikama, Hirohata and Aboshi) but Agents arrange Pilot when vessel approaches upon receiving cable giving 24 hours advance notice. Pilot boarding positions as follows: Mega 34° 44′ N. 134° 42′ 15″ E. Shikama 34° 45′ N. 134° 39′ E. Hirohata 34° 44′ N. 134° 37′ E. Aboshi 34° 44′ N. 134° 34′ 10″ E.

No strict location of anchorage for vessel awaiting a Pilot in Himeji area, but should be as close as possible to port according to draft and communication.

ANCHORAGE: No strict boundary areas for anchorages. Anchor as close as possible to the port according to draft.

RESTRICTIONS: At ports of Mega, Shikama and Aboshi, no Pilot boarding between sunset to sunrise. Hirohata Pilot will board from sunrise to 22.00 hours for vessels less than 10,000 d.w.t. for entry, and less than 15,000 for departure, for piers No. 4, 5, 6, 7, 9 and 10 but other berths only from sunrise to sunset.

MAX. SIZE: Draft restrictions as follows:

Mega 11.80 m., Shikama 8.80 m., Hirohata 13.0 m. for central pier, 7.50 m. for Kamota pier (Pier No. 1–7), 9.45 m. for Tsuruta pier (Pier No. 10–14). Aboshi 9.0 m.

Sea buoy mooring, max. draft 19 m. Max d.w.t. 250,000 tons.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards. Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.

TUGS: Tug(s) normally join vesel when approaching, or at anchorage. Always use tug's lines without charges.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Wharf length*	*Max. LOA*	*Max. Draft*
Shikama			
Public pier No. 2	130 m.		7.5 m.
Public pier No. 3	170 m.		10.0 m.
Public pier No. 4	170 m.		10.0 m.
Public pier No. 5	170 m.		10.0 m.
Satetsu pier	200 m.	160 m.	9.0 m.
Buoy No. 1	160 m.	130 m.	9.0 m.
Buoy No. 2	220 m.	160 m.	9.0 m.
Mega			
Idemitsu Oil Jetty			12.0 m.
Aboshi			
Buoy No. 1		160 m.	9.0 m.
Buoy No. 2		180 m.	9.0 m.
Hirohata			
Yumesaki Wharf (Pier No. 1–2)	280 m.		7.5 m.
Kamoda Wharf (Pier No. 3–7)	722 m.		7.5 m.
Central Wharf (Pier No. 9)	315 m.	265 m.	13.0 m.
Tsuruta Wharf (Pier No. 10–12)	503 m.		9.45 m.
Shioiri Wharf (Pier No. 13–14)	320 m.		9.45 m.
Oil Berth	140 m.		7.5 m.
Buos			9.5 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Idemitsu Kosan Kaisha Ltd., Himeji oil jetty where 1 berth only and max. 11.8 m. draft allowed. Shore discharging facilities two 12 in. diameter hose connections which connect to 18 in. diameter line for tank hoses. Acceptable max. 5 kg/sq.cm. on hose gauge, discharge rate abt. 2,000 l/t per hour. Discharge rate at the Sea Berth is 10,000 t.p.h. through 2×19 in. lines.

Note: Idemitsu Kosan Kaisha Ltd., Himeji, require following information prior to arrival for smooth berthing and connecting hoses: Height from sea to deck; Length from vessel's side to underneath of hose connections; Height from deck to connection of line; Diameter of connection.

DENSITY: Average density between 1025 and 1026 in Winter season and 1018 and 1020 in Summer season.

FRESH WATER: Idemitsu Oil Jetty, Shikama public pier and Hirohata pier able to supply fresh water from shore, but *No Water Barge available at Port of Himeji* therefore not able to supply fresh water at Satetsu pier (Shikama), Shikama buoy, Aboshi buoy or outside anchorage.

Port	*Average rate of delivery*
Mega	20–30 m/t per hour
Shikama	15–20 m/t per hour
Hirohata	15–20 m/t per hour

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passenger or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CARGO GEAR: See "Certificates" but no special requirements.

CONSULS: No consuls at Himeji, Shikama or Hirohata.

REPAIRS: Most minor deck and engine repairs available at port of Himeji; in case special technician required, should be called from Kobe.

DRY DOCKS: No dry dock available at port of Hijemi, Nearest dry dock Ishikawajima-Harima Heavy Industries Co. Ltd., Aioi, who have following dry docks. Also see Aioi.

	LOA	*LBP*	*Breadth*	*Depth*	*Capacity*
Dock No. 1	238 m. (780′9″)	230 m. (754′7″)	33 m. (108′3″)	5.5 m. (18′)	73,000 d.w.t. (LT)
Dock No. 2	156.1 m. (512′1″)	145 m. (475′8″)	19.5 m. (63′11″)	4.5 m. (14′9″)	14,000 d.w.t. (LT)
Dock No. 3	341 m. (1,118′9″)	328 m. (1,076′1″)	54 m. (177′1″)	6 m. (19′8″)	300,000 d.w.t. (LT)

REPATRIATION: Possible.

AIRPORT: About 60 km. to Irami airport. Regular services.

TIME: GMT plus 9. No alterations made to clocks during year.

HOLIDAYS: At Aboshi, no work on 1st and 3rd Sunday. At Shikama, shore crane, no work on 1st and 3rd Sunday but gangs available for discharging and loading.

POLICE/AMBULANCE/FIRE: Police (Shikama) Tel. 35–1441; Ambulance (Shikama) 119 or 35-0119; Fire (Shikama) 119 or 35-0119.
TELEPHONE: No facilities for placing telephones on board.
GENERAL: No quarantine available at port of Himeji, therefore pratique to be obtained at other ports.
SERVICES: Tally, laundry, daily provisions by ship chandler available locally. All other service from Kobe or Osaka.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: See "Amagasaki".
AGENTS: Sub-agents of Dodwell & Co., Tokyo. Shikama Kalun K.K., Minatomachi, Shikama-Ku, Himeji-shi. Tel. Himeji (0792) 35-0912. Telegraphic address "Shikamakaiun Himeji".

HIROSHIMA: 34.20 N. 132.25 E.

DOCUMENTS: See "Yokohama".
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGES:

Anchorage	Location	From Ujina lighthouse Radius	m.	Conditions	Note
"A"	N. 34.20′59.5″	56°	2,510	Draft – below 6 m.	
	E. 132.29′17″		180	Length – below 120 m.	
				Necessary P & S Anchor	
				Draft – below 7 m.	
"B"	N. 34.20′57″	52°	2,200	Length – below 120 m.	
	E. 132.29′02.5″		180	Same as "A"	
				Draft – below 8 m.	
"C"	N. 34.20′45″	67°	2,467	Length – below 150 m.	
	E. 132.29′24″		180	Same as "A"	
				Draft – below 10 m.	
"D"	N. 34.20′35.5″	53°	1,070	Length – below 150 m.	Load & unload.
	E. 132.28′28″		180	Same as "A"	Logs.
				Draft – below 12 m.	
"E"	N. 34.20′22.5″	73°	910	Length – below 150 m.	Load & unload.
	E. 132.28′29″		200	Same as "A"	Logs.
				Draft – below 12 m.	
"F"	N. 34.20′09″	100°	890	Length – below 150 m.	Load & unload.
	E. 132.28′29″		200	Same as "A"	Logs.
				Draft – below 12 m.	
"G"	N. 34.19′57″	116.5°	1,190	Length – below 150 m.	Load & unload.
	E. 132.28′36″		200	Same as "A"	Logs.
				Draft – below 12 m.	
"H"	N. 34.19′45″	125.5°	1,150	Length – below 150 m.	Load & unload.
	E. 132.28′44″		200	Same as "A"	Logs.
"I"	N. 34.19′47″	158°	900		
	E. 132.28′08″		300		
"J"	N. 34.19′28″	162°	1,500		
	E. 132.28′18″		300		
"K"	N. 34.19′17″	122°	3,280		Ship repairs.
	E. 132.29′43″		700		
"L"	N. 34.18′58″	132°	3,430		Ship repairs.
	E. 132.29′34″		300		
"M"	N. 34.20′14″	230°	3,550		Ship repairs.
	E. 132.25′35″		300		
"N"	N. 34.19′56″	262°	3,820		Ship repairs
	E. 132.25′26″		300		

Ujina Lighthouse is at South of Ujina-islet 34° 20′ 14″ N.: 132° 27′ 55″ E.
RESTRICTIONS: Depth of approach to berth about 10 m.
MAX. SIZE: Wharf (Hiroshima Prefecture Public Berth) No. 1 length 166 m., draft 9.7 m. (10,000 g/t vessel). No. 2, length 166 m.

Gaibo-Ganpeki (wharf for ocean-going vessel) length 337 m., depth alongside about 10 m., max. draft acceptable 9.70 m.
HEALTH: See "Kobe".
TUGS: Join vessel at quarantine anchorages. Tug's lines used.
TIDES: Max. (spring tide) 3.9 m. Min. (neaps) 0.57 m.

Rate of current at flood tide generally 0.25 knot to N.E.; 0.5 knot at ebb tide to S.W. South area of Togeshima and Kannonsaki 0.25 knot at flood to S.S.E., and 0.5 knot at ebb tide to N.N.W.
FRESH WATER: By water barge (capacity: 330 m/t available). Additional charges made for overtime i.e. after 5 p.m., and Sunday, holidays and Saturday afternoon.
CONSULS: No consul in Hiroshima. Nearest Osaka or Kobe. Marine note of protest can be attested by local notary public.
REPAIRS: All types of deck, electrical and engine repairs.
DRY DOCKS: Largest dry dock Taibi dry dock, Mitsubishi-Hiroshima Works, L 154 m. B 22.00 m. 10,300 g/t. Kanawa dry dock and Ujina dry dock available for 3,500 g/t and 1,500 g/t respectively.
AIRPORT: Hiroshima airport. Only domestic airlines every hour to Osaka and Tokyo.
POLICE/AMBULANCE/FIRE: Police (for emergency) 110; Ambulance 119; Fire 119.
TELEPHONE: No arrangements for placing telephones on board.
SERVICES: Any navigational apparatus can be serviced on request, Cargo holds cleaning services can also be carried out, but tank-cleaning and other services are to be arranged from Kobe.
REGULATIONS: Many seaweed and oyster beds near anchorages, therefore oil pollution precautions strictly observed.
AUTHORITY: Hiroshima-Kencho.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Naigai Unyu Co. Ltd., 23–36, 2-chome, Kaigan-dori, Ujina Hiroshima-shi, Hiroshima-ken. Cable address: Naigai Hiroshima. Domestic Telex: 652–963 Naigai Hir. Tel.: Hiroshima (0822) 54–2421.

HITACHI: 36.30 N. 140.37 E.

DOCUMENTS: and all general information, refer to "Onahama".
PILOTAGE: Not compulsory. Pilot boards in approximate position 36° 28′ 39″ N. 140° 38′ 40″ E.
MAX. SIZE: Draft, 8.50 m. limited by channel depth.
PRATIQUE: If arriving from abroad, vessel should obtain pratique at Onahama.
TUGS: One tug of 180 h.p. available.
BERTHING:

Hitachi Pier (A)	depth 7.5 m.
Hitachi Pier (B)	depth 7.5 m.
10,000 tons Wharf	depth 7.5 m.
10,000 tons Wharf	depth 9.0 m.

AUTHORITY: Port Administration Office.
AGENTS: See "Onahama".

HOSOSHIMA: 32.25 N. 131.41 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Telegraphic address of pilot station "Pilot Hososhima". 48 and 24 hours advance notice of ETA required, and any change in ETA. Pilot boards at Hososhima Quarantine anchorage location, Hosohima lighthouse N.E. one mile off, position 32° 25′ 50″ N. 131° 41′ 53″ E.
ANCHORAGE: Refer Japanese chart No. 1223 (Ozue-wan and Hososhima-Ko).
RESTRICTIONS: Strictly no entry after sunset.
MAX. SIZE: Max. permissible LOA 170 m. and draft 31 ft. 6 in.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
TUGS: Join vessel in position 32° 26.5′ N. 131° 39.5′ E. Tug's lines to be used.
BERTHING:

Industrial Port	
Wharf No. 1	depth 10.0 m.
Wharf No. 2	depth 10.0 m.
Wharf No. 3	depth 5.7 m.
Wharf No. 4	depth 5.7 m.
Wharf No. 5	depth 10.0 m.
Hyuga Refinery's Wharf	depth 11.0 m.
Sugar Plant Wharf (Dolphin)	depth 11.0 m.
Commercial Port	
Wharf No. 1	depth 7.5 m.
Wharf No. 2	depth 7.5 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Average 1025 in Winter, 1020 in Summer, subject to weather and tide current.
FRESH WATER: Available from dock, 20/30 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and net tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No local representatives.
REPAIRS: None.
REPATRIATION: Possible.
AIRPORT: Nearest, Miyazaki airport about 2 hours drive from Hososhima. JAL and ANA lines.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119. Public telephone booth available near by the berth.
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Hakko Unyu Co. Ltd., No. 731, Kaigan-dori, Hososhima Hyuga-shi, Miyazaki-ken (883). Cable Address: "Ringer Hyuga". Domestic Telex: 776677 Hakko Hyuga. Tel.: Hyuga (09825)2–2185.

IHO: 34.45 N. 134.46 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N., 135° 11′ E. Telegraphic address "Anjin Kobee".
2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 14″ N., 131° 03′ 12″ E.

ANCHORAGE: Closed Port. Agent will arrange Anchorage position for discharging, with Authorities, but usual position Iho signal station, bearing 215° distant 3,000 m. (signal stn. 34° 44′ 58″ N., 134° 46′ 12″ E.).
HEALTH: Pratique must be obtained at another Port before calling Iho.

At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Not required. Discharging at Outer Anchorage.
TANKERS: Port is operated for oil discharging only. Discharge is into barges through 6 in. hoses at either side of vessel.
DENSITY: Average density is between 1025 and 1026 in Winter season and between 1018 and 1020 in Summer season.
FRESH WATER: Not available.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunker will be lightered from the nearest stock ports at maximum 7 days prior notice.
REPAIRS: Not available.
DRY DOCK: Nearest dockyard at Aioi.
AIRPORT: Nearest airport at Osaka.
TIME: GMT plus 9 hours, no alterations.
POLICE/AMBULANCE/FIRE: Police tel. 07944/2-3377; Ambulance, 119 or 2–2101; Fire 119 or 2–2101.
SERVICES: None. Nearest services available at Kobe/Osaka area.
AGENTS: See "Himeji".

IMABARI (Imahuru): 34.04 N. 133.00 E. (incl. Mategata).

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel), Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGE: Anchorage outside breakwater, sufficient water, but on account fast current deemed not safe anchorage. Anchorage inside breakwater generally shallow, and sea area narrow for large vessels. To discharge/load only Temposan wharf available for vessels alongside berth where holding ground is good and depth of water is 7.50 m.

Vessels drawing over 7 m.: vessel can enter Mategata (open road) deemed to be most fitted place for vessels entry to discharge/load. Port of Mategata faces Aki-Nada and located near West entrance of Kurushima Channel; 132° 55′ E., 36° 06′ N., where holding ground good and depth of water 12–20 m. is kept.
RESTRICTIONS: No entry after dark.
MAX. SIZE: Temposan Wharf length 110 m., breadth no limit, draft 7 m. Mategata (open road) length no limit, breadth no limit, draft 10 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Temposan wharf: join vessel at sea anchorage, using tug's line without charge. Mategata (open road): no tug required in normal conditions.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. Also see "Max. Size".
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Temposan wharf 1015. Mategata 1015.
FRESH WATER: Fresh water not available but usually brought by barge from Onomichi (about 4 hours run to Imabari/Mategata). Rate of delivery 80 tons to 200 t.p.h. dependent on barge.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request

stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and net tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: See "Kobe".
REPAIRS: Only minor repairs.
DRY DOCKS: Not available at this port, the nearest ones are Kawasaki Heavy Industries Ltd., Sakaide; Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima; and Mukaishima; dimensions of these docks as follows:

Kawasaki Heavy Industries Ltd., Sakaide. Dock No. 2 for 500,000 d.w.t. vessel. 450 m.×72 m.×12.3 m. It is not in action yet for ships to repair. Only used presently for shipbuilding and after services.

Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima Dock, Dock No. 1 for 20,000 d.w.t. vessel. 175 m.×25.62 m.×9.10 m. Dock No. 3 for 130,000 d.w.t. vessel. 282.50 m.×47 m.×11.33 m.

Hitachi Shipbuilding & Engineering Co. Ltd., Mukaishima Dockyard, Dock No. 1 for 3,000 d.w.t. vessel. 86.18 m.×13.60 m. ×6.80 m. Dock No. 2 for 8,500 d.w.t. vessel. 125 m.×18 m.×7.40 m. Dock No. 3 for 25,000 d.w.t. vessel. 175 m.×29 m.×9 m.

REPATRIATION: Possible.
AIRPORT: No airport. Nearest airports are Matsuyama and Takamatsu where are All Nippon Airways.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police Tel. 110; Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
GENERAL: Mategata is a closed port. To conform with regulations, vessel obtains permission from Shikoku Maritime Bureau to enter.

Customs request vessels calling Mategata to obtain permission to enter at preceding port of call by paying charge at same rate of tonnage dues prior to arrival of vessel. Application undertaken by Agent.

No quarantine available. Nearest station Matsuyama. No Immigration. Officer comes from Niihama.
SERVICES: None.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENT: See "Matsuyama".

INNOSHIMA: 34.17 N. 133.11 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication with Inland Sea pilot stations.

Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N., 135° 11′ E. Telegraphic address "Anjin Kobe".

Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki pilot station.

Kanmon Pilot boards at Mutsure (33° 58′ 15″ N., 130° 53′ 43″ E.) for passing Shimonoseki Strait to Hesaki where Pilot will be changed to Inland Sea Pilot.

Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.
ANCHORAGE: No. 1. 14 m. deep, 1.4 miles off Hyakkan Island 180°. No. 2, 9 m. deep, 1.5 miles off Hyakkan Island 290°.
RESTRICTIONS: In general, mooring/unmooring and/or dry-docking in-and-out carried out in daytime only.
MAX. SIZE:

	Length	*Breadth*	*Draft*
(1) For mooring only	320 m.	× 50 m.	× 7 m.

(2) Max. draft for entering port: 9 m.
(3) Max. draft for mooring: 5–7 m. according to quay.
Current is N.E. at high tide, and S.W. at low tide at max. 2.5 knots.
HEALTH: In event vessel proceeding Innoshima direct from foreign port, vessel to receive pratique at Quarantine anchorage Kobe or Saganoseki (33° 15′ N., 131° 52′ E.) or Mutsure (33° 59′ N., 130° 53′ E.).

At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Ship taken into port by Dock Master who joins ship at anchorage with tug-boat. Usually tug's lines used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
TANKERS: Tank cleaning station operated by Setonaijai Tank Cleaning Company, can receive slops up to rate of 250 t.p.h.
MEDICAL: No advance notice required unless urgent. Hospital facilities available.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: All facilities for major repairs.
DRY DOCKS: Hitachi Zosen:

	Length (m.)	*Width* (m.)	*Depth* (m.)	*Capacity* (d.w.t.)
Dock No. 1	175	25.60	9.10	21,000
Dock No. 2	282.50	47.00	11.30	130,000
Dock No. 3	260.00	57.00	11.10	100,000

AIRPORT: Hiroshima Airport or Okayama Airport (domestic only). About 2 hours by car from both airports.
TIME: GMT plus 9 hours. Permanent.
TELEPHONES: Telephone is available: Shipyard installs one telephone in accommodation and another one in engine room.
SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
SERVICES: The following services are available: Tank cleaning, Discharge of tank washings, Compass adjustment, Ship's chandler.
AUTHORITY: Mihara Doboku (Public Works) Office.
AGENT: Sub-Agent of Dodwell & Co., Tokyo. Hamaoka Kaiun Co., Ltd., 2207, Habu-cho, Innoshima-shi, Hiroshima-ken. Cable address: Hamaoka Innoshima; Tel.: Innoshima (08552) 2-1340/2. Telex: 6499-94.

ISHINOMAKI: 38.23 N. 141.16 E.

DOCUMENTS: and all general information, refer to "Ofunato".
RESTRICTIONS: Channel depth 9 m. LW.
TUGS: Available from Shiogama.
BERTHING:

Minami Hama Wharf	depth 10.0 m.
Hiyori Wharf	depth 9.0 m.
Nakajima Wharf	depth 10.0 m.
Shiomi Wharf	depth 4.5 m.
Hiyori Wharf	depth 4.5 m.
Minami Hama Wharf	depth 4.5 m.
Jyujyo Wharf	depth 6.5 m.
Tekkosha Wharf	depth 4.5 m.

FRESH WATER: Available ex-wharf.
FUEL: To be barged from Yokohama.
AUTHORITY: Port Administration Office.
AGENTS: See "Sendai".

IWAKUNI, Hiroshima Bay: 34.10 N. 132.11 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Cable address "Ansin Moji". Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout, 24 hours and 72 hours

advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGES: Two anchorages, one for "Quarantine" and repairing, etc., other for discharging logs.

(a) Quarantine 34° 10′ 28″ N., 132° 16′ 43″ E. min. depth 27 m.

(b) Discharging area 34° 11′ 12″ N., 132° 14′ 21″ E. min. depth 10 m.

Nature of bottom mud. Minimum bottom width no limit.

HEALTH: At first port of call in Japan vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Tugs normally join vessel at Quarantine area. Tug's lines to be used free of charge. Two tugs available of 3,800 h.p.

BERTHING: No berthing from sunset to sunrise. At least 2 hours notice arrival necessary to reach berth, in event of direct arrival from foreign country.

MEDICAL: No advance notice required unless urgent.

TANKERS: Max. 150,000 d.w.t.; slop discharge pipe-lines.

	Max. d.w.t.	*Max. LOA*	*Max. safe draft*	*No. and diameter hoses*
Koa Oil Crude Pier	150,000	No limit	16.50 m.	12″×3
Koa Oil No. 3 Pier	25,000	200 m.	10.00 m.	8″×1
Kenei North No. 3 Pier	35,000	230 m.	9.00 m.	10″×2

Discharge rates:

Koa Oil Crude Pier	(Crude Oil)	6,000 t.p.h.
Koa Oil No. 3 Pier	(Low sulphur Fuel Oil)	600 t.p.h.
Kenei North No. 3 Pier	(Crude Oil)	500/800 t.p.h.

DENSITY: 1020.

FRESH WATER: Alongside Koa Oil Pier, possible to take fresh water ex. shore.

Berth	*Capacity*
Koa Oil Crude Pier	5 t.p.h.
Kenei No. 3 Pier	3 t.p.h.
Sanyo Pier	5 t.p.h.

FUEL: Available ex-wharf, but not ex-barge. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

DEVELOPMENTS: New berth named "Muronoki Pier" under construction.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CARGO GEAR: See "Certificates" but no special requirements.

CONSULS: No consul but marine note of protest can be attended by local notary public.

REPAIRS: None. For heavy repairs from Hiroshima.

REPATRIATION: Possible.

AIRPORT: Hiroshima airport 45 km. (Abt. 2 hours).

For Osaka (TOA Airline) 0900 hrs., 1415 hrs., 1725 hrs., 2000 hrs.

For Tokyo 0750 hrs., 1100 hrs., 1355 hrs., 1510 hrs., 1755 hrs., 1905 hrs.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110 (just dial); Ambulance 119 (just dial); Fire 119 (just dial).

TELEPHONES: No arrangements available except Koa Oil.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port Administration Office.

AGENTS: Sub-agents of Dodwell & Co., Tokyo. Naigai Unyu Co. Ltd., Iwakuni Office, 7–351 4-chome, Shinminato-cho, Iwakuni-shi, Yamaguchi-ken. Cable address: Naigai Iwakuni; Domestic Telex: 6672–39, Naigaiunyu Iwa; Tel.: Iwakuni (0827) 21–7115/6.

KAGOSHIMA: 31.35 N. 130.33 E.

DESCRIPTION: Port situated in Kagoshima Bay, the Southern part of Kyushu and consists of 3 sections as follows:

Main Harbour: divided into Inner Harbour sheltered by breakwaters which can accommodate up to 3,000 tonners, and Outer Harbour, (open roads) where large size vessels lie at anchor.

New Harbour: adjacent to Main Harbour on the South. This section also sheltered by breakwaters and a 10,000 tonner can be accommodated.

South Harbour: located about 6 kms. away from main harbour on South and used for small coasters.

DOCUMENTS:

Customs: When vessel arrives direct from foreign port, customs officials board for search. Following documents to be submitted:

Crew List.
Passenger List.
Manifest of crew personal effects (must be signed by individual crew member).
Store List.
Arms and Ammunition List.
Narcotics List.
List of ports of Call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward.

Following will be checked on board: Ship's Registry; Last Port Clearance.

When vessel comes from Japanese port, Customs officials will not attend on board, except special case. Master or Agents to attend Custom House for entry formalities with following documents:

Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward.
Ship's Registry.
Last Port Clearance.
Documents entrusted with the Master by Customs at previous port.

On vessel's departure, a clearance is issued by Customs, after confirming payment of tonnage dues.

PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks at quarantine anchorage (see "Health"). Request for Pilot made through Agent. Master report by radio accurate ETA at least 24 hours prior to arrival.

ANCHORAGE: Ample good holding anchorage available in Outer Harbour. Depth: Over 9 m.

RESTRICTIONS: Berthing/unberthing during day only.

Wharf	*Location*	*Length*	*Depth*
7.9 m. wharf	Main harbour	110 m.	7.9 m.
7.5 m. wharf	,,	220 m.	7.5 m.
North	New harbour	125 m.	7.5 m.
North	,,	160 m.	5.5 m.
South	,,	165 m.	9.0 m.
South	,,	260 m.	7.5 m.

HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get radio pratique.

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If crew or passengers on board do not possess valid Smallpox Vaccination Certificate.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

Quarantine:

(a) Quarantine station: Sea area within radius of 1,000 m. from centre, position 31° 33′ 25″ N., 130° 35′ 33″ E.

(b) Quarantine service rendered from sunrise to 1 hour before sunset.

(c) "Q" flag should be hoisted until free pratique granted.

(d) When vessel arrives from plague-infected or suspected area within 10 days after she left such place, 24-hour special quarantine required.

All sanitary scuppers must be closed and garbage not thrown overboard after reaching 60 miles off Japanese coast.

RADIO: Recommended Captain contacts Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: "Wakashio Maru" twin diesel vessel 1,000 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by Agent mainly by radio.

New Port (Kagoshima-Shinko). Sheltered harbour with main entrance 150 m. wide between S. breakwater (350 m.) and N. breakwater (150 m.). Sheltered anchorage in depth of 5.5–9.0 m. No mooring buoy. Berthage outside breakwater in depth of 9.0 m. and inside breakwater in depth of 5.5–9.0 m.

Piers: South pier (in foreign trade zone, for outbound vessels only):' 165 m. long with 9.0 m. alongside, will take one vessel of about 10,000 g.r.t.

260 m. long with 7.5 m. alongside, two vessels less than 5,000 g.r.t.

120 m. long with 4.5 m. alongside, two vessels less than 500 g.r.t.

North pier (for inbound vessels):

125 m. long with 7.5 m. alongside will take one vessel of about 3,000 g.r.t.

160 m. long with 5.5 m. alongside two vessels less than 1,000 g.r.t.
60 m. long with 4.0 m. alongside one vessel less than 500 g.r.t.
160 m. long with 5.5 m. alongside two vessels less than 1,000 g.r.t.

Taniyama Harbour: South pier has been constructed, located about 10 kms. from main harbour on South and used for large coasters.

Berthing: Sheltered harbour with main entrance 200 m. wide between S. breakwater (780 m.) and N. breakwater (650 m.). Sheltered anchorage in depth of 5.5–13 m. No mooring buoy. Berthage inside breakwater in depth of 5.5–12.5 m. South pier (in foreign trade zone, for outbound vessels only).

Pier	*Length*	*Depth alongside*	
S–1	250 m.	12 m.	one vessel of 50,000 g.r.t.
S–2	260 m.	7.5 m.	two vessels less than 10,000 g.r.t.
S–3	270 m.	5.5 m.	two vessels less than 1,000 g.r.t.

North pier: now under construction.

STEVEDORES: Maximum 10 gangs available. Working hours: 1 labour shift. Normal working hours: 0800 to 1700 hrs. Overtime work possible until about 2000 hrs. by applying to Customs at following hours: 1700–2200 hrs., 0500–0830 hrs. also Sundays and holidays 2200–0500 hrs. All night work is impracticable. No work can be arranged for 31st December and during New Year holidays (1st to 3rd January).

MEDICAL: Hattanmaru Hospital; Fukusaki Hospital; Nagata Dental Plant. No advance notice required unless urgent.

TANKERS: No tanker berths at Kagoshima, but Central Terminal Station (C.T.S.) in Kagoshima Bay. See "Kiire".

FRESH WATER: One 150-ton water barge available. Hydrants at wharves in main harbour. Rate of delivery: 50 t.p.h. from barge; 15–20 t.p.h. from hydrants.

FUEL: None available. Lightered from another port. Ample notice so that necessary lighterage can be arranged.

GANGWAY/DECK WATCHMEN: Not specifically required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores open/close hatches. Cost per hour depending on type of cargo. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete before berthing.

CERTIFICATES: Ship's register to show Customs Inspector registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears poor.

CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore but no spirits.

REPAIRS: Only minor repairs – Kikukawa Iron Works and Kagoshima Dockyard Co.

REPATRIATION: Possible. Also see "Regulations".

AIRPORT: Kagoshima Airport. Short distance from town.

TIME: GMT plus 9 hours. No alterations to clocks during year.

HOLIDAYS: See "Tokyo" (Also see "Stevedores").

SERVICES: Cargo Survey. Provisions and Stores. Fumigation – Toyo Fumigation attend from Moji on request.

WIND/TIDE: N.W. wind prevails in Winter season and Easterly wind in Summer. Wet seasons in April and July. Average tidal range 2.74 m. In the outer harbour, flood tide sets to North and ebb to South. Maximum speed of current 2 knots. Current in inner harbour is less than 0.25 knots.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extension possible if vessel stays longer. Also see "Regulations".

REGULATIONS: Immigration officials board vessel on arrival to examine passports, discharge-books and/or other equivalent travel documents and provide 72-hour landing passes for crew members and passengers. 1 copy each of crew list and passenger list required by them. Providing ship's Agent with a crew list beforehand will be a great help in expediting immigration business on vessel's arrival. When vessel stays in port more than 72 hours, the landing passes may be extended 72 hours on application. In the event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within 5 days.

AUTHORITY: Kagoshima Kencho.

AGENTS: Sub-agents of Dodwell & Co. Tokyo. Kyoshingumi Co. Ltd., Agency Department, Zisaki, Zyonan-cho, Kagoshima-shi, Kagoshima-ken. Cable address: Kyoshingumico Kagoshima; Domestic Telex: 7825–12. Kyoshingumico Kagoshima; Tel.: (0992) 26–7123.

KAKOGAWA: 34.42 N. 134.50 E.

Port is for sole use of the Kobe Steel Co. Ltd. Declared open port as of 1st May 1970, but vessels should first call off Kobe to obtain free pratique, Customs clearance and Pilot.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot will board off Kobe when calling for free pratique and Customs clearance. Pilot will be arranged by Agent subject advance request and usual ETA advices.

HEALTH: Vessel must call off Kobe for free pratique. At first port call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

RESTRICTIONS: Mooring/unmooring conducted daylight hours only.

BERTHING:

	Length	*Depth*
Pier E-1	200 m.	15 m.
Pier E-2	200 m.	14 m.
Pier E-3	300 m.	14.5 m.
Pier E-4	400 m.	17 m.

3 unloaders are presently available. 2 have capacity of discharging 1,500 t.p.h. and the third 700 tons.

Depth at low water is 17 m. in the fairway which is 400 m. wide.

MEDICAL: Treatment has to be arranged from Kobe.

FRESH WATER: Available from quay. Rate 50–80 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

REPAIRS: Arranged from Kobe.

REPATRIATION: Possible, through Kobe.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

SHIPMASTER'S REPORT:

When the vessel anchors off Kobe in the roads, "Kobe Harbour Control" will call on VHF Channel 16 and ask for anchoring time and position from Kobe headlight.

The maximum draft at Higashi Harima is 15.5 m.

Vessels always berth port side alongside. The gangway should be lowered as soon as possible to let the officials aboard.

The vessel loaded 112,000 metric tons in 60 hours, previously the same amount had been loaded a little quicker.

Bilge water, oil or garbage should never be thrown overboard because owners have to pay compensation to the Fishermen's Union.

Berthing takes place two hours before high water.

AUTHORITY: Kakogawa Doboku (Public Works) Office.

AGENT: See "Himeji".

KAMAISHI: 39.16 N. 141.55 E.

DOCUMENTS:

Ship's Register. Last Port Clearance. 3 Crew Lists including Passport Nos. 3 Passenger Lists. 1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot not compulsory, but arrangeable at Master's request. Pilot arranged by Agent and vessel required to radio Agent ETA 24 hours before ship's arrival. Pilot boat has no facility to communicate, nor particular light or sound signals, but flies Pilot flag "H". Pilot boards at 39° 16′ N. 141° 59′ E. 1 mile off Osaki Point. No alternative area in event bad weather.

ANCHORAGE: Up to four 30,000 d.w. tonners can safely anchor. Depth of water: 31–43 m. at Quarantine anchorage. 20–27 m. at discharging anchorage.

RESTRICTIONS: Vessel free in and out anytime, but no Pilot available after dark for entry.

MAX. SIZE: Draft 12 m. and LOA, 200 m. (656 ft.) Breadth no restriction. Vessels with draft exceeding 9 m. required to berth on high water.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Qurantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO : Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Tugs (2) join vessel at anchorage and tugs' lines used free of charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. Max. depth alongside, 13 m.
STEVEDORES : At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700-1900 hrs. 50% additional of basic stevedorage; 2100-0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL : No advance notice required unless urgent.
DENSITY : Winter 1026-1027. Summer 1023-1024.
FRESH WATER : Available from wharf by hose. Rate of delivery: about 10-15 t.p.h. No water barge, but in case vessel requires water at anchorage, tugboat arrangeable for that purpose.
FUEL : Domestic diesel oil. No bonded fuel oil. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
OPENING/CLOSING HATCHES : Stevedores carry out opening and closing hatches. Cost depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES : Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE : Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS : None.
REPAIRS : Minor repairs such as welding, piping, lathing works etc. only.
DRY DOCKS : None.
REPATRIATION : Possible.
AIRPORT : Hanamaki, distant 100 km. (2 hours by car). One flight between Hanamaki/Tokyo on Tuesday/Thursday/Saturday and two flights on Sunday/Monday/Friday by All Nippon Airline (ANA).
TIME : GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE : Police 2-4536 (Headquarter) and 2-3828 (Water Police Station); Ambulance 119; Fire 119.
TELEPHONES : No facilities for placing telephones on board.
SERVICES : Surveyor, Tally, Hold cleaning, Tank cleaning.
GENERAL : Discharging ex-gearless vessel not possible at anchorage.
SHORE LEAVE : Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY : Port and Harbour Dept.
AGENTS : Sub-agents of Dodwell & Co. Ltd., Tokyo. Abeki Shokai, 1–210, Hama-cho, 1-chome, Kamaishi-shi, Iwate-ken. Cable address: Abe Kamaishi; Domestic Telex: 8355–61 Abe J; Tel.: Kamaishi (01932) 2–4583/4.

KANDA: 33.47 N. 131.00 E.

RESTRICTIONS: Main channel length 11,080 m., width 200 m., depth 9 m.
Tidal range 3.2 to 3.3 m.
BERTHING: Main berths dredged to 9 m. alongside. Berths mostly used for importing lumber.

KANMON-KO (Kanmon Harbour).

According to Japanese Harbour Area Regulations, Moji, Shimonoseki, Kokura, Tobata, Wakamatsu and Yawata are respective sections included in one port namely Kanmon Harbour. The expression of the port as "Kanmon" has been used in charter parties, where these six ports are considered to be one port. Vessel's movements within these ports is treated as shifting berth in the same port. Therefore, if vessels calls at more than 2 ports within this area, such calls are covered by one payment of tonnage dues. However, at Tobata, Wakamatsu and Yawata, port dues are levied in addition to tonnage dues.

Entry/departure procedures to Customs, Immigration and/or Harbour Master should be effected at each port, as those officials stationed individually at each port.

KANOKAWA: 34.11 N. 132.26 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF Communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel.) Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Moji". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

Inland Sea Pilots also attend Harbour Pilotage but if specifically required Harbour Pilot boards at Port entrance South side of Ohkurokamishima, Position 34° 10′ N. 132° 26′ E.
ANCHORAGES: Good holding ground. Entrance channel and Harbour Channels. Depths 18 m. min. Bottom mud and sand. Difference between quoted datum and chart datum about 2 m. (to be added). Harbour anchorage about 2 miles South of "T" head berth where vessel remains if waiting berth.
MAX. SIZE: Length 240 m., beam 30 m., draft 13 m., deadweight 60,000. See "Tankers".
HEALTH: Closed port. Vessel must call at another port (Such as, Matsuyama or Iwakuni) for Customs and Health clearance before entering Kanokawa. At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

N.B. Vessels destined to Kanokawa have called at Kure Quarantine Anchorage for free pratique and customs' clearance before proceeding to Kanokawa. The above practice is not only a loss of time (50 miles deviation) but dangerous for vessels to transit in a congested traffic area. In view of the above, the practice was amended and vessels from now on must call at Matsuyama or Iwakuni instead of Kure for Customs and Quarantine clearance.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
TUGS: Arranged from Kure. Normally join at Kanokawa Port entrance. Usually tug's lines used without extra charge.
TANKERS: "T" head jetty with 4 buoys. Depth alongside 13 m. 2 hoses with 12 in. connections, max. 8 kgs/sq. cm. Grades handled: molasses, crude and fuel oil. Discharge rate for crude oil 800/1,000 t.p.h.

A new berth is expected to be opened in 1974, the particulars are as follows.
Berth: Mitsubishi Corp. Kanokawa oil pier No. 3, being extension of the old berth Nos. 1 and 2. Depth alongside, 15.4 m. Nature of bottom, sand with shell. Average density, 1020 (Summer), 1025 (Winter). Max. size, length 300 m., beam 40 m., draft 14.0 m. d.w.t. about 80,000 L.T.

Type and size of manifold: 2 × 12 in. and Chikusan arm. Discharge rate 2,000 t.p.h.
DENSITY: 1023–1025 alongside berth. Rise of tide: Springs 3.4 m. Neaps 2.6 m.
FRESH WATER: Available at berth, ex-pipe-line. Average delivery rate – 20 ton/hour.
CONSULS: None.
REPAIRS: See "Kure".
AIRPORT: Kure.
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police 2005; Ambulance 2711; Fire 2711.
TELEPHONES: No arrangements available for placing telephones on board.
AUTHORITY: Ohgaki Doboku (Public Works) Office.
AGENTS: See "Kure".

KASHIMA: 35.54 N. 140.42 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot called through Agent. Pilot boards about 2 miles to N.E. from the end of breakwater, in position 35° 57′ 5″ N. 140° 43′ 5″ E.
ANCHORAGE: No suitable anchorage at present Quarantine Anchorage located at section between 183° and 279° from the undermentioned centre within a circle of radius of 1,300 m. centering the position of 35° 57′ 19″ N., and 140° 42′ 30″ E., where depth of water, 18 m.
RESTRICTIONS: Pilot does not board vessel after dark.
MAX. SIZE: *Tankers:*

Berth	*Max. D.W.T.*	*Max. L.O.A.*	*Max. Safe Draft*
200,000 Ton Sea Berth	200,000	No Limit	17.00 m.
100,000 Ton Berth	100,000	No Limit	14.50 m.
70,000 Ton Berth	70,000	No Limit	13.30 m.

Bulk carriers have entered with draft up to 44 ft.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to Choshi and Northbound to Nagasaki Radio respectively.
TUGS: Usually joins vessel at anchorage where Pilot boards; ship's lines used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
Sumitomo Metal Depth 16.0 m.
Sumitomo Metal ,, 12.0 m.
Kashima Denkai ,, 16.0 m.
Kashima Sekiyu ,, 16.0 m.
MEDICAL: No advance notice required unless urgent.
TANKERS: Requirements prior to arrival: Manifold: position, number and external and internal diameters. Reducer: type (ASA or JIS etc.) and external and internal diameters. Bolt: diameter and number, also diameter of pitch circle. Pumping capacity. Ship's draft and ETA, to be received by 0900 hrs. every morning continued 3 days prior to day of arrival. Water requirement (because of necessity of pumping-up tank for preparation).
Discharge Rates:

Berth	*Product*	*Discharge Rate (t.p.h.)*	*Shoreline*
200,000 Ton Berth	Crude Oil	10/12,000	38″×1
			42″×1
100,000 Ton Berth	Crude Oil	4/6,000	24″×1
		4/6,000	26″×1
	Bunker	5/600	8″×1
70,000 Ton Berth	Naphtha / White Kerosene	1,800	14″×1
	Minus Crude Oil	3/3,500	16″×1
	Fuel Oil	1,800/2,000	20″×1
	Crude Oil	3/3,500	20″×1
	Bunker	5/600	8″×1

DENSITY: 1025.
FRESH WATER: 50 metric t.p.h. from shore pipe, 50% additional for service between 0600–0800 hrs. 1700–2200 hrs. and during rainy and rough weather, also on Sundays and holiday. 100% additional for service between 2200–0600 hrs.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: No special precautions, but water curtain made alongside dolphin in case, and there is an extinguisher-boat (15 gross tons, and airfoam system).
DEVELOPMENT: Port under construction. When completed, total length of wharf will be about 17 km. for about 30 big industries such as iron and steel works, oil refinery and chemical works, foodstuff and foodstuff industries, etc.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Arranged from Tokyo/Yokohama.
AIRPORT: Presently under construction, about 60 km.s away.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police Tel. 110; Ambulance/Fire Tel. 119.
TELEPHONES: Not available for placing on board.
SERVICES: No equipment nor facilities, but compass adjusting and others arrangeable from Yokohama.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kashima Port Development Office.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Keiyo Shipping Agency Ltd., Kashima Office, Kizaki, Kamisu-machi Kashima-gun, Ibaraki-ken. Cable Address: Keiyoshipkashima Itakoibaraki Domestic Telex: 3658-926 Tel.: Kashima (02999) 2-2193.

KAWASAKI: 35.32 N. 139.42 E.

Also refer to Yokohama.
PORT LIMITS: Consists of sea and rivers below the most downstream bridges bordered by the coastline, the line drawn between the administrative areas of Tokyo and Yokohama and the point 143° 30′, 2950 m. from the Hane-da light buoy, the line drawn 233° from the above-mentioned point, the line drawn 151° 30′ from the end point of Sakai Channel which divides Yokohama City administrative section from Kawasaki City. (The river of Tama is not included.)
DOCUMENTS: *Quarantine Station*
Quarantine Declaration.
Crew List.
Passenger List.
Fumigation Certificate.
Cargo Manifest.
Immigration Office
Declaration Inward Outward of Vessel.
Crew List.
Passenger List.
Application for shore pass.
Custom House.
Declaration Inward Outward of Vessel.
Crew List.
List of Ship's Stores.
Cargo Manifest.
Passenger List.
List of Crew's Baggages or List of Personal Effects.
List of Tobacco.
Through Cargo Manifest.
PILOTAGE: See "Yokohama".
RESTRICTIONS: Tsurumi passage 11.70 m. (high water); Kawasaki passage 12 m. (high water). At night except in an emergency, vessels over 500 g.t. shall not enter port between hours of sunset and sunrise unless permission previously obtained from Captain of the Port. Vessels over 500 g.t. may enter without prior notice in order avert sea disaster or other unavoidable circumstance.
Note: No vessel of more than 1,000 g.t. permitted enter through Kawasaki Passage from 0630 hrs. to 0900 hrs. No vessel of more than 1,000 g.t. permitted depart through Tsurumi Passage from 0630 hrs. to 0900 hrs.
MAX. SIZE:

Passage	*G.R.T.*	*LOA*	*Draft*	*Remark*
Kawasaki	—	up to 245 m.	12 m.	high water
	up to 50,000	—	11.7 m.	,,
Tsurumi	—	up to 225 m.	11.7 m.	,,
	over 50,000	up to 260 m.	11 m.	,,

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Keihin Kawasaki Sea Berth	200,000	No Limit	29.00 m.
Toa Nenryo Ohgishima Sea Berth	250,000	No Limit	23.00 m.
Toa Nenryo Pier	No Limit	250 m.	12.00 m.
Toa Nenryo Ukishima Sea Berth	100,000	—	16.00 m.
Toa Oil No. 3 Factory	No Limit	225 m.	11.70 m.
Toa Oil No. 1 Pier	No Limit	225 m.	11.70 m.
General Sekiyu Seisei	No Limit	250 m.	12.00 m.
Mitsubishi Oil	No Limit	260 m.	11.00 m.
		225 m.	11.70 m.
Mitsubishi Shoji	No Limit	250 m.	12.00 m.
Nissho Iwai	No Limit	250 m.	12.00 m.
Idemitsu Oil	No Limit	200 m.	9.00 m.
Showa Oil	20,000	170 m.	8.30 m.
Showa Oil (Toyo Futo)	No Limit	250 m.	9.30 m.

PRATIQUE: See "Yokohama".
RADIO: See "Yokohama".
VHF: VHF radio telephone station under joint control of Tokyo, Kawasaki, Yokohama and Chiba Port and Harbour Bureau. Call Sign. "Kawasaki Port Radio." This station covers all Tokyo Bay with radius 50 kilometres from location of transmitting antenna (Yokohama). Station keeps in touch with ships crossing in vicinity

of Nojimasaki Point and is able to communicate with a ship that is a fairly long distance South of Jyogashima Island.

Channels, Class, Frequencies.

	Channel	Class	Frequencies used by ship	Frequencies used by coast
Calling	16	F3	156.80 Mc/s.	156.80 Mc/s.
Working	12	F3	156.60 Mc/s.	156.60 Mc/s.
	14	F3	156.70 Mc/s.	156.70 Mc/s.
	20	F3	sending 157.00 Mc/s.	sending 161.60 Mc/s.
			receiving 161.60 Mc/s.	receiving 157.00 Mc/s.
	22	F3	sending 157.10 Mc/s.	sending 161.70 Mc/s.
			receiving 161.70 Mc/s.	receiving 157.10 Mc/s.

Port official in charge of Marine Operation Section, Port and Harbour Bureau, City of Yokohama or Kawasaki or Tokyo Metropolis or Chiba Prefecture will give ships necessary instruction relating to Port Operations Services. No charge for communication in regard to Port Operations Services.

TUGS: Normally join vessel at anchoring position. Ship's lines used.

BERTHING: Vessels of more than 1,000 g.r.t. having explosive or other dangerous cargo on board desiring to enter First Section of Kawasaki, and Fourth Section, Yokohama Quarter, shall report expected time of arrival off Tsurumi Passage in advance to Captain of Port. When intending shift berths within First Section of Kawasaki and Fourth Section, Yokohama or to depart, the estimated time of getting under way shall also be reported in advance to Captain of Port. Report shall be made by noon of day before estimated date of entry or getting under way.

Municipal Piers	Depth
1	7.3 m.
2	9.0 m.
3	10.0 m.
4	10.0 m.
5	10.0 m.
6	10.0 m.
7	10.0 m.

Besides above-listed piers, harbour has private piers with 70 berths capable of mooring vessels of up to 250,000 d.w.t.

STEVEDORES: Ordering of labour gangs is by 1600 hours of previous day.

MEDICAL: Contact Agent to arrange medical attention. Agent must present Arrival Notice to Quarantine Station in advance of vessels arrival. Hospital facilities available.

TANKERS:

Berth	Product	Shorelines	Discharge Rate t.p.h.
Keihin Kawasaki Sea Berth	Crude Oil	20″x2	9,000
Toa Nenryo Ohgishima Sea Berth	Crude Oil	16″×4	18,000
Toa Nenryo Pier	Fuel Oil	12″×2	2,000
Toa Nenryo Ukishima Sea Berth	Crude Oil	12″×3	6,000
Toa Oil No. 3 Factory	Fuel Oil	10″×3	1,000
Toa Oil No. 1 Pier	Crude Oil	10″×2	2,000
General Sekiyu Seisei	Crude/Fuel	12″×2	3,800
Mitsubishi Oil	Crude Oil	12″×2	4,500
	Fuel Oil	8″×1	1,200
Mitsubishi Shoji	Crude Oil	8″×2	1,200
	Fuel Oil	8″×2	850
Nissho Iwai	Fuel Oil (C)	10″×1	1,500
	Fuel Oil (A)	8″×1	1,000
Idemitsu Oil	Lub. Oil	6″×1	250
		8″×1	400
Showa Oil	Fuel	8″×2	500
Showa Oil (Toyo Futo)	Fuel	8″×2	800

TIDAL CURRENT: The littoral current running Westward along reclaimed industrial area of city is very slow and has rate of about 0.3 m. around the head of municipal wharf when tide is on the ebb.

FRESH WATER: Supplied at piers. Water supplied by water barge, overtime, Sundays and legal holidays.

Item	Available at	Number of Hydrants	Capacity t.p.h.
Pier	Nissin Seifun K.K.	1	25
	Hitachi Zosen K.K.	7	140
	Toyo Wharf Co. Ltd.	9	180
	Nippon Kokan K.K. Ogimachi	11	330
	Nippon Kokan K.K. Ogijima	2	20
	Bridgestone Gas Co. Ltd.	2	40
	Nippon Kokan K.K. Oshima	9	270
	Mitsui Wharf Co. Ltd.	9	180
	Idemitsu Kosan Co. Ltd.	1	30
	Municipal Berth	37	1,850
	General Oil Co. Ltd.	1	40
	Nippon Oil Gas Co. Ltd.	1	50

	Barge	Loading Capacity (ton)	Remarks
Water Barge	Tamagawa Maru	130	Operated by Water Bureau of Kawasaki City
	Washin Maru	168	
	Geiyo Maru No. 2	200	
	Hoei Maru No. 12	285	

DEVELOPMENTS: Plans for commercial wharf at Ohgishima. Ohgishima East Island will be reclaimed and wharf constructed with 20 berths for 15,000-ton vessels for international trade and 11 berths for 5,000-ton vessels for domestic trade.

GANGWAY/DECK WATCHMEN: Watchmen not necessary and not recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

FUEL: All grades available.

CERTIFICATES: See "Yokohama".

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes, Wines/spirits, 6 bottles.

IDENTITY CARDS: Needed to get shore-pass.

CONSULS: See "Yokohama."

REPAIRS: All repairs possible.

DRY DOCKS: Hitachi Dockyard.

Dock Number	Length	Breadth	Depth	Capacity
No. 1	164 m.	22 m.	6 m.	7,000 g.t.
No. 2	220 m.	30 m.	10 m.	25,000 g.t.

AIRPORT: Distance from airport (Tokyo International Airport) 5 miles. Airport served by regular airlines.

TIME: Akashi standard time 135° GMT plus 9 hours. Permanent.

HOLIDAYS: National holidays, Sundays. National holidays January 1, 2, 3, 15; February 11; March 21; April 29; May 3, 5; September 15, 23; October 10; November 3, 23; December 28, 29, 30, 31. Cargo work cannot be arranged on following days: December 31st; January 1st, 2nd, 3rd.

POLICE/FIRE/AMBULANCE: Police Kawasaki 26–9161; Ambulance Kawasaki 28–0963; Fire Kawasaki 28–5521.

TELEPHONES: Connection to ship. Charge for use.

SERVICES: Tank-cleaning. Compass adjusting.

SHORE LEAVE: Crew members allowed ashore.

DELAYS: Awaiting favourable tide. Delay of Quarantine inspection.

SHIPMASTER'S REPORT: *The Tonen Ohgishima Sea Berth:*

1. Suggest Mikimoto Lighthouse used for end of passage as from there inwards to Uraga Channel (58 miles) heavy concentrations of traffic frequently experienced.
2. Entry to Uraga Channel for VLCCs permitted only during daylight (i.e. sunrise to sunset).
3. Pilot boards in vicinity Uraga No. 1 buoy from 1 of the 2 tugs which escort the vessel to Yokohama.
4. Deep draft signal to be displayed including the red flashing light and Code "First Substitute over Flag 'B' " (refer Maritime Traffic Safety Law).
5. ETAs (No. 1 Buoy Uraga) should be updated as promptly as possible. Considerable importance attached to the vessel's arrival time by Yokohama Port Authorities.
6. Vessel must anchor at Yokohama Quarantine Anchorage where Port Health boards (pilot hoist used).
7. Berthing/Unberthing Ohgishima Sea – berth during daylight only (sunrise to sunset).
8. Berthing pilots (2) embark at Quarantine Anchorage, 6 tugs all using nylon tow ropes with eye on bitts. Always port side alongside. Refer mooring diagram for details. No additional mooring ropes available on loan or hire from berth. Shore gangway, Chiksan arms 4×16 in. connections.
9. A spill boom completely surrounds the vessel on the berth. A comprehensive book (in English) of the Terminal Regulations placed on board on arrival. Tonen Company require a tape recording concerning oil pollution to be broadcast throughout the vessel's p/a system before cargo discharge commences.
10. Ullaging is witnessed by Oil Co. representative. Samples taken from all tanks necessitating the opening of tank hatches. All tanks dipped after discharging completed.
11. The loading of stores, provisions, etc. (either by crane or derrick) is not permitted on this berth. No restrictions on items being *carried* on board via the gangway, e.g. laundry. Necessary to anchor after discharging/ballasting to take on stores.
12. During severe weather conditions tug assistance was requested to stand by the vessel on the berth. Tugs cannot approach unless the spill boom is removed and this will only be removed if cargo discharge ceases and Chiksan arms disconnected.
13. A shore liberty boat was arranged through Agent. This service is to Yokohama, approx. 1 hour journey. A boat service to nearby Kawasaki is not permitted due to Customs difficulties. All boat services suspended when weather deteriorates. Shore passes issued by Immigration Authorities on board and must be collected in before vessel leaves berth.

AUTHORITY: Port & Harbour Bureau of Kawasaki Municipality.

AGENTS: See "Yokohama".

KIIRE: 31.23 N. 130.32 E. (See Plan)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport Nos.
5 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms.

Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: No particular regulations for navigating in Kagoshima Bay. Suggest enter Bay on course close to Osumi Peninsula. 3 Light Beacons South of oil piers for Ships approaching and manoeuvring. Bay pilots not provided but Mooring Master provided for assistance to Master for berthing without charge. No VHF available for ship-shore communication.
ANCHORAGES: Anchorage area ranges in depth from 30 to 60 m. Holding ground in these areas only fair; recommended vessels lie to long scope of chain. Locally tide rise approximately 3 m. in springs and 1.5 m. neaps. Maximum tide currents Northerly 0.32 knot, Southerly 0.47 knot. Ample anchorage and manoeuvring area N.E. of terminal.
RESTRICTIONS: Night entry and departure permitted subject to weather conditions. However, Harbour Master will not permit vessels loaded with oil cargoes to berth between sunset and sunrise.
MAX. SIZE: Max. draft at Nos. 1 and 2 berths – 18 m. acceptable 30,000–150,000 d.w.t. vessels. Max. draft at No. 3 berth – 28 m. acceptable 30,000–450,000 d.w.t. vessels. Max. safe draft at No. 4 berth 34 m. suitable for up to 500,000 d.w.t. Also see "Tankers".
HEALTH: See "Kagoshima".
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
TUGS: Mooring and unmooring assistance provided by two 4,200 h.p. CPP tugs and two 3,000 h.p. VSP tugs regularly stationed.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
MEDICAL: Advance notice required if arriving at weekend.
TANKERS:

Berth No.	*Max. LOA*	*Connections*	*Discharge Rate*
1	310 m.	5×12″	10,000 k/l (loading only)
2	310 m.	5×12″	10,000 k/l
3	350 m.	6×16″	20,000 k/l
4	400 m.	2×16″	5,000 k/l
		3×24″	10,000 k/l

DENSITY: 1025.
FRESH WATER: Water obtainable at berth on oil piers at rate of 40 tons per hour.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: Very strict Safety Regulations.
Disregard of regulations will result in stopping all loading or unloading operations and the vessel being ordered off berth for appropriate action to be taken.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Available Moji, Sasebo & Nagasaki.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Distance from airport about 2 hours by car. ANA and Towa airlines serve daily.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police station tel. 110; Fire brigade station is located at terminal and Ambulance available at that station.
TELEPHONE: Telephone placed on board at Terminal free of charge for inter-office communication.
SERVICES: All services available.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Nippon Oil Staging Terminal Co., Ltd.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Tokyo Tanker Marine Service Co. Ltd. 2856-5, Uenohama Aza Nakamyo Kiire-cho, Ibusuki-gun Kagoshima-ken. Cable Address: Tokmarine Ibusuki Domestic Telex: 7867-22 Tel.: (09934) 5-0171

KIKUMA: 34.02 N. 132.50 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot-stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea pilots also act as Harbour pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot-stations.
1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot-station.
3. Mesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.
ANCHORAGE: Lat. 34° 03′ N. Long. 132° 51′ E. Depth of water: 15–30 m. Anchorage located about 350 m. off beach. Holding ground good and Port faces Iyo-Nada and located Bungo channel. Current at berth and off shore very strong. During winter months strong North-westerly wind prevails.
RESTRICTIONS: Mooring and unmooring daytime only and to be carried out on flood tide.
MAX. SIZE: See "Tankers".
PRATIQUE: Closed port. Vessels should obtain pratique at Matsuyama. If Kikuma is first port of call in Japan, customs formalities will be carried out by Imabari Branch Customs Kikuma Port Guard Office.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
TUGS: Join vessel at sea anchorage, always using tugs line without charge. 2 to 4 tugs are required for berthing, depending on size of vessel. 3 tugs are normally used for unberthing.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
MEDICAL: No advance notice required unless urgent.
TANKERS: *Taiyo Oil Co. Terminal.* 2 tanker berths available in approximate position 34° 03′ N. 132° 51′ E.
No. 1 Berth: Max. d.w.t. 125,000 tons, Max. LOA, 280 m. Max. safe draft 20.0 m. Connections 1×28″ for Fuel Oil, pumping rate 4,500 t.p.h. and 1×28″ for Crude Oil, pumping rate, 4,500 t.p.h.
No. 2 Berth: Max. d.w.t., 40,000 tons, Max. LOA, 220 m. Max. safe draft 13.20 m. Connections 1×20″ for fuel oil, pumping rate 1,800 t.p.h. and 1×20″ for Crude oil, pumping rate 1,800 t.p.h.
DENSITY: Anchorage 1015. Berth 1015.
FRESH WATER: Fresh water not available but usually brought by barge from Onomichi (about 4 hrs. run to Kikuma). Rate of delivery 80 tons to 200 t.p.h. dependent on barge.
FUEL: Can only be supplied by barge from Hanshin and Kanmon area, provided five days notice is given. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consuls. The nearest Consulates in Kobe.
REPAIRS: Only minor repairs.
REPATRIATION: Possible. Nearest Immigration office situated at Matsuyama.
AIRPORT: Nearest Matsuyama and Takamatsu.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
GENERAL: As this port is a closed port, the undermentioned procedures required: In conformity with regulations vessel required to obtain special permission to enter from Shikoku Maritime Bureau.
Customs request vessel call at Kikuma to obtain special permission for entering at preceding port, by paying the charge at the same rate of tonnage dues prior to arrival; the above procedures will be taken by Agent.
No quarantine available, the nearest quarantine station is located at Matsuyama.
No Immigration office at this port (coming from Matsuyama).
SERVICES: See "Kobe".
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
DEVELOPMENTS: A Taiyo Oil Co. Ltd. dolphin sea berth is under construction, to be suitable for up to 70,000 d.w.t. and will replace the existing 40,000 d.w.t. berth.
AGENTS: See "Niihama".

KIMITSU (Kisarazu): 35.22 N. 139.52 E. **(See Plan)**

DOCUMENTS:
Ship's Register.
Last Port Clearance.
4 Crew Lists including Passport Nos.
4 Passenger Lists.
1 Store List.

1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: *Berthing Pilot:* Not compulsory but necessary. Application to be made to Yokohama pilot office, via local Agent. Pilot boards on Kisarazu Quarantine station or entrance of approaching passage. Available during daytime only.

Bay Pilot . . . . Uraga & Nakano-SE Suido on entering: Bay Pilot will become compulsory as of January 1977 with effect to foreign trade vessels over 10,000 gross tonnage. Application required 24 hours prior to entering by Cable to Anjin Yokosuku through Agent or direct. Pilot boarding position located on point 3.5 miles and 150° from Kannon Saki L.H. Available any time, if any notice delay, change must be cabled to Anjin Yokosuka.

On leaving: Application same as On Entering. Pilot boarding on pier or off harbour.

ANCHORAGE: Refer to Japanese Chart No. 1062 (middle part of Tokyo Bay). Kisarazu Quarantine Anchorage boundary:

Point A, 35° 24′ 6″ N. 139° 49′ 30″ E.
Point B, 85° 3,500 m. direction from A.
Point C, 355° 1,500 m. direction from B.
Point D, 265° 3,500 m. direction from C.
Position usually used: 35° 24.5′ N. 139° 50.5′ E.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port. A vessel may be berthed without a stay at the anchorage if Radio Pratique system used and permission of Chief of Quarantine Office.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

VHF: Port Radio Station at Yokohama works 24 hours. Channel 16.

TUGS:

6 tug boats belonging to Kimitsu tug boat station.

3,500 h.p.–4,000 h.p.	2 tugs
2,900 h.p.–3,500 h.p.	3 tugs
2,200 h.p.	1 tug

Another 16 tug boats listed belonging to Yokohama tug boat station.

3,500 h.p.–4,000 h.p.	2 tugs
3,000 h.p.–3,500 h.p.	4 tugs
2,500 h.p.–3,000 h.p.	2 tugs
2,000 h.p.–2,500 h.p.	8 tugs

Tug boat's lines used free of charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by VHF.

Centre Pier:

No. 1 – 4 Coastal chemical tanker, tug boat basin.
No. 5 Coastal Raw material discharging berth.
No. 6 Discharging berth of iron ore and coal. Max. draft 16.3 m. at high tide. Length of berth 304 m. Capable of 150,000 d.w.t.
No. 7 Discharging berth of iron ore and coal. Max. draft 18 m. at high tide. Length of berth 350 m. Capable for 200,000 d.w.t.
No. 8 Discharging berth of iron ore and coal. Max. draft 18 m. at high tide. Length of berth 422 m. Capable for 270,000 d.w.t.
No. 10 Coastal Limestone carrier berth.
No. 11, 12 Coastal tanker berth.

Centre pier unloader at No. 6 & 7 – 4 units each capacity 1500 t.p.h.
Centre pier unloader at No. 8 – 1 unit capacity 2,500 t.p.h.

West Pier:

No. 1 – 6 Coastal small ships only.
No. 7 Loading berth of steel products. Max. draft 11 m. Length of berth 250 m. Capable for 30,000 d.w.t. Shore crane 1 unit 20 tons 1 unit 30 tons.
No. 8 Loading berth of steel products. Max. draft 11 m. Length of berth 250 m. Capable for 30,000 d.w.t. Shore crane 1 unit 30 tons 1 unit 20 tons.
No. 9 Loading berth of steel products. Max. draft 11 m. Length of berth 285 m. Capable for 30,000 d.w.t. Shore crane 1 unit 30 tons 1 unit 35 tons.
No. 10 Loading berth of steel products. Length of berth 230 m. Max. draft 11 m. Capable for 40,000 d.w.t. Shore crane 2 units each 30 tons.

East Pier:

No. 2 Loading berth of steel pipes. Max. draft 11 m. Length of berth 240 m. Capable of 30,000 d.w.t. Shore crane 3 units on No. 2 & No. 3 berth 30 ton.
No. 3 Loading berth of steel pipes. Max. draft 11 m. Length of berth 240 m. Capable for 30,000 d.w.t.
No. 4 – 13 Coastal ship use only for loading wire rod, angle bar, etc. and discharging materials.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost.

Average loading rates:	Coils 75 t.p.h.
	Plates 50–60 t.p.h.
	Pipes 40 t.p.h.
	Angle 40 t.p.h.
	Wire rods 15–25 t.p.h.
Average discharging rates:	Coal 700 t.p.h.
	Iron ore 750–800 t.p.h.
	1,500–1,600 t.p.h.
	(2,500 ton unloader)
	Manganese ore 600 t.p.h.
	Iron sand 900 t.p.h.
	Coke 700 t.p.h.

MEDICAL: No advance notice required unless urgent.

TANKERS: Only coastal tankers.

DENSITY: 1021-1025

FRESH WATER: Available from shore line. Rate of delivery 40-50 t.p.h. Costs Yen 125 per ton.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches except steel hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CARGO GEAR: Usually load/unload by shore cranes.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 60 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRYDOCKS: None.

SURVEYORS: Nippon K.K.K., Kimitsu Branch.

REPATRIATION: Possible.

AIRPORT: Haneda International Airport is about 3-4 hours distant.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: No cargo loaded on January 1st. Cargo discharged on all holidays.

POLICE/AMBULANCE/FIRE: Kisarazu Police Station tel. 0438–23–4011; Kisarazu Fire Brigade and Fire Station tel. 0438–23–7121.

TELEPHONES: No telephones installation direct to vessels alongside wharf.

SERVICES: Provisions, Laundry, Ships store, Garbage, Hold cleaning, Navigation aids. Special service are called from Yokohama and Tokyo.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

GENERAL: Notification to Maritime Safety Agency:

According to Maritime Traffic Safety Law, The Master of large vessel (over 200 m. in LOA) is required to give to Regional Maritime Safety Agency an advance report of estimated time passing the traffic route and other matters and also requires to obey the instruction given by the Agencies.

Notification cable definitely to be given by 1200 hrs. (JST) on the day prior to entering, directly from Master or through local Agent. Any change in reported matters, to be reported 3 hours before the time of entering by radio communication or telephone.

Seaweed cultivation to be carried out in the vicinity of Nippon Steel Corporation Kimitsu Works so Master's co-operation with regards to the following items would be appreciated.

1. The discharge of oil or oily waste into the water is strictly prohibited by Marine Pollution Law and other related ordinance.
2. Proceeding to the cultivation area is prohibited.
3. Numerous buoys each exhibiting flashing yellow light have been established to mark the outer side-line of the seaweed cultivation area.
4. Bunkering possible daytime only (sunrise to 1 hour before sunset) in the port of Kimitsu.

AGENT: Sub-agents of Dodwell & Co. Ltd. Toyko. Chiba Kaiun Sangyo Co. Ltd., Kimitsu Office, c/o Kaiun Centre Kimitsu Works of Nippon Steel Corporation, No. 1, Kimitsu, Kimitsu-shi, Chiba-ken. Tel. Kimitsu (04785) 2-0800. Telegraphic "Chibamarine Kisarazu".

KINUURA: 34.50 N. 136.56 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: When Pilot required, cable Agent at least 1 day before arrival with ETA. Pilot station located 34° 40′ N. 136° 58′ E. If ETA changes cable "Handakoun Handa Aichi" who pass messages to Pilot. Vessels anchor to await Pilot at above position. No VHF communication available. Pilot boats have no communication system.
ANCHORAGE: Kinuura anchorage located 34° 49′ N. 136° 57′ E. Depth of anchorage: Outside high tide bank about 38-39 ft., inside high tide bank about 32-33 ft.
RESTRICTIONS: Entry restricted only by draft; no other restrictions.
MAX. SIZE: Depth at Chubu Nihon Grain Centre, 12 m. At other berths, 10 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel, to Choshi and North bound to Nagasaki Radio respectively.
TUGS: No tug required when vessels enter anchorage, only alongside wharves.

Pilot Boats – "Yahagi Maru" 1,600 h.p., "Shiomi Maru" 1,300 h.p. Tugs standby near wharves.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: About 1023–1027.
FRESH WATER: Available, but only 1 water barge – capacity 50 tons. When vessels alongside Public Wharves, water can be taken from shore. Delivery rate: 50 t.p.h. but if more than 50 tons required barge returns to shore to load, therefore 1 trip takes about 3 hours.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: None.
AIRPORT: None.
TIME: GMT plus 9 hrs. No alterations made to clocks during year.
HOLIDAYS: 20th July.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 109.
TELEPHONES: No telephones available to place on board.
SERVICES: None.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kinuura Port Office.

AGENT: Dodwell & Co., c/o Handa Koun Kabushiki Kaisha 28, Hama-cho, Handa, Aichi-ken. Cable Address: Handakoun Handa Domestic Telex: 4563-626 H Koun J Tel.: Handa (0569) 21-2301.

KIN WAN (Okinawa): 26.22 N. 127.58 E.

(See Plan)

Kin Wan Port Services Company, Heianza Island.
DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of crew baggage, i.e. tobacco, wines/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest, Cargo Manifest in Transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

APPROACHES: For those vessels which may not be provided with a large-scale chart the following suggestions are given as a guide to approaching the pilot station:

Vessels should make for the position 26° 26′ N., 128° 04′ E. (off the East coast of Okinawa) and from there should steer due West, passing No. 1 Buoy (fl. 4 sec., Ra. Refl.) abeam to port, distant about 1.25 miles. The Berthing Master will board VLCC's (150,000 d.w.t. plus) or any vessel which is a stranger to the port, when they are abeam of the bouy, but if circumstances should prevent this the vessel should continue on the Westerly course for a mile past the buoy and then alter course to 233 (T). About 3.25 miles on this new course brings the vessel approximately to the inner pilot station in 26° 24′ N., 127° 58′ E.

For the purpose of Traffic Separation and Control, the approach to Kin Wan Port is divided by a centre line joining the following positions:

1. 26° 26′ 00″ N., 128° 02′ 00″ E.
2. 26° 25′ 20″ N., 128° 00′ 00″ E.
3. 26° 23′ 30″ N., 127° 58′ 00″ E.

Vessels entering or leaving the port should keep to their own starboard side of this line.
PILOTAGE: Also see "Approaches".

Berthing Masters will normally board from a tug having a blue hull and cream upperworks, with a tall lattice mast bearing a number (1, 2, 3 or 4). Since the tugs have a fairly high freeboard, pilot ladders should be rigged with the bottom step about 6 ft. (2 m.) above the water-level, otherwise the lower steps may be crushed or damaged. Vessels with a freeboard exceeding 30 ft. are requested to rig the pilot ladder in conjunction with an accommodation ladder in the approved manner.

Masters of calling vessels are reminded of their obligation to comply with statutory rules and are requested to comply with International recommendations concerning pilot ladders. If the ladder is not safe, the Berthing Master may refuse to board and thus cause unnecessary delay to the ship.
ANCHORAGES: Recommended anchorages:
For mammoths in order of arrival:

M1: Lat. 26° 24′ 09″ N. Long. 127° 57′ 41″ E.
M2: Lat. 26° 24′ 49″ N. Long. 127° 58′ 15″ E.
M3: Lat. 26° 25′ 29″ N. Long. 127° 58′ 40″ E.
M4: Lat. 26° 26′ 08″ N. Long. 127° 59′ 05″ E.

(Subject Japanese Coastguard M.S.A. approval is obtained by Agent.)
For vessels 50,000 d.w.t.–150,000 d.w.t.

S1: Lat. 26° 23′ 38″ N. Long. 127° 57′ 29″ E.
S2: Lat. 26° 23′ 14″ N. Long. 127° 57′ 14″ E.
S3: Lat. 26° 22′ 50″ N. Long. 127° 56′ 59″ E.

Products anchorage: The area bounded by a line joining the following positions:

1. 26° 22′ 00″ N. 127° 56′ 29″ E.
2. 26° 22′ 13″ N. 127° 56′ 33″ E.
3. 26° 22′ 00″ N. 127° 57′ 19″ E.
4. 26° 21′ 51″ N. 127° 57′ 05″ E.

The holding ground is good in anchorages, but depths in the first groups between 22 and 25 fathoms; it is therefore recommended that at least one shackle of chain be walked back on the windlass before letting go the anchor.

Depths in the product anchorage vary between 10 and 14 fathoms.

Prohibited Anchorage: Owing to the existence of underwater pipe-lines, telephone cables and obstructions, anchoring is prohibited anywhere S.E. of a line joining the following two positions:

1. 26° 22′ 31″ N., 127° 58′ 08″ E. (i.e. the N.E. dolphin of the Sea Island)
2. 26° 21′ 37″ N., 127° 56′ 44″ E. (i.e. the N.E. dolphin of No. 3 berth on the Products Pier)

For berthing, Masters of vessels are requested to have the propeller submerged and vessel in a reasonable trim for ship-handling purposes (not exceeding 3.5 m.).
RESTRICTIONS: Berthing and sailing operations take place 24 hours a day with the exception that vessels do not berth on Nos. 4 and 5 between sunset and sunrise. However, the island of Okinawa recently reverted to Japanese control and it is possible that movements after sunset may be restricted in the future, especially if the anticipated increase in traffic takes place.

There are no specific restrictions on draft, but in order to ensure safe handling characteristics it is recommended that vessels arriving in ballast arrange that the propeller is fully submerged, with a stern trim not exceeding about 10 ft. Vessels which do not meet this requirement may be delayed in berthing until additional ballast has been run in.
MAX. SIZE: Five berths are available for calling tankers. No. 1 berth can accommodate vessels up to 500,000 d.w.t., and No. 2 berth vessels up to 150,000 d.w.t. These two berths are situated at the offshore platform. Berths No. 3, No. 4, No. 5 are situated at the product dock. (Also see "Berthing").

Berth No.	*Max. d.w.t.*	*Least depth of water below datum*	*Remarks*
Sea Berth 1	500,000	102 ft.	
,, ,, 2	150,000	90 ft.	
Prod. Pier 3	60,000	50 ft.	Max. dist. stern to manifold 320 ft.
,, ,, 4	20,000	36 ft.	
,, ,, 5	10,000	30 ft.	

In addition to the above tanker berths a dry-cargo berth is also available. This berth is 110 m. in length and has a least depth of 22 ft. below Okinawa Datum.

HEALTH: At first port of call in Japan, vessel may obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset, and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected zone within 10 days, Captain must advise crew and passengers' health condition to Quarantine Officer through ship's Agent prior to arrival, and close all soil pipes before entering port.

No person other than port health and customs officer is allowed to board or disembark from a vessel until clearance has been obtained from Government Authorities.

Radio pratique is available to vessels in possession of valid certificates issued by the Japanese Government. For radio pratique procedures Owners are advised to consult with their Agents for details.

RADIO: When en route to the Kin Wan Port at Okinawa a vessel's ETA must be communicated to his Agent, 72, 48 and 24 hours prior to arrival. If VHF is not available arrival information can also be passed to your Agent by "Ship Telephone Service". Naha: 098854–5155.

It is important that ETAs are confirmed 12 hours before expected arrivals and amendments communicated when known.

VHF station "Kin Wan Tug" located on Heianza Island keeps a 24 hour listening watch on Channel 16 (156.800 mc/s) and Channel 13 (156.650 mc/s). Tel. 098967-8131 is also manned 24 hours per day.

RADAR: The port is not equipped with radar. Poor visibility may occur in heavy rain, but fog is rare. Coastlines and buoys within the bay give good echo returns on ship's radar. All tugs are fitted with radar, and on occasions vessels have been guided into the port by them in heavy rainstorms, the tug keeping close alongside within sight of the bridge, and communicating by VHF.

TUGS: Four tugboats are stationed at the Terminal. The Berthing Master in consultation with the Master will decide the number of tugs required for each berthing operation and as stand-by tugs during the vessel's stay in port.

Vessels are berthed with the assistance of up to four tugs according to the vessel's size and weather conditions. Such tugs will either secure alongside, "American style", or will secure forward or aft by their towing hooks. Tugs' lines are always used. The tugs are of 2,400 h.p. and have twin C.P. propellers with independent Kort-nozzle rudders, and are manned by highly skilled crews. It should be noted that the port charges for vessels are a fixed amount based on deadweight tonnage, and this charge is not affected by the number of tugs used or not used. Masters may thus follow the Berthing Master's recommendations regarding tug requirements without having to consider what may well be dangerous economies.

READINESS: A vessel is "arrived" for notice of readiness purposes, when the Berthing Master boards or, if vessel proceeds to anchorage without a Berthing Master, when she drops her anchor.

BERTHING: In normal circumstances no lines are run out until the vessel is alongside the berth and in position. Tugs will hold her there whilst the mooring takes place, springs usually being run first, followed by breastlines, then head-and stern-lines. On the larger berths all lines except springs are lowered to the water and taken to the dolphins by line-handling boats, where they are secured to quick-release hooks. Nothing is required in the way of pennants, tails or shackles. Springs are passed direct to the dolphins by heaving-lines.

Owing to the depth of water, anchors are not normally used when berthing at the sea-berth. However, the outboard anchor should in all cases be ready for emergency use.

Weather permitting, vessels secure starboard side alongside at No. 3 Berth. At Nos. 4 and 5 vessels can only berth starboard side to the pier, owing to the construction of the berths. Therefore if wind conditions do not permit of berthing in this way, the berthing will be delayed until the wind is suitable. At the sea-berth, mammoth vessels normally berth port side to the pier, but this is only to reduce the time taken for the operation, and they can be berthed starboard side to if conditions require it. Smaller vessels are berthed either way according to requirements and conditions.

The Marine Office is equipped with a Weather Facsimile Recorder, and Masters can obtain the latest information regarding possible storm conditions by contacting the Harbour Master on VHF Channel 14 or by calling 214 on the internal telephone system from the berths. When typhoons are imminent all cargo operations cease and vessels are required to vacate the berths and are recommended to proceed to sea.

Berth No. 1

Owners: Okinawa Terminal Company Ltd.
Position: 26° 22′ 25″ N., 127° 58′ 01″ E.
Depth: 30 m. (MLWS).
Max. Size: 385 m. LOA, 55 m. beam, 28 m. draft. 500,000 d.w.t.
Services: Fuel oil (bunkers), loading rate 2,800 kl/h, chicksan used. No fresh water.
Loading Rates: Bunkers/HFO 3,000 kl/h, product 2,000 kl/h. All other products 4,000 kl/h. Max. pressure 250 p.s.i.

Berth No. 2

Owners: Okinawa Terminal Company Ltd.
Position: 26° 22′ 25″ N., 127° 58′ 01″ E.
Depth: 30 m. (MLWS).
Max. Size: 315 m. LOA, 45 m. beam, 20 m. draft.
Services: See Berth No. 1.
Loading Rates: See Berth No. 1.

Berth No. 3

Owners: Okinawa Sekiyu Seisei K.K.
Position: 26° 21′ 34″ N., 127° 56′ 40″ E.
Depth: 15.5 m. (MLWS).
Max. Size: 240 m. LOA, 35 m. beam, 13.5 m. draft.
Services: Fuel oil (bunkers) available, 70 kl/h. 6 in. hoses used. No fresh water.
Loading Rates: Aviation, JP4 and Naphtha, 500 kl/h × 2 low sulphur FO 1,000 kl/h × 3. Fuel oil and diesel 1,000 kl/h. Max. pressure 15 kg/sq. cm.

Vessels normally berth starboard side to.

Berth No. 4

Owners: Okinawa Sekiyu Seisei K.K.
Position: 26° 21′ 29″ N., 127° 56′ 48″ E.
Depth: 11.5 m. (MLWS).
Max. Size: 175 m. LOA, 22 m. beam, 10 m. draft limiting condition 90 m. stern to manifold.
Services: Fuel oil available, rate 70 kl/h. Chicksan used. No fresh water.
Loading Rates: Aviation, JP4, JP1, kerosene 500 kl/h × 2. Low sulphur F.O. 600 kl/h. diesel 1,000 kl/h, fuel oil "A" 1,000 kl/h. Maximum pressure 15 kg/sq. cm.

Vessels berth starboard side to.

Berth No. 5

Owners: Okinawa Sekiyu Seisei K.K.
Position: 26° 21′ 28″ N., 127° 56′ 58″ E.
Depth: 10 m. (MLWS).
Max. Size: 110 m. LOA, 17 m. beam, 8.5 m. draft limiting condition 10,000 d.w.t.
Services: Fuel oil, 6 in. hose, 70 kl/h diesel, 6 in. hose, 700 kl/h.
Loading Rates: JP4, JP1, kerosene, diesel and fuel oil "A" 700 kl/h. Max. pressure 20 kg/sq. cm. sulphur, 120 kl/h, max. pressure 15 kg/sq. cm. low sulphur fuel, 600 kl/h max. pressure 20 kg/sq. cm. LPG 200 kl/h max. pressure 27 kg/sq. cm.

Vessels berth port to.

LOADING: Loading lines at the berths are as follows: *(Note:* Hoses are listed from N.E. to S.W.)

Berth No.	*Dia. (in.)*	*To handle*	*Type*
1	12	Bunker/HFO	Chicksan arm with Q/C
	16	Products	,, ,,
	16	Crude/HFO	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude	,, ,,
	16	Ballast	,, ,,
2	12	Bunker/HFO	,, ,,
	16	Product	,, ,,
	16	Crude/HFO	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude	,, ,,
3	4	Bunkers (DO, FO)	Flexible hose
	10	Ballast	Mechanical arm
	10	Naphtha/JP4/kero.	,, ,,
	10	Naphtha/JP4/kero.	,, ,,
	12	Ballast/LSFO	,, ,,
	12	Low sulphur fuel	,, ,,
	12	Low sulphur fuel	,, ,,
	6	Bunkers (DO, FO)	Flexible hose
4	10	Ballast	Mechanical arm
	10	JP4, Jet A1, kero., naph.	,, ,,
	10	JP4, Jet A1, kero., naph.	,, ,,
	10	Automotive or marine diesel	,, ,,
	10	Low Sulphur (FO)	
	6	Bunkers (DO, FO)	Flexible hose
5	6	Auto/marine diesel, kero.	,, ,,
	4	LPG vapour return	,, ,,
	6	LPG/propane/butane	,, ,,
	6	Liquid sulphur	Mechanical arm
	6	Bunkers (FO, DO)	Flexible hose

During cargo transfer or ballast operation all vessels shall show signal flag "B" during the day, and a red light during the night.

Transfer operation shall not be started, or if started shall be discontinued by either the duty officer of the vessel or the Terminal supervisor, when any of the following conditions come to his attention:

(a) During severe electrical storms.
(b) If a fire occurs on the pier or on the vessel.
(c) If there is not sufficient competent personnel aboard the vessel or on the pier to safely handle cargo operation in progress.
(d) Should any condition develop which represents a hazard to the vessel or Terminal installation.

MEDICAL: Agents should be given advance notice of medical or dental attention required. Clinic and hospital facilities are available, and in emergencies helicopter evacuation is possible. There is also a Company ambulance on Heianza Island, for emergencies only. Telephone 319. If no answer, or at night, telephone 300. Or contact C.C.D. (Central Control Desk) on VHF Channel 16 or telephone 211.

DENSITY: The bay is open to the sea, and normal density is 1025.

FRESH WATER: Not available.

FUEL: Heavy fuel is available at Nos. 1 and 2 Berths. All grades of bunkers are available at Nos. 3, 4 and 5.

CONSULS: At present the only Consulates on Okinawa are those of U.S.A. and Taiwan, but it is expected that Consular Officers for Norway and Greece will be established.

REPAIRS: Only minor repair facilities are available in Kin Wan, for such small components as can be sent ashore, e.g. repairing of valves or piping, re-winding of electric motors.

DRY DOCKS: None.

GANGWAY/DECK WATCHMEN: Shore gangways are fitted at Nos. 1, 2 and 3, and are supplied free of charge. Ship's gangways must be provided at Nos. 4 and 5. Watchmen are not required since access to the berths is controlled by the Company's security guards at the installation gates.
REPATRIATION: Crew changes and/or repatriation can be arranged by the Agent.
AIRPORT: Kin Wan Port is about two hours by car from Naha airport (depending on traffic conditions) from where there are frequent services by several major airlines to all parts of the world via Tokyo, Honolulu, Taipeh or Hong Kong.
TIME: Local time is nine hours ahead of GMT, unchanged throughout the year.
HOLIDAYS: Local holidays do not normally affect operations in the port. Bank Holidays are now basically the same as those in other Japanese ports.
POLICE/AMBULANCE/FIRE: Ambulance 319 or 300 after hours or 211 (C.C.D.) or VHF 16; Fire 319 or 300 after hours or 211 (C.C.D.) or VHF 16; Police inform C.C.D. by VHF Ch. 16 or tel. 211, or Harbour Master tel. 214.
TELEPHONES: Telephones are not placed on board, but for urgent ship's business arrangements can be made for calls to be placed through the Company switchboard.
SERVICES: Tank-cleaning alongside is prohibited, but facilities for discharge of tank washings are available. See "Pollution Control".
SHORE LEAVE: For reason of safety the Terminal and the Off-Shore Platform are restricted areas. However, ship's personnel and visitors to ships are permitted to disembark and embark via the dolphins, which are also the personnel landing areas. Loitering at the loading platform will not be permitted.

Unauthorized or apparently intoxicated or disorderly persons shall be prohibited from entering the pier and the Terminal.

Shore passes will be issued by the Agent. These passes must be surrendered to the Agent prior to the ship's departure, unless the vessel is bound for another port in Japan when they can, after stamping, be used in the second port. The pass is sufficient, and no other means of identification need be carried when ashore.
POLLUTION CONTROL: Gas-freeing is not allowed on tankships alongside the pier.

To minimise the chances of pollution *all* ballast, whether clean or dirty, *must* be discharged ashore, except that which is contained in independent "permanent" ballast tanks. Also all ballast loaded into cargo tanks must be taken from ashore, and not from the Bay. The shore ballast tank has a capacity of 550,000 barrels and is connected to all tanker berths.

Caution: The sea berth is surrounded by a new type of sink/float oil fence to contain any oil that may be spilled on the sea. This fence is moored in place by 36 anchors and ropes. Vessels are therefore warned against approaching this fence or using any anchors in the vicinity of the sea berth. Nor should they throw overboard any old wires, ropes or other rubbish which may foul or damage the fence or its moorings.

The Terminal will, in case of an oil spill, take such steps as may be deemed necessary to fight the pollution before it spreads. If the spill is due to faulty equipment or materials on the vessel or to negligency on the part of ship's personnel, the Terminal shall be indemnified for any expenses incurred in connection with the preventive action taken.

No ballast is to be taken from the Bay unless required for the ship's clean permanent ballast system. Ballast for cargo tanks will be supplied by the Terminal.
FIRE PRECAUTIONS: Smoking and use of naked lights is strictly prohibited on board vessels alongside the berths, except in those enclosed spaces aboard ship specifically designated by the Master as "Smoking Areas".

Fire wires of steel must be hanging over the side of the offside bow and quarter whilst alongside to enable tugs to connect readily in an emergency situation. The towing eyes should be maintained at water level.

Boiler tubes must not be blown whilst vessel is alongside and every precaution must be taken to prevent sparks and soot particles escaping from the funnel.

Mooring of boats or craft with mechanical propulsion alongside a vessel loading/discharging crude oil or in the process of ballasting, is not allowed, unless special permission has been given by the Terminal.

In case of a fire aboard a vessel alongside the pier the following sequence of procedure should be adhered to:

(a) "Kin Wan Tug" to be informed immediately.
(b) All cargo operations to cease forthwith.
(c) MOVs and gate valves on loading arms, nitrogen and battery limit valves to be closed as soon as possible.
(d) Dock personnel to stand-by for disconnecting loading arms, unberthing or fire-fighting in accordance with instructions issued by the Berthing Master or "Kin Wan Tug".

During an emergency situation on board a vessel alongside, the Berthing Master will be in charge of organising the preliminary fire-fighting assisted by "Kin Wan Tug". He is to make use of all available means at his disposal, such as tugboats, launches, personnel, terminal equipment and other facilities to assist the vessel and protect lives and Terminal installations. Should the Berthing Master be unavailable or unable to communicate, "Kin Wan Tug" will direct the preliminary fire-fighting.

Kin Bay area comes under the jurisdiction of the 11th District of the Japanese Coastguard and lies in Kin Nakagusuku Port. The telephone number of the Captain of the Port-Coastguard offices, 11th District is 098892-4874.
AUTHORITY: Maritime Safety Agency, 11th Maritime District.

AGENTS: Connell Bros. Co. Ltd., GPO Box 57, Naha, Okinawa. Tel. 098868-4145. Cables: Seabsea, Okinawa. Telex: Seabsea, OKI 49.

KOBE: 34.41 N. 135.10 E. (See Plan)

DOCUMENTS:

Documents	*Quarantine*	*Immigration*	*Customs*	*Agents*
Crew Lists *(a)*	1	1	1	2 *(e)*
Passenger Lists				
Disembarking passengers (passengers leaving the vessel at Kobe)	1	2	1	2 *(e)*
Through passengers (passengers disembarking at ports beyond Kobe)	1	2	1	2 *(e)*
Overland passengers (R/T leaving the vessel at Kobe and rejoining the vessel in other ports in Japan)	1	2	1	2 *(e)*
Discharging Cargo Manifests	1 set	—	2 sets *(b)*	1 set
Through Cargo Manifests	—	—	1 set *(b)*	1 set
Maritime Declaration of Health (International Form) *(f) Plus* Deratisation Certificate	1	—	—	—
Application for permission to land upon arrival in Japan *(f)*	—	1	—	—
List of Ports of Call	—	1	1	—
List of ship's stores	—	—	1 *(c)*	—
List of personal effects (duly signed by each person)	—	—	1 *(g)*	—
Narcotics List	—	—	1	—
List of Arms and Ammunition	—	—	1	—
Declaration inward/outward of vessel, to be signed by the Master	—	1 *(d)*	1 *(d)*	—
Ship's Certificate of Nationality	—	—	1	—
Berthing List	—	—	—	1 set
Address List of landing passengers (separate list for round trip passengers)	—	—	—	1
Free pratique from previous port	1	—	—	—
Port Clearance (previous port)	—	—	1	—

(a) The following particulars should be mentioned in the Crew List: 1. Number, 2. Name, 3. Rank, 4. Age, 5. Nationality 6. Number of Seaman's Book.
(b) Customs Form C.2039 Official forms to be supplied by Kobe or HK.
(c) Customs Form C.2060 Official forms to be supplied by Kobe or HK.
(d) Customs Form C.2000 Official forms to be supplied by Kobe or HK.
(e) Of which 1 copy to be airmailed from previous port.
(f) Form supplied by the Authorities.
(g) For first port of call in Japan only, to be completed on Customs Form C.2050 (Declaration of Crew's Baggage) which form is supplied by Kobe or HK.

PILOTAGE: The Hanshin Pilot Association, Umetate-chisaki, Kaigan-dori, Ikuta-ku, Kobe. Tel. 39-5032. Telegraphic address: "Pilot".

When ship arrives daylight, application should be made not later than 1800 hrs. of previous day. When application made on same day as ship arrives, ETA should be advised at least two hours earlier.

R/T used between pilot office and pilot boat. Frequency: 153.49 Mc. Output: Key station 50 W.; Mobile Station 5-10 W. As neither pilot office nor pilot boat equipped with International VHF apparatus, no arriving ship can exchange direct communication with them.

Six pilot boats available. Gross tonnage 15 tons, speed 15 knots. (maximum 20 knots). Ship requiring Pilot makes request to signal station by flying International flag "G" in day-time, or sending by lamp at night. Pilot taken at quarantine anchorage at Wada-misaki Point. Pilot boats usually located at pier in front of pilot's office. Special point fixed for Pilot to board in bad weather. The ship awaits a pilot either at or near quarantine anchorage at Wada-misaki Point or outside breakwater.

When moored to a mooring buoy, chain cable should be used. Chain shackles must be ready. Pilot boards vessel for mooring if ship arrives before 2230 hrs. and for unmooring any time except following berths:

	Mooring	*Unmooring*
Kobe Seiko Pier (Steel Mill)	Before sunset	Up to 2000 Hrs.
Toyo Menka Pier (Silo Berth)	" "	No restriction
Showa Sangyo Pier (Silo Berth)	" "	" "
Mitsubishi Shoji Pier (Tanker Berth)	" "	" "
Shell Buoy (Tanker Berth)	" " but subject to tide being available.	Before sunset as a rule but possibly up to 2200 hrs. depending on weather conges – tion, etc.
MKS Buoy (Tanker Berth)	" "	"
Nissho Buoy (Tanker Berth)	" "	"

ANCHORAGES: Quarantine anchorage: Latitude 34° 38′ N; 34° 38.6′ N. Longitude 135° 10′ E; 135° 11′ E.

Section of Port	*Number of Anchorages*	*Depth of Water*
3rd	8 berths	12 m.–15 m.
4th	4 berths	11 m.–15 m.
5th	28 berths	11 m.–15 m.
6th	6 berths	13 m.–15 m.

All vessels requiring anchorage for awaiting berth, repairs, bunkering etc., must obtain anchoring position from Harbour Master except following cases: 1. Vessels coming from foreign ports and anchoring at Quarantine Anchorage for inspection. 2. Vessels staying in Quarantine Anchorage not longer than 24 hours after obtaining pratique.

RESTRICTIONS: Quarantine. When ship arrives outside breakwater after sunset, it is inspected for quarantine purposes next day.

Entry at night. When ship arrives outside breakwater after 2130 hrs. it is not permitted to enter.

Hazardous cargo. Depending on kind and quantity of hazardous cargo carried, ship is ordered to berth alongside a pier, at a buoy or outside breakwaters.

Tide. 3 sea berths in the 3rd section can be used only when tide running towards the West.

Draft. Each berth limited for draft.

MAX. SIZE: (Dry Cargoes)

Berth	*Permissible LOA*	*Safe Draft*	*Cargo Handled*	*Remarks*
Buoy 12 (Public)	210 m.	10.3 m.	Any cargo	
Pier 7-B (Public)	192 m.	9.9 m.	Grain	Vessel with Government cargo has priority to use this berth.
M'bishi D Buoy (Private)	190 m.	10.3 m.	Grain/ Scrap/ general	This buoy can be used only when there is no repair vessel.
Tomen Silo Berth (Private)	208 m.	11.3 m.	Grain	
Showa Sangyo Silo Berth (Private)	200 m.	11.3 m.	Grain	
Kobe Seiko Pier-3 (Private)	300 m.	11.0 m.	Coal/ iron ore	

(Tankers)

Name of Berth	*Max. d.w.t. (approx.)*	*Max. LOA*	*Max. safe Draft*	*Mooring–Pipeline–discharging rate*
Shell. Bunkers ex-barge only. No slop discharge facilities.	70,000	250 m.	12.6 m.	To 4 buoys. 1×24″, 1×12″ for F.O., D.O. Minas/Seria Waxy Residue. Average discharge rate (1 Pipe) 1,000 t.p.h. Max. (2 Pipe) 3,000 t.p.h. (mooring possible when tide runs towards West)
MKS. Bunkers ex-barge only.	40,000	234 m. (breadth 33 m).	12.24 m.	To 3 buoys. 2×16″ for F.O. and D.O. Average discharge rate 1,000 t.p.h. Max. 1,300 t.p.h. (mooring possible when tide runs towards West)
Mitsubishi Shoji (for L.P.G. tankers). Bunkers available ex-wharf; ex-barge at anchorage. No slop discharge facilities.	45,000	240 m.	10.35 m.	Alongside Pier. 1×16″, 2×12″ for F.O. and 1×12″ for D.O. Average discharge 800 t.p.h. per pipe. Max. 2,000 t.p.h.
Port Island Oil Berth	70,000	300 m.	10.98 m.	1×22″ for Fuel oil. Average discharge rate 2,000 t.p.h. Max. 3,500 t.p.h.

HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If crew or passengers on board do not possess Valid Smallpox Vaccination Certificates.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: Recommend Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West-bound vessel to Choshi, and North-bound to Nagasaki Radios respectively.

Kobe-Radio details.

	Security and Port message	*Port message*	*Public message*
Call sign	JGD	Kobe Port Radio	JCK
Name of Station	Coast Station or Special Service Station	Kobe Port Radio	Kobe Radio
Station Owner	5th Regional Maritime Safety Headquarters	Kobe Municipality (its Port & Harbour Bureau)	Kobe Central Telegraph Office
Frequency	444 kc/s.	International	134.9 kc. 143 kc.
	500 kc/s.	VHF	
	500 kc/s.	Channels 16, 12, 11, 18, 20.	416.5 kc. 487.5 kc
	512 kc/s.	24-hour service.	500 kc. 512 kc. 425 kc.
	International VHF Channels 12, 16		

TUGS: Meet vessel at entrance of fairway but if Master/Pilot so requests, service commences from anchorage. Tug's lines used without extra charge.

BERTHING: Chains must be used in mooring to a buoy. Ship must not drop anchor near a buoy when it is moored to one. Ship brought head in alongside pier except in special cases. Some berths impossible to reach after sunset. Example: dolphin berths. This is why ships need to arrive outside breakwater before sunset.

Berths alongside and Mooring Dolphins for Large Vessels (Public).

E= East side, W= West side, S= South side.

Name		*Length*	*Fixed depth of Water*
Shinko Pier 1	W.	349 m.	9.1 m.
	S.	102 m.	9.1 m.
	E.	351 m.	9.1 m.
Shinko Pier 2	W.	351 m.	9.1 m.
	S.	102 m.	9.1 m.
	E.	351 m.	9.1 m.
Shinko Pier 3	W.	343 m.	9.1 m.
	S.	102 m.	9.1 m.
	E.	354 m.	10–10.9 m.
Shinko Pier 4	W.	576 m.	10.0–12.0 m.
	E.	644 m.	10.0–12.0 m.
Shinko Pier 5	W.	457 m.	10.0–12.0 m.
	E.	444 m.	10.0 m.
Shinko Pier 6	W.	445 m.	10.0 m.
	E.	441 m.	10.0 m.
Shinko Pier 7	W.	200 m.	10.0 m.
	E.	241 m.	10.0 m.
Shinko Pier 8	W.	400 m.	10.0 m.
	E.	400 m.	10.0 m.
Maya Pier 1	W.	588 m.	10.0–12.0 m.
	E.	400 m.	10.0–12.0 m.
Maya Pier 2	W.	400 m.	10.0–12.0 m.
	S.	192 m.	12.0 m.
	E.	400 m.	10.0–12.0 m.
Maya Pier 3	W.	400 m.	10.0–12.0 m.
	S.	192 m.	12.0 m.
	E.	400 m.	10.0–12.0 m.
Maya Pier 4	W.	400 m.	10.0–12.0 m.
	S.	192 m.	12.0 m.
	E.	580 m.	10.0–12.0 m.
Naka Pier	W.	637 m.	5.5–9.0 m.
	E.	215 m.	9.0 m.
Hyogo Pier 1	E.	632 m.	7.2 m.
	S.	127 m.	7.2–9.0 m.
	W.	436 m.	7.2–9.0 m.

Name		Length	Fixed depth of Water
Hyogo Pier 2	E.	436 m.	7.2–9.0 m.
	S.	127 m.	9.0 m.
	W.	436 m.	7.2–9.0 m.
Hyogo Pier 3	W.	250 m.	7.5 m.
	S.	150 m.	9.0 m.
Nada Wharf	(South(W.) side)(E.)	135 m.	6.3 m.
		510 m.	4.5 m.
Port Island	C 1–9	2,650 m.	12.0 m.
	1–7, 12-15	2,400 m.	10.0 m.
Mooring Dolphins		2,185 m.	10.0–12.0 m.

Mooring Buoys

The whole sea surface within the Port Limits is divided into 6 sections.

Section	Owner of Buoys	No. of Buoys	Buoy Numbers or designations
No. 1	Kobe City Government	4	Nos. 31, 34
No. 2	Kobe City Government	12	Nos. 1–12
	Mitsubishi Heavy-Industries, Ltd.	2	C,D,
	Kawasaki Dockyard Co. Ltd.	2	A,B
No. 3	Shell Sekiyu Kaisha Ltd.	4	Shell Buoy
	Nissho Company Ltd.	2	Nissho Buoy
	Maruzen Kanematsu and Esso Cos.	4	MKS Buoy
No. 5	Kobe City Government	4	Nos. 21, (A,B) Nos. 22, (A,B)

BULK HANDLING FACILITIES: Hanshin Silo Company Berth, 12.50 m. depth alongside available for vessels up to 50,000 tons d.w.t. Discharge effected by 2 pneumatic unloaders with capacity 400 t.p.h. per unit.

Kobe Silo Berth, length 752 ft., depth alongside 41 ft. 2 mobile discharging units each with capacity of 500 t.p.h.

Kohan Silo Berth, length 214 m., depth alongside 12.5 m. equipped with 2 discharging units which can be used for grain, sugar, or general cargo, also 1 pnuematic unloader, with capacity 1,500 t.p.h. per unit.

In the current development programme a total of 7 container berths are to be provided at Kobe.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vesel must constantly keep Agent advised ETA. If stevedores cannot commence loading/unloading at time notified by Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: Agent required give information when patient to be hospitalised or needs medical attention. All medical facilities in port (Kobe City) can be used. When report made by means of VHF or wireless, necessary arrangements are made at once for urgent treatment of patient.

TANKERS: See "Max. size".

The Port Island receives bunker oil from tankers into the terminal and delivers Intermediate 15 and MDO by pipe-line to vessels moored at Kobe Port Island. This berth is equipped with loading arms and utilises a boom completely surrounding the discharging tanker to prevent the spread of any oil spill.

Storage facilities consist of three tanks of 36,000 kl (226 mb) for Intermediate 15 and two tanks of 5,000 kl (31 mb) for MDO.

Pumping facilities consist of three pumps of 700 kl/hour (4,400 b.p.h.) capacity for Intermediate 15 and two pumps of 200 kl/hour (1,258 b.p.h.) capacity for MDO.

Special features include an automatic control system from a central control board, remote valve operation, remote tank gauges, communication equipment at each bunkering berth, flow meters for all deliveries, a chemical fire engine, a crane and a lorry for recovery of waste oil.

The terminal is open between 0900 and 1700 hrs. and availability at other times involves overtime.

TIDE: Mean height of tide 1.030 metres. Some of tanker berths in West part of port affected by tide. Currents less than one knot inside harbour.

DENSITY: Winter: 1023–1026. Summer: 1018–1022.

FRESH WATER: Supplied from the quays at rates of 40 to 50 cu. m. per hour. Four water barges available, largest with capacity 325 cubic metres, can supply vessels at rates up to 300 cu. m. per hour.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. See also "Max. Size – Tankers".

FIRE PRECAUTIONS: LPG tankers instructed by Maritime Safety Headquarters to strictly observe safety rules. Example: checking on what is carried by those who go aboard; banning ship's stores to be loaded on to ship which is working.

DEVELOPMENTS: *Port Island:* When complete 11 container berths (depth 12 m., length 2,600 m.) and 18 liner berths (depth 12 m., length 4,200 m.) will be available.

Rokko Island: Further development planned providing a further 37 berths.

WATCHMEN: Not specially required unless passengers or valuable cargo aboard.

OPENING/CLOSING HATCHES: By Stevedores. Charges for assistance.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnage. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Tobacco (per passenger or crew member). Temporary shore-leave up to 50 cigarettes (duty free); Disembarkation up to 200 cigarettes (duty free). Maximum allowable (only in case of disembarkation) up to 800 cigarettes duty free (however, 600 cigarettes – taxable).

Wines and/or Spirits: Crew member: When the ship at sea for more than one month, up to 6 bottles (one bottle – duty free); less than one month up to 6 bottles (no duty free). Passengers: When a passenger travels for less than a fortnight up to 12 bottles (one bottle – duty free); more than a fortnight up to 12 bottles (up to 3 bottles – duty free).

CONSULS: The following countries are represented by Consuls at Kobe:

Argentina	France	Pakistan
Australia	Germany	Panama
Austria	Great Britain	Paraguay
Belgium	Greece	Philippines
Bolivia	Guatemala	Portugal
Brazil	India	Singapore
Central Africa	Indonesia	Spain
Chile	Ivory Coast	Sweden
China	Korea	Switzerland
Coast Rica	Malagasy Republic	Thailand
Denmark	Malta	Turkey
El Salvador	Mexico	Uruguay
Ethiopia	Netherlands	U.S.A.
Finland	Norway	U.S.S.R.

REPAIRS: All repairs possible.

DRY DOCKS:

Owner	Name	Overall length m.	Width m.	Depth m.	Remarks
Mitsubishi Heavy Industry Ltd.	Dock No. 4	253.25	41.2	13.0	To be lengthened by 45 m.
Kawasaki Heavy Industry Ltd.	Dock No. 1	160.0	22.0	8.83	The largest ship docked: 215 m.×30.5 m.×6.8 m.
	Dock No. 2	94.0	15.4	14.8	
	Dock No. 3	172.8	26.0	13.0	
	Dock No. 4	215.0	33.5	11.0	

(Number of docks in Kobe)

Kobe Dockyard Engine Works Co. Ltd.	3 floating docks
Ishihara Shipyard Co. Ltd.	1 floating dock
Arata Dockyard & Engine Works Co, Ltd.	1 floating dock
Shikase Dockyard Ltd	1 floating dock
Mitsubishi Heavy Industries Ltd.	3 floating docks 1 dry dock
Kawasaki Heavy Industries Ltd.	2 floating docks 2 dry docks

AIRPORT: Osaka International Airport. Distance from Airport about 1.5 hours by car.

Domestic: Following regular airlines, Japan Air Lines, All Nippon Air Lines, Nihon Kokunai Koku, Toa Koku.

International: For Far East: Japan Air Lines 31 flights per a week, Thai International Air Lines 10 flights per a week, Cathay Pacific Air Lines 8 flights per a week, China Air Lines 11 flights per a week, Korean Air Lines 12 flights per a week, North-West Air Lines 7 flights per a week.

For Europe: Lufthansa 1 flight per week, British Airways 3 flights per week, Air France 2 flights per week.

For United States: Japan Air Lines 12 flights per week, Pan American 3 flights per week.

TIME: Japan Standard Time set at the 135th degree of East longitude GMT plus 9 hours. No alteration to clocks throughout year.

HOLIDAYS: On 2 Sundays of each month, no cargo work arranged. In special cases, daytime cargo handling operation possible on Sundays and holidays.

POLICE/AMBULANCE/FIRE: *Police* 110 Water Police Station tel. 33–2351, 33–2354, Ikuta Police Station 33–0044, Fukiai Police Station 23–4441, Hyogo Police Station 55–0051.

Ambulance: 119 Ikuta Fire Department 39–4994.

Fire: 119 Water Fire Department 33–9951, Ikuta Fire Department 33–4994, Fukiai Fire Department 29–0401, Hyogo Fire Department 56–6141.

TELEPHONES: Installation charge on board vessel lying alongside pier. Installation on board vessel which is lying at buoy or anchorage.

GENERAL: When typhoon approaching, Port captain requires ships to proceed outside breakwater.

SHORE LEAVE: Crew members free to go ashore.

DELAYS: 1. Weather condition (where strong wind prevents ships entering port). 2. Tide (berths in West part of port). 3. Berths where no ships permitted berth alongside at night. 4. Where a quarantine officer or Pilot being awaited. 5. Shortage of gangs, weather.

AUTHORITY: Port Management Body: City Government of Kobe.

AGENT: Dodwell Tramp Agencies, PO Box 557 Kobe Port, Kobe Meiji Seimei Building 3–7, Isogami-dori 8-chome Fukiai-ku, Kobe. Tel. (078) 251–0021. Telegraphic "Dodtramp Kobe". International Telex J 78826.

KOKURA: 33.54 N. 130.53 E. (See "Kanmon-Ko") (See Plan)

Kokura situated between Moji and Tobata. On the East is contiguous to Moji Port, on the West to Tobata Port and on the North it opens to the Kanmon Straits.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N. 135° 11′ E. Telegraphic address: "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGE: Anchorage not in use as the area is being dredged for the purpose of navigation fairway.

RESTRICTIONS: Vessel enters port only within 1 hour before and after slack tide in daytime. No night departure.

MAX. SIZE: 18,000 tons gross., 10 m. draft.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi and Northbound to Nagasaki Radio respectively.

TUGS: See "Moji".

BERTHING:

Name of berth	*Length* m.	*Depth* m.	*Permissible draft* m.	*Capacity*
Murasaki				
Kawajiri Wharf	190	10.0	10.0	20,000
Sunatsu				
West Wharf	366	8.4	8.4	10,000
Hiagari Wharf				
No. 3	OA180	10	10	20,000
No. 4	OA180	10	10	20,000
No. 5	OA180	10	10	30,000
Ferry	270	5.5	5.5	5,000
No. 6	OA200	10	10	20,000
No. 7	OA200	10	10	20,000
Kanematsu				
Oil Pier	OA170	6.5	6.5	DW 18,000

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

(a) Max. 6 gangs are available.

Stevedores, regular employees 116, temporary labourers 109. Longshoremen 459.

(b) Lighters: Kokura Marine Transportation Co., lighters 25, tonnage 8,900 tons.

(c) Shore crane:

No.	*Capacity*		*Location*	*Owners*
2	10 tons		Sunatsu Wharf	Sumitomo Metal
1	6 tons		,,	Kokura Marine
3	12 tons	outreach 18 m.	Sumitomo Metal Wharf	Sumitomo Metal
3	35 tons		Hiagari Wharves Nos. 6 and 7	Shin Nihon Steel Corp.

(d) Floating crane: arrangeable from Moji.

(e) Average performance of loading/discharging: Discharging: Iron ore 40/50 t.p.h./gang/hatch (by ship's gear). 200 t.p.h./gang/hatch (by shore crane). Coal 40/50 t.p.h./gang/hatch (by ship's gear). 100/150 t.p.h./gang/hatch (by shore cranes). Scrap steel, pressed 20 t.p.h./gang/hatch (by ship's gear). Ordinary 10 t.p.h./gang/hatch (by ship's gear). Bulky 5 t.p.h./gang/hatch (by ship's gear). Loading: Steel under 20 ft. long 25–30 t.p.h./gang/hatch, over 20 ft. long 15–20 t.p.h./gang/hatch.

(f) 2 shifts: 0800 to 1700 hrs. and 1700 to 0700 hrs. Normal working hours: 0800 to 1700 hrs. Refer to Moji for further information.

TANKERS: Also see "Berthing". At Kanematsu-Goshi Oil Refinery 1×8 in. and 1×10 in. diameter shore pipe-line. No slop facilities available.

DENSITY: 1025.

FRESH WATER: From hydrants at Sunatsu and Sumitomo Metal wharves, the rate of delivery per hour: 30 tons per hydrant. Also delivered by barge.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: See "Moji".

REPAIRS: See "Moji".

AIRPORT: All Nippon Airways, Kitakyushu, about 30 minutes by taxi from Kokura station to airport. Japan Air Lines, Fukuoka, and Cathay Pacific Air Lines, Fukuoka, about 1.5 hours by train and taxi from Kokura station to airport.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 56–7171; Ambulance 119; Fire 92–4831.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Kita Kyushu Port Authority.

SHIPMASTER'S REPORT: December 1975, Vessel discharged iron ore at Sumitomo Metal Industries.

Pilotage: Arriving from East. He Saki: Lat. 33° 56′ 24″ N. Long. 131° 03′ 12″ E. Arriving from West. Mutsure: Lat. 33° 58′ 30″ N. Long. 130° 53′ 00″ E.

Anchorage:

He Saki: Lat. 33° 56.2′ N. Long. 131° 02.9′ E. Depth 11.4 m.

Mutsure: Lat. 34° 00.0′ N. Long. 130° 52.5′ E. Depth 19.0 m.

Departing from He Saki anchorage to arrive to port of destination in Kanmon Straits in Slack Water and only in daylight.

Normally Pilot boarding 1 hour before tide change. Allowable Drafts to transit Kanmon Straits Max. 30 ft. anytime. Max. 32 ft. 10 in. at High Water.

Radio Pratique: Obtained if in possession of valid Sanitary Certificate and all Smallpox Certificates valid. Send cable to Agent with prefix RPM following the standard text.

Docking: Always Starboard side.

Anchor: Port anchor ready for emergency.

Fenders: Prismatic Rubber.

Gangway: Ship's Accomodation ladder.

Discharging Facilities: 3 Cranes – Capacity 180 t.p.h. each.

Departure from Dock: Undocking only in daylight and about 1 hour before slack water. 3 tugs are necessary for turning the vessel in the narrow basin to head out.

Note: A new Dock is built facing Kanmon Straits, just North outside this Basin.

Sumitomo representative said that it will be ready in Spring 1976.

Under completion 2 Unloaders Canti-Lever, Bridge type with capacity of 1200 t.p.h. each.

AGENT: See "Moji".

KOMATSUSHIMA: 34.00 N. 134.36 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
6 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 5 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. 3 authorised licensed Pilots available.

ANCHORAGES: Situated at Western corner of Komatsushima bay and port protected by three breakwaters, North, East and South covering 396,700 sq. m. Depths of water at anchorages as follows:

(a) Inside breakwater 8–10 m., *(b)* Outside breakwater 8–13 m., *(c)* Wharf 8.50 m.

RESTRICTIONS: Vessels must get permission and instructions where to anchor from Port Captain before arrival. Wharf and Inner harbour: entering and sailing usually only during day-time regardless tide and current. Outer harbour: Entry and sailing anytime.
MAX. SIZE: Anchorage inside breakwater: length no limit, breadth no limit, draft 8.60 m.
Anchorage outside breakwater: length no limit, breadth no limit, draft 8.60 m.
Wharf. (Suitable 10,000 d.w.t.). length 175 m., breadth no limit, depth 9 m.
Shinko Wharf: (Suitable 10,000 d.w.t.) Length 175 m. Draft 8.5 m.
Kanaiso Wharf. (Suitable 10,000 d.w.t.) Length 175 m. Draft 8.5 m.
Kanaiso Wharf. (Suitable 15,000 d.w.t.) Length no limit. Draft 10 m. after dredging.
HEALTH: Pratique to be obtained at Shimotsu prior arrival Komatsushima. At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Wharf and inner harbour: join vessel at sea anchorage, always using tug's line without charge. Outer harbour: no tug required in normal conditions.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by telegram.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630–2130 hrs. 60% additional of basic stevedorage; 2130–0500 hrs. next morning special additional; Sundays/holidays 100% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: 1015.
FRESH WATER: Alongside berth: Can be supplied by shore line with capacity of 25 t.p.h.
Anchorage: Can be supplied by 50-ton barge with capacity of 28 t.p.h. (but as strong winds prevail during Winter months no water supplied at anchorage outside breakwater).
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None. Nearest consulates in Osaka.
REPAIRS: Only minor repairs up to 3,000 d.w.t..
DRY DOCKS: No dry dock. Nearest at Hitachi Shipbuilding & Engineering Co. Ltd., Chikko works, Osaka; Kawasaki Heavy Industries Ltd., Kobe and Mitsubishi Heavy-Industries Reorganised Ltd., Kobe Shipyard & Engine Works.
AIRPORT: Nearest airport Tokushima (10 miles North) where TOA Domestic Airlines, 9 flights to Osaka, 1 to Tokyo.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police tel. 110; Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: None.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENT: See "Niihama".

KUDAMATSU: 34.00 N. 131.52 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.
1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.
ANCHORAGE: Kudamatsu loading anchorage Lat. 33° 59′ 40″ N., Long 131° 51′ 20″ E.
RESTRICTIONS: No restriction for entry into and/or departure from anchorage during night and day time. But berthing/unberthing effected during daytime only.
MAX. SIZE: No restriction on length, breadth, and draft for any vessel entering port, but maximum safe draft for Nippon Oil Refinery Wharf 12 m. Max. d.w.t. 55,000 tons, and for Toyo Kohan Wharf 11 m.
HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or suspected case, of infectious disease within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination Certificate.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to Choshi and Northbound to Nagasaki Radio respectively.
TUGS: Tugs normally join vessel proceeding to Nippon Oil Refinery Wharf at Lat. 33° 58′ 20″ N., Long 131° 53′ 30″ E. and proceeding to Toyo Kohan Wharf at Lat. 33° 59′ 40″ N., Long. 131° 51′ 20″ E. Tug's line used and charges for line's use is included in tug-boat operation charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: At Nippon Oil Refinery 2×10″ shorelines. Indonesian Crude, 6/7000 t.p.h. P. G. Crude, 1,200 t.p.h. and Fuel Oil, 500 t.p.h.
DENSITY: 1025.
FRESH WATER: At anchorage, section II Kudamatsu: water barges available from Tokuama. Rate of delivery 50 t.p.h. At Nippon Oil Refinery and Toyo Kohan Wharf, hydrants are available. Rate of delivery 20 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. Also see "Moji, Fuel".
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: All types possible.

DRY DOCKS: Kasado Dockyard Co. Ltd.

Dry dock	*Length*	*Breadth*	*Depth*	*Docking capacity (g/t)*
No. 1	152.10 m.	22.71	8.90	10,884
No. 2	107.71 m.	16.46	7.48	3,600
No. 3	220.00 m.	37.00	11.00	34,497

REPATRIATION: Possible.
AIRPORT: Ube and Hiroshima airports: distance about 2 hours by train, and from Ube to Tokyo 1 flight per day and from Hiroshima 4 flights per day.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 41–0615, emergency 110; Ambulance 41–2840, emergency 119; Fire 41–2840, emergency 119.
TELEPHONES: No arrangements exist for placing telephones on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.

AGENT: Sub-agents of Dodwell & Co. Ltd., Sankyu Unyo Kiko K.K., 1379–14 Aza Yamzakiya, Oaza-Nishitoyoi, Kudamatsu-shi. Tel. Kudamatsu (0833) 43–0390 41–4499. Telegraphic Address "Sankyuunyu Kudamatsu". Telex: 6754–67.

KURE: 34.15 N. 132.32 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea Ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N., 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.

ANCHORAGES:	*Minimum Depth*	*Minimum bottom width*	*Density of water*	*Nature of bottom*
Entrance Channel	20 m.	No limit	Summer Av. 1020	
Harbour Channel(s)	20 m.	No limit	Winter Av. 1025	Mud and sand

Depths refer to M.W.L. Difference between datum quoted and chart datum: about 2 m. (to be added) Rise of tide: springs 3.4 m. neaps 2.6 m.
Also Mooring buoys and Harbour Anchorage. (See "Berthing").
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from Cholera infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Tugs normally join vessel at quarantine anchorage area. Tug's lines free of charge.
BERTHING: Pilots do not agree to berth or unberth outside period from sunrise to sunset. For berthing, at least 1.5 hours advance arrival necessary to reach berth before sunset. Mooring buoys: 3 buoys available in harbour for vessels less than 15,000 d.w.t. Harbour anchorage: 3 anchorages with good ground (mud) and suitable vessels up to 80,000 d.w.t. LOA 300 m.

Nissin Steel Works Ore berth
No. 2 Berth
Depth of approaches 17–18 m.
Length of Berth 190 m.
Depth of alongside berth 13 m.
Max. draft acceptable 12 m.
Max. length acceptable 224 m.
Max. width acceptable 31.8 m.

No. 3 Berth
Suitable 150,000 d.w.t.
Depth of approaches 19–20 m.
Length of Berth 275 m.
Depth of alongside berth 18 m.
Max. draft acceptable 18 m.
Max. length acceptable 295 m.
Max. width acceptable 45 m. (about).

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notifed by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: No facilities.
FRESH WATER: For domestic and boiler, 330 k/tons per barge (1 barge available from Kure City office), delivering rate about 100 k/t.p.h. (50% additional for overtime, Sundays/holidays and Saturday afternoon also additional to basic rate for outside harbour limit).
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consul available, but marine note of protest can be attested by the local notary public.
REPAIRS: All types of deck and engine repairs are possible.
DRY DOCKS: (Ihi-Kure). Dimensions of No. 4 Dry Dock (length 338.3 m., width 43 m., depth 17 m.) – 160,000 d.w.t. No. 3 Dry Dock, for up to 800,000 d.w.t. (length 510 m., width 80 m., depth 13.5 m.).
REPATRIATION: Possible.
AIRPORT: Hiroshima airport, distance approximately 35 km. – 40 km. and about 60–90 minutes by car. Only domestic regular airlines available. 4 flights to Osaka and 6 to Tokyo, daily.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police (for emergency) 110; Ambulance 119; Fire 119.
TELEPHONES: No arrangements available for placing telephones aboard.
GENERAL: Kure is a local port which makes it difficult to arrange all requirements. At least 3 days notice helpful.
SERVICES: All navigational apparatus can be serviced as required. Cargo holds cleaning service can also be carried out, but tank-cleaning equipment and services to be arranged from Kobe area, otherwise through IHI Kure Shipyards.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for 3 days only, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Naigai Unyu Co. Ltd., 1–7, 1-chome, Naka-dori, Kure. Tel. Kure 0823 21–5181/5. Telegraphic "Naigai Kure". Telex: 662340.

KUSHIRO: 42.58 N. 144.21 E.

DOCUMENTS: Ship's Register. Last Port Clearance. 3 Crew Lists including Passport Nos. 3 Passenger Lists. 1 Store List. 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: No telegraphic address. Previous advance notice, minimum 8 hours advance notice ETA and any alterations. Contact Pilot boat through Harbour office/tug boats with wireless telephones. Pilot boat has no radio telephone. Pilot boat waits at Quarantine anchorage (1,000 m. off and 280° from North Breakwater white light), and entrance of Breakwater during Winter period (December–March).
ANCHORAGE: Bottom sand and mud. Min. depth 9 m. in passage and 7.5 m. in anchorage. Depth over 29.5 ft. 162,075 sq. m., Section 2; Depth over 24.5 ft. 690,000 sq. m., Section 2 and 3; Depth under 24.5 ft. 393,600 sq. m., Section 3. Tidal range, average high-tide plus 1.533 m., average low-tide plus 0.154 m., average tidal difference plus 0.953 m.
RESTRICTIONS: Vessel allowed enter and sail day and night. Pilot assistance officially not compulsory but in practice necessary, and Pilot service available for 24 hours subject to 8 hours advance notice.

MAX. SIZE: Pilot agrees take in 25,000 d.w.t. vessels (LOA about 185 m.). However, depth max. 9.5 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Usually join vessel at entrance of breakwater and ship's lines to be used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. All berths limited by depth in entrance channel.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ships' crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: North Pier – 3 berths for 20,000 d.w.t.×2 and 18,000 d.w.t.×1. Hose-diameters 10″×1, 8″×3, 6″×3. South New Pier – 1 berth for 3,000 d.w.t. Hose-diameters 10″×1.
DENSITY: Average 1025 inner breakwater high-tide, and average 1022 low-tide.
FRESH WATER: Direct supply from the wharves at 30 t.p.h. Barge supply and capacity 3 hours round per barge.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
DEVELOPMENT: Total of 21 berths including 4 for up to 40,000 d.w.t. Industrial raw materials carriers will be built and port breakwater will be lengthened by 3,940 m.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None. U.S. Consul located in Sapporo city.
REPAIRS: Ordinary deck, engine and electrical repairs arrangable by the local factory.
DRY DOCKS: None; nearest located in Hakodate and Muroran ports.
REPATRIATION: Possible.
AIRPORT: Kushiro air port about 40 minutes taxi or direct connection bus from port area. Flight service daily, 2 flights for Tokyo and 1 flight for Sapporo.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: 1st May.
POLICE/AMBULANCE/FIRE: Police HQ 23–7111 or emergency 110; Hospitals Kushiro Grand Hospital 41–6121, Kushiro Red-Cross Hospital 22–7171; Fire HQ 22–2156 or emergency 119.
TELEPHONES: No systems for arranging on board.
GENERAL: All port facilities services except wharfage applicable. Winter period additional charges 30%–50% while 1st December and 31st March (all Hokkaido ports same).
SERVICES: Arrangable from Muroran.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kushiro-Shiyakusho.

AGENT: Sub-agents Dodwell & Co. Ltd., Tokyo, Narasaki Sangyo Co. Ltd., c/o Mitsuwa Transport Co. Ltd., Attn. Shipping Agency Dept., Minami Hama-cho, Kushiro. Tel. Kushiro (0154) 22–3030, 22–0903. Telegraphic "Narasaki Kushiro".

MAIZURU: 35.27 N. 135.19 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot boats "Koun Maru No. 2" 130 h.p. "Koun Maru No. 1" 60 h.p. Channel between Kanagasaki and Bakuchi Cape. Pilot station Lat. 35° 32′ 00″ N., Long. 135° 18′ 30″ E. Anchorage position for vessel waiting Pilot, Lat. 35° 32′ 00″ N., Long. 135° 18′ 30″ E. Pilot daytime only.
ANCHORAGE: Section 2, Depth 9 m., Section 3, 17 m.
RESTRICTIONS: Entry during day only. Channel depth 12.0 m.
MAX. SIZE: Length 182 m., draft 10 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Position: No. 2 Q-anchorage (35° 29.2′ N.; 135° 20.5′ E.). Both ship's and tug's lines used. Five tugs available, 1×1,000 h.p., 2×800 h.p., 1×300 h.p. and 1×100 h.p.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible draft* (m.)	*Capacity* (g.r.t.)
No. 2 pier No. 1	110	7.3	6.6	3,000
No. 2	120	7.3	6.6	5,000
No. 3	185	9.0	8.2	10,000
No. 4	105			3,000
No. 4 pier	180	10.0	9.1	15,000
Kita Buoy		8.0	7.2	
Ohgimi Buoy		12.0	11.0	
Katsura Buoy		12.0	11.0	
Nagahama Buoy		8.0	7.2	
Taira 8 Buoy		8.0	7.2	
Taira 14 Buoy		10.0	9.2	

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: 1025.
FRESH WATER: Available from wharf, and delivered by barge.
In rough, snow, rainy weather 50% extra. Overtime 1600–2300 hrs. 50% extra; 2300–0500 hrs. 100% extra, 0500–0800 hrs. 50% extra. Holidays 30% extra. Distance addition.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears' maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Possible.
DRY DOCKS: 246 m.×33.5 m.×12.5 m. Two others.
REPATRIATION: Possible.
AIRPORT: None.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 07736–5–0810; Ambulance 07736–5–2174; Fire 07736–5–2174.
TELEPHONES: Not possible to place telephones on board.
SERVICES: None.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Iino Kauin Kaisha Ltd., Maizuru Office, 18–5, Koaza Shimasaki, Oaza Matsukage, Maizuru-shi Kyoto-fu. Cable Adress: Iino Maizuru. Domestic Telex: 5734–426 Maizuruiino Mai. Tel.: Maizuru (0773) 75–21112/7.

MATSUYAMA: 33.52 N. 132.42 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.

1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N., 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki Pilot station.

3. Hosaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.

ANCHORAGE: The port faces Iyo-Nada and located near Bungo Straits. Entrance open to Iyo-Nada towards West, but port protected by West breakwater and small island off Northern part of approaches where holding ground good. During Winter months strong N.W. wind prevails causing heavy swell at anchorage. Depth of water 17–25 m.

RESTRICTIONS: *Oil tanker berth.* Vessel drawing less than 12 m. can moor and unmoor at half-flood during daytime but vessels drawing 12 m. or more advised to await high water.

Dry cargo vessels berth. Dry cargo is logs and cargo working carried out at anchorage of Horie, Umaiso and Yura Bay.

Horie Bay. Vessels no longer than 160 m. can berth. Vessels enter daytime only regardless of tide and current.

Umaiso Bay. As Horie Bay.

Yura Bay. Vessels no longer than 110 m. can berth. Daytime entry only regardless of tide and current.

MAX. SIZE: *Maruzen Oil Co. Ltd., Matsuyama refinery, Genyu Sambashi.* Max. 50,000 d.w.t. Max. LOA, no limit. Max. safe draft 12.00 m.

Horie and Umaiso Bays. Length of vessel 160 m.; breadth no limit; draft 15 m.

Yura Bay. Length 110 m.; breadth no limit; draft 10 m.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: For tankers: join vessel at Quarantine anchorage, using Tug's lines without charge. For dry cargo vessel, no tug required for berthing and unberthing in normal conditions.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: No advance notice of dia. of load/discharge lines required. See "Max. Size".

Shorelines: 1×10″ (Fuel Oil) 600 t.p.h. and 1×10″ (Crude Oil) 2,000 t.p.h.

DENSITY: Anchorage 1015. Berth 1015.

FRESH WATER: *Maruzen Oil Co. Ltd., Matsuyama refinery, Genyu Sambashi.* Can be supplied by shore line with capacity 25 t.p.h.

Anchorage: Can be supplied by 30 ton barge with capacity 30 t.p.h.. Strong winds prevail during Winter months, when no water can be supplied.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. Also see "Moji, Fuel".

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless ship's crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears' maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: Consulates in Kobe.

REPAIRS: Only minor repairs.

DRY DOCKS: None. Nearest at Kawasaki Heavy Industries Ltd., Sakaide; Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima and Mukaishima, dimensions of those docks as follows:

Kawasaki Heavy Industries Ltd., Sakaide. Dock No. 2 for 500,000 d.w.t. vessel 450 m.×72 m.×12.3 m. Only used presently for shipbuilding and after services.

Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima Dockyard. Dock No. 1 for 20,000 d.w.t. vessel 175 m.×25 m.×25.62 m.×9.10 m. Dock No. 3 for 130,000 d.w.t. vessel 282.50 m.×47 m. 11.33 m.

Hitachi Shipbuilding & Engineering Co. Ltd., Mukaishima Dockyard. Dock No. 1 for 3,000 d.w.t. vessel 86.18 m.×13.60 m.×6.80 m. Dock No. 2 for 8,500 d.w.t. vessel 125 m.×18 m.×7.40 m. Dock No. 3 for 25,000 d.w.t. vessel 175 m.×29 m.×9 m.

REPATRIATION: Possible.

AIRPORT: Domestic airport situated South of harbour. All Nippon Airways flights to Osaka and Tokyo.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: Only at Kobe.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days. 3 days extension possible if ship stays longer.

AUTHORITY: Port Administration Office.

AGENTS: See "Niihama".

MIIKE: 33.00 N. 130.23 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: 24 hours notice required. Vessel entering dock will receive necessary assistance from Dock Master for berthing, and for departing. Sea pilot from Kuchinotsu to Miike will be arranged if required. Request for Pilot should be given a.m. previous day, through Agent or direct to Pilot Miike Harbour, c/o Miike Port Management Co. Harbour Pilot boards two miles off the lighthouse.

ANCHORAGES: Lat. 33° 0′ 08″ N. Long. 130° 23′ 50″ E. Harbour limit within circle of 2,700 m. radius centring on lighthouse at West end of Northern breakwater. Roadstead affords safe anchorage, mud and sand.

RESTRICTIONS: Vessel shall dock or depart on high water. Ebb stream begins about half an hour before high water and runs to South for 6 hours. Max. current 3 knots at entrance of channel. Flood stream begins at about low water time and runs to North for 6 hours max. 3 knots at lighthouse. Channel 1800 m. long, 137 m. broad from jetty to jetty, 45.7 m. width at bottom.

MAX. SIZE: No limitation for breadth and length, but max. drafts are as follows: 30 ft. 6 in. up to 20,000 d.w.t.; 28 ft. 10 in. up to 25,000 d.w.t.; 25 ft. 7 in. up to 30,000 d.w.t.

HEALTH: Officials board at anchorage. At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: 6 available: "Suwa Maru" 131 g/t 1,100 h.p. "Minato Maru" 131 g/t 1,100 h.p. "Miike Maru" 146 g/t 570 h.p. "Suehiro Maru" 25 g/t 166 h.p. "Wakashio Maru" 19 g/t 120 h.p. "Asahi Maru" 5 g/t 60 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

North Quay	depth 10.7 m.
Dock Pier	depth 8.5 m.
Dock Quay	depth 8.5 m.
Quay No. 5	depth 10.7 m.
New Quay No. 5	depth 10.7 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at

additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: 1025.
FRESH WATER: Available at wharf only. Delivery 20–25 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears' maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: Consuls at Moji.
REPAIRS: Minor repairs only.
DRY DOCKS: See "Moji".
REPATRIATION: Possible.
AIRPORT: See "Moji".
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAYS: 15th August.
POLICE/AMBULANCE/FIRE: Tel. 110 and 119.
TELEPHONES: Available at stevedores' office at the wharf.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: Sub-agent of Dodwell & Co. Ltd., Tokyo. Miike-ko Service Center K.K., 1, Shinko-cho, Omuta-shi, Fukuoka-ken. Cable Address: Ringer Omuta; Domestic Telex: 7444–12; Tel.: Omuta (09445) 3–3061.

MISUMI: 32.38 N. 130.27 E. (See Plan)

PORT LIMITS: The sea surrounded by the line from Seto-no-hana to the lighthouse on Oyano Island, the line from Togasaki on the same island to Daishiro-bana on Chizoku Island, the line from Daishiro-bana to Usagi-bana on Tobase Island, the line West to Tobase Bridge, and the coast.
DOCUMENTS: 3 Crew Lists, 3 Passenger Lists, 1 Manifest, 1 Customs, 1 Store List, 1 Health Document, 1 Bill of Lading.
PILOTAGE: Pilot Station (acting also as an Agent for foreign vessels).
Misumi Branch Office of the Nippon Kaiun K.K. located at Higashiko 1, Misumi-machi, Uto-gun, Kumamotoken. Tel: 09645-2-3121 or 2-3125.
Misumi Kaiun K.K. located at Higashiko 1, Misumi-machi, Uto-gun, Kumamoto-ken. Tel: 09645-2-3130, 2381 or 3278.
ANCHORAGE: Within port limits.
RESTRICTIONS: A Pilot is not available after dark, also his availability depends on the tidal conditions.
MAX. SIZE: Maximum d.w.t. 15,000 tons. The tidal difference between high and low water is great. (4 m).
HEALTH: All the necessary procedures must be performed at the Misumi Branch Office of the Fukuoka Immigration Office.
RADIO: Not available.
VHF: Not available.
TUGS: 3 tugs owned by the Misumi Kaiun K.K., 2 tugs owned by the Misumi Branch Office of the Nippon Kaiun K.K.
BERTHING:

Quay	A	Length	137 m.	Depth	8 m.
,,	B	,,	160 m.	,,	9 m.
,,	C	,,	165 m.	,,	9 m.

CRANES: 1 zip crane (fixed) owned by the Kumamoto Prefecture. 3 zip cranes (fixed), 2 zip cranes (movable), 2 shovel loaders (movable) and 3 fork-lifts (movable) owned by the Misumi Kaiun K.K.
1 zip crane (fixed), 1 mobile crane (movable), 4 truck cranes (fixed) and 2 pay loader (movable) owned by the Nippon Kaiun K.K.
A vessel is not required to use her own gear along the quays A, B, and C, but is sometimes required to do so at the time of loading and discharging.
STEVEDORES: Advise Agent.
MEDICAL: Advise Agent.
FRESH WATER: Available from the water supply facilities operated by the Kumamoto Prefecture.
Charge: 150 yen per 1 cu.m. 180 yen per 1 cu.m. after business hours.
CONSULS: None.
REPAIRS: Only light repairs possible.
DRY DOCKS: Small docks for less than 1,000 tons.
SURVEYORS: Not available.
GANGWAY/DECK WATCHMEN: Service of watchmen is not necessary.
HATCHES: Opening and closing is done by the stevedores.
REPATRIATION: Misumi Branch Office of the Fukuoka Immigration Office arranges necessary repatriation.
AIRPORT: Kumamoto Airport (about 60 km. distance).
POLICE/AMBULANCE/FIRE: The Oyano Police Station Misumi Police Box located at Higashiko, Misumi-machi, Uto-gun, Kumamotoken. Tel: 09645-2-3150.
TELEPHONES: There is no arrangements for placing telephone on board.
SHORE LEAVE: Shore passes are to be issued at the Misumi Branch Office of the Fukuoka Immigration Office.
DELAYS: Delays will be expected when quays are occupied by vessels or a Pilot cannot go on board because of the tidal conditions.
AUTHORITY: Misumi Port Office of the Kumamoto Prefecture.
AGENT: Holme Ringer & Co., Ltd. c/o Misumi Kaiun K.K. 3-1159, Oaza Misumiura Misumi-machi, Undo-gun Kumamoto-ken. Cable Address: Ringer Misumi. Tel: Misumi (096452) 3130

MIYAKO: 39.39 N. 141.58 E.

DOCUMENTS:
For Quarantine
1 Statement by Ship's Master.
1 Crew List.
1 Passenger List (if any).
Yellow cards for all.
1 Derating Certificate.
For Immigration
1 Declaration of Inward Vessel.
Passport of Seamen's Book for all.
1 Crew List.
1 Application for shore pass.
For Customs
1 Last Port Clearance.
1 Declaration of Inward Vessel.
1 Crew List.
1 List of Crew's Baggage.
1 List of Ship's Store.
2 Cargo Manifest (Discharging).
1 Cargo Manifest (Through).
1 Certificate of Ship's Registry.
For Port Management Office
1 Declaration of Inward Vessel.
For Maritime Safety Base
1 Declaration of Inward Vessel.
1 Crew List.
1 Cargo Manifest (Discharging).
1 Cargo Manifest (Through).
Above documents to be prepared by Master before arrival.
Master to telegraph ETA and crew's health condition directly to Quarantine Miyako before arrival.
PILOTAGE: Pilot not compulsory but arrangable at Master's request. Pilot boards about 1,200 m. from Miyako breakwater light 130 degrees. Master must radio vessel's Agent of ETA 24 hours in advance, because neither telegraphic address of pilot station nor VHF available. In bad weather, wait instructions from Agent.
ANCHORAGE: Quarantine anchorage located at 39° 37′ 9″ N., 141° 59′ 35″ E. outside breakwater and care should be taken not to foul fishing nets.
RESTRICTIONS: Night entry and departure permitted subject to weather conditions.
MAX. SIZE: Draft 9 m. and LOA 175 m., breadth no restrictions. New pier "Fujiwara-futo" now under construction, draft 12 m. and LOA 240 m., breadth no restrictions.
PRATIQUE: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When free pratique is granted by radio, vessel will be required to submit the following documents to Quarantine officers on arrival:
Maritime declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique: A vessel that has been in contact with an infected area or a suspected infectious disease, within 15 days of arrival. If crew or passengers on board do not possess valid Smallpox Vaccination Certificates. If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. Westbound vessel, via Choshi Radio, and Northbound via Nagasaki Radio.
TUGS: Normally join vessel on passage from anchorage. Tug's line used. *Yokohama Maru* 1,800 h.p. If Pilot requires 2 tugs, 1 tug available from Kamaishi.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Max. LOA*	*Max. draft*	*No. of wharf*	*Max. d.w.t.*
	m.	m.		
Desaki wharf	214	7.3	2	3,000
,, ,,	175	9.0	1	10,000
Lumber port buoy		8.0	1	
Fujiwara wharf	260	7.5	2	5,000
,, ,,	240	12.0	1	40,000

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified

by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additonal; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: No facilities.

DENSITY: Average 1019.

FRESH WATER: Available from wharf about 50 t.p.h. but no water barge. In case vessel urgently requires water at anchorage, tug-boat arrangable for this purpose.

FUEL: Domestic diesel oil. No bonded fuel oil. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

DEVELOPMENT: New berth named "Fujiwara Pier" under construction.

GANGWAY/DECK WATCHMEN: Not especially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depends on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register, Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: 60 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor deck and engine repairs available.

DRY DOCKS: None.

REPATRIATION: Possible.

AIRPORT: Hanamaki Airport distant 150 km. from Miyako (2.5 hours by car). 1 flight between Hanamaki/Tokyo Monday/Thursday/Friday and Saturday and 2 flights Tuesday/Wednesday and Sunday by Toa Domestic Air Lines (TDA).

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 2-5011 (Headquarters) and 2-6037 (Water Police Station); Ambulance 119; Fire 119.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: Surveyor, Tally, Hold cleaning, Tank cleaning.

GENERAL: Discharging ex-gearless vessel at wharf unavailable, because no shore crane for discharge.

SHORE LEAVE: Local Immigration Office issues shore pass valid for only 3 days; 3 days extension possible if ship stays longer. If vessel advises longer stay in port on arrival, Immigration can issue shore pass for 9 days.

AUTHORITY: Miyako Port Management Office.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Abeki Shokai, c/o Nishimura Tekko K.K., 18–7, Kuwagasaki, Miyako-shi, Iwate-ken. Cable Address: Abe Miyako, Tel.: 01936–2–5870.

MIZUSHIMA: 34.31 N. 133.45 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: *(a)* Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

(b) Vessels over 50,000 d.w.t. or of draft of more than 12.5 m. are unable to pass through Kurushima Strait and required to transit Wadamisaki.

There are very narrow and crooked channels, such as the Kurushima Strait, maximum tidal current amounting to 10 knots; the Bisan Strait maximum tidal current amounting to 4 knots, and the Akashi Strait, maximum tidal current amounting to 6 knots.

(c) Harbour Pilot: Pilots of the Inland Sea Pilots Association are also employed for this pilotage if required, and Pilot boards at Mizushima Quarantine Anchorage (34° 26′ 30″ N. 133° 34′ 30″ E. approximate centre position of quarantine area). However, if an Inland Sea Pilot is employed at the above-mentioned Pilot stations, the same Pilot acts for harbour pilotage.

ANCHORAGES: Anchorages available for small size vessels only, and not for large vessels. In case of large vessels waiting for berthing, these vessels shall wait at Quarantine Anchorage, at around Nabeshima, at nearby Sakatewan or off Kobe.

Around "Q" Anchorage Depth		15–18 m.
Around Nabeshima	,,	32–40 m. (temporarily suspended.)
Nearby Sakatewan	,,	32–41 m.
Off Kobe	,,	43–47 m.

RESTRICTIONS: *(a)* Entering and departing from port shall be in accordance with instructions to be given by Signal Station.

(b) No restriction imposed upon entering or leaving port during night-time, nevertheless such movements are next to impossible in consideration of the nature of the structures of the port. In addition Pilots refuse to board during night-time.

(c) Super-sized vessels, unable to enter except at high tide. Pilots should be consulted in advance for draft exceeding 14.80 m.

MAX. SIZE: See "Berthing".

HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List
Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.

If crew or passengers on board do not possess valid Smallpox Vaccination Certificates.

If a vessel does not posses a valid Derat or Derat Exemption Certificate.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to Choshi and Northbound to Nagasaki Radio respectively.

TUGS: Tugs normally join the vessel at the Quarantine Anchorage area. Usually tug's lines used free of charge.

BERTHING:

Max. d.w.t.	*Max. LOA*	*Max. safe draft*	*Discharging facilities*	*Discharge rate per hour/gang or unit*
Coal, Iron Ore and Scrap				
(A) *Tokyo Seitetsu*				
(i) A berth – 215 m.				
35,000	190 m.	at high tide 12.0 m.	Ship's gear only	Scrap 20 tons Pig Iron 30 tons
(ii) B and C berths – 300 m.				
20,000	150 m. × 2	9.0 m.	Crane 6 tons×2 Ship's gear	Scrap 30 tons Pig Iron 40 tons
(B) *Kawasaki Steel Corp., Mitzushima Works*				
C Berth				
45,000	445 m.	11.0 m.	28 Tns. Crane×2 22 Tns. Crane×1	
Takahashi-gawa Berth				
45,000	250 m.	11.0 m.	30 Tns. Crane×2	
D Berth – 400 m.				
35,000	No limit	11.0 m.	Ship's gear Shore crane 16 tons×1 17 tons×1	Scrap 15 tons Pig Iron 25 tons
E berth – 976 m.				
0 m. – 656 m. 110,000	No limit	14.80 m.	Unloader 1,500 tons×3	Coal 30,000 tons Iron ore 40,000 tons
657 m. – 976 m. 200,000	No limit	14.80 m. – at high tide		
Grain				
(A) *Nishi Nihon Grain Centre Mizushima Works*				
Nishinihon Wharf (Dolphin)				
60,000	*230 m.*	*12.0 m.*	*Pneumatic unloader×2*	*400 tons per unit*
(B) Nishi-Futo				
(i) 1 berth				
25,000	180 m.	10.0 m.	Ship's gear	Wheat 80 tons Soybean 70 tons
(ii) 2 berth				
15,000	130 m.	9.0 m.	Ship's gear	Wheat 80 tons Soybean 70 tons
(C) *Seto Futo Co. Ltd.*				
Seto Futo				
55,000	No limit	14.0 m.	Pneumatic unloader×1 Level luffing crane×2 Silo capacity 21,000 tons	400 tons per unit 500 tons per unit

Max. d.w.t.	Max. LOA	Max. safe draft	Discharging facilities	Discharge rate per hour/gang or unit
Coal, Iron Ore and Scrap				
Oil				
(A) *Mitsubishi Oil Co Ltd., Mizushima Refinery*				
(i) No 5 Pier (Dolphin)				
80,000	No limit	12.3 m.	Crude oil 12 in.×2	5,000 tons
			Fuel oil 12 in.×2	1,000 tons
			Diesel oil 6 in.×1	800 tons
(ii) No. 6 Pier (Dolphin)				
230,000	No limit	14.80 m.*	Crude oil 12 in.×3	7,000 tons
			Fuel oil 8 in.×1	400 tons
(B) *Nippon Mining Co. Ltd., Mizushima Refinery*				
(i) No. 1 Pier (Dolphin)				
80,000	No limit	12.5 m.	Crude oil 12 in.×2	4/5,000 tons
			Fuel oil	7/1,200 tons
			Diesel oil	600 tons
(ii) No. 2 Pier (Dolphin)				
230,000	No limit	14.80 m.*	Crude oil 12 in.×5	8,000/12,000 tons
			LPG 12 in.×2	900 tons
			Fuel oil 8 in.×1	400 tons
(C) *Asahi Kasei K.K. Mizushima Works*				
C-8 Pier (Dolphin)				
10,000 (g/t)	No limit	8.3 m.	Chemical (vapour line 4 in.×1) (cargo line 6 in.×1)	100/200 tons

*N.B.—Some allowance may be granted by Pilot depending on tidal condition. Depth of water (14.80 m.)+tide=ship's draft+keel allowance (ship's draft×0.1+0.5 m.).

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notifed by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additonal cost. Overtime surcharges 1700–2100 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: See "Berthing".
DENSITY: Entrance channel Summer av. 1020, Winter av. 1023. Harbour channel Summer av. 1019, Winter av. 1025.
FRESH WATER: Available at berth, ex-pipe-line. Average delivery rate 20 k/t/hour. Water barges available, sent from Onomichi. Delivery rate approximately 50 k/tons per hour.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. All grades available by pipe-line at Refinery berths.
FIRE PRECAUTIONS: *(a)* Whenever necessary to repair vessel, the rule of "Strictly and Completely No Fire" is to be observed. *(b)* To keep sufficiently powered tugboat alongside vessel at all times when engine is under repair. *(c)* A written pledge to be submitted to Oil Company, promising to take full responsibility and to pay full indemnity by ship's Owners (in case of repairing vessel) if any accident has occurred by fault of the vessel.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consul available, but marine note of protest can be attested by the local notary public.
REPAIRS: All types of deck and engine repairs possible by Mitsui Shipbuilding and Engineering Co. Ltd., Tamano Works. Minor repairs possible by Nojima Senpaku Co. Ltd., Mizushima Works, Sonkyo Nainenki Seisakusho Co.
DRY DOCKS: No dry docks at Mizushima, but Mitsui Shipbuilding and Engineering Co. Ltd. Tamano Dock is the nearest from Mizushima, distance approximately 20 miles and navigation about 2 hours.
Mitsui Shipbuilding and Engineering Co. Ltd., Tamano Dock.
(a) Dimensions of largest dry dock No. 3 D. Dock (length 672 ft. × width 103 ft. 3 in. × depth 32 ft.). *(b)* Number of small docks: 2.
AIRPORT: Okayama airport is the nearest from Mizushima, distance approximately 40 km. and takes about 40 minutes by car. Only domestic regular airlines available. 3 flights to Tokyo, daily.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: No telephone installation service on board.
SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
SERVICES: All navigational apparatus can be served, as requested, but technicians are to be sent from Kobe.
REGULATIONS: Quarantine Anchorage is outside harbour limits therefore (i) no persons allowed ashore from this anchorage, (ii) No supplies permitted to vessels and, (iii) No Agency services available.
AUTHORITY: Okayama-Kencho.

AGENT: Sub-agent of Dodwell & Co. Ltd., Tokyo. Naigai Unyu Co. Ltd., 1, 2-chome, Kaigan-Dori Mizushima, Kurashiki-Shi. Cables: Naigai Kurashikimizushima. Tel. Kurashiki (0864) 44–5211.

MOJI (Kitakyushu): 33.54 N. 130.58 E.
(See Kanmon-Ko)

DOCUMENTS: When ship arrives direct from foreign port, customs officials will board vessel for search. Following documents to be submitted:

Crew List.
Passenger List.
Store list.
Manifest of crew personal effects (must be signed by individual crew member).
Arms and ammunition list.
Narcotics List.
List of ports of call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward (Form No. C2000).

The following will be checked on board:
Ship's Registry.
Last Port Clearance.

When ship comes from Japanese port, Customs Officials will not attend on board, except special case. Master or Agent to attend Custom House for entry formalities with following documents:
Discharging Cargo Manifest.
Through Cargo manifest.
Declaration inward/outward.
Ship's Registry.
Last Port Clearance.
Documents entrusted with the Master by Customs at previous port. On ship's departure, clearance issued by Customs, after confirming payment of tonnage dues.
PILOTAGE: (1) *Harbour pilotage* compulsory for entry and departure, but not when vessel passing through Straits. Pilots embark East-bound vessels at Mutsure Quarantine Anchorage position half mile East Mutsure L.H. 33° 58′ 15″ N. 130° 53′ 43″ E. and West-bound vessels at Hesaki Quarantine Anchorage position 125 degrees, 1,500 metres from Hesaki L.H. 33° 56′ 24″ N. 131° 03′ 12″ E. Two Pilots embark vessels exceeding 30,000 gross tons for entry and departure charging double pilotage.

(2) *Sea pilotage:* Vessels approaching from East can obtain Pilots by radio request made at least 24 hours in advance. Pilot embarks at position 3 miles South from Sekisaki L.H. 33° 13′ 00″ N. 131° 54° 00″ E.

(3) Pilots should be kept closely advised of vessel's accurate ETA at pilot station. If any change in vessel's movements, Master requested to immediately communicate by radio or VHF to pilot offices directly or through Agent reporting revised ETA. Cable addresses of pilot offices are: Harbour pilot "Kanmonpilot Moji", Inland Sea Pilot "Anjin Moji".

(4) *VHF:* Vessels keep in direct contact with port authorities with regard to arrival, berthing instructions and Pilot's requirements through VHF as follows:
(a) Call sign: Kitakyushu Port Radio (or Shimonoseki Port Radio).
(b) Location of Radio facilities: Transmitting and receiving station located at the top of Mt. Hinoyama, Shimonoseki.
(c) Type of wave: Channel: Simplex 16 (calling, responding); Simplex 12 (communicating); Simplex 14 (communicating); Duplex 20 (communicating). Output 50 W.
(d) Operating hours: 00.00–24.00 hrs.
(e) Communicating range: within a radius of 50 miles from the Hinoyama Station.
(f) Communicating language: Japanese/English.

ANCHORAGE:

	Depth	*Capacity (g/t)*
Tanoura	9.1 m.	20,000 tons×2

(No. 2 anchorage: 83 degrees from Mojisaki light buoy, 1,770 m.)
(No. 3 anchorage: 80 degrees from Mojisaki light buoy, 2,300 m.)

WIND, TIDE: Easterly winds prevail in warm seasons. North-westerly winds prevail in winter season. Dense fog frequently prevails in spring and autumn.
Tidal range 3.07 metres. Current near entrance of port runs Westward at flood and Eastward at ebb. Speed of current in vicinity of narrowest section of Straits sometimes reaches 7-8 knots. In stream of port, it is about 3-5 knots.

RESTRICTIONS: *(a)* Berthing: During daytime only. Swift tidal current prevails at buoy berths necessitating strong moorings, and in accordance with harbour rules, ships moor with anchor chains to buoy. Requisite chain preparations should be completed before ship leaving Pilot station. Occasionally large vessels drawing deep draft made to await high water and/or suitable current to berth alongside wharves.
(b) Departure: with adequate notice, no restrictions from anchorage and/or buoys. Night departure from wharves generally practicable, except when Pilot disagrees to ship-out; this will depend upon conditions of weather, tide, etc.
(c) Tug assistance may be required at Pilot's discretion for large vessel mooring to and/or unmooring from buoy, depending upon efficiency of engine and conditions of weather, tidal current, etc.
(d) Maximum draft to enter and passing through Kanmon Straits limited to 10 m.

MAX. SIZE:

Name of berth	Length m.	Depth m.	Permissible draft and length overall m.	Capacity g.t.	
Moji Wharf (public)					
No. 1 (No. 1–2)	450	8.7	8.5	15,000	
2		8.1	8.0	15,000	
3 (No. 3–7)	877	9.3	9.3	15,000	
4		9.3	9.3	15,000	
5		9.1	9.0	15,000	1×crane for grain cargo
6		9.3	9.3	15,000	
7		9.1	9.0	15,000	
8 (No. 8–9)	390		9.2	12,000	
9			9.2	12,000	
10	220	9.1	9.0	9,000	
11	195 (180)	9.0	9.0		
12 (No. 12–13)	345	8.6	8.5	15,000	2× pneumatic suckers
13		9.4	9.3	15,000	2× pneumatic suckers
Moji Buoy					
No. 1		10.1	9.6	15,000	
2		10.1	9.6	15,000	
3		9.4	9.3	15,000	
4		9.6	9.0	15,000	
5		—	—	—	
6	(160)	13.0	10.0	15,000	
7	(160)	13.0	10.0	15,000	
8		9.7	9.0	15,000	
9		9.5	9.3	10,000	Only usable when tidal current is under 5 knots
10		9.5	9.3	10,000	
Tanoura Wharf					
No. 1	105	9.0	9.0		Banana centre
2	105	9.0	9.0		
3	185	9.0	9.0		Container berth
4	220	9.0	9.0		
5	170.4		7.9	10,000	
6	170.3		7.9	10,000	
7	181.1	9.0	9.0	10,000	
8	185	9.0	9.0	10,000	
Tanoura Anchorage No. 2 and 3		9.1	9.1	20,000	
Tanoura Buoy No. 1		9.1	9.1		
Tanoura Oil Berth (dolphin) (Mitsui Bussan and M-Iida Wharf)		9.1	9.1	33,000	

Tachinoura Wharf (public). Approximately 7 berths with depth of water between 10 and 12 m.

Tankers: 1 tanker berth, Mitsui & Co. Berth "B". Max. d.w.t. 33,000 tons. Max. LOA, 200 m. Max. safe draft 9.10 m.

PRATIQUE: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If crew or passengers on board do not possess Valid Smallpox Vaccination Certificates.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

(a) Quarantine Station at Western entrance: half mile East from Mutsure lighthouse 33° 58′ 15″ N., 130° 53′ 43″ E.

(b) Quarantine station at Eastern entrance: 125 degrees, 1,500 metres from Hesaki lighthouse 33° 56′ 24″ N., 131° 30′ 12″ E.

(c) Quarantine inspection not allowed inside port except when weather or other special reasons prevent quarantine boat from approaching ship at anchorage.

(d) "Q" flag should be hoisted until ship is in free pratique.

(e) Vessels exceeding 20,000 gross tonnage may undergo quarantine on application when they berth inside port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.

TUGS: Normally join vessel at adequate position in judgment of pilot and tug for mooring. In operation, tug's line to be used for mooring and unmooring without any charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Average loading/discharging:

Bulk cargo:	Coal	50 t.p.h./gang/hatch (dis.)
	Iron ore	45–50 t.p.h./gang/hatch (dis.)
	Grain	50 t.p.h./gang/hatch (dis.)
Baled cargo:	Cement	50 t.p.h./gang/hatch (load)
	Fertilisers	40 t.p.h./gang/hatch (load.)
	Grain	30–50 t.p.h./gang/hatch (dis.)
	General	40 t.p.h./gang/hatch (load.)
Steel cargo:	Under 20 ft. long	25–30 t.p.h./gang/hatch (load.)
	Over 20 ft.	15–20 t.p.h./gang/hatch (load.)
Scrap steel:	Pressed	20 t.p.h./gang/hatch (dis.)
	Ordinary	10 t.p.h./gang/hatch (dis.)
	Bulky and awkward	5 t.p.h./gang/hatch (dis.)
Lumber/logs:	Lumber	15–20 t.p.h./gang/hatch (dis.)
	Logs	30 t.p.h. gang/hatch (dis.)

2 shifts; 0800 to 1700 hrs. and 1800 to 0500 hrs. Normal working hours 0800 to 1700 hrs. Overtime work is possible by applying to Customs. No work can be arranged on 31st December and during New Year holidays (1st to 3rd Jan.). No work on 1st and 3rd Sunday of each month.

MEDICAL: No advance notice required unless urgent.

TANKERS: No slop discharge facilities. Mobil Oil berth situated at Okubo, near Tanoura. At vicinity of berth, the current runs towards West nearly all the time. Maximum rate of current 3 knots. Vessels berthed during period that tide sets to West, in day-time only. Mooring berth consists of 1 oil pier (length 80 m. width 5 m.) and 2 dolphins. Two 10-in. pipes connected to vessel; discharge rate 1,000 tons per hour.

FRESH WATER: Good fresh water supplied from water barges to vessels lying at buoys and/or anchorage; from hydrants to those alongside wharves. The rate of delivery per hour is 20–40 tons from hydrant and 50 tons from barge.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

Bonded bunker oil is supplied by oil barges. The rate of delivery: 80-100 tons per hour.

Suppliers	*Delivery agents*	*Installation*	*Required notice* days
Shell Sekiyu K.K.	Uyeno Unyu	Shimonoseki	1
Esso Oil Co.	General Bussan	Mutsure	1
		Sakai	4
Mobil Oil Co.	Nisshin Tanker	Kokura/Moji	1
		Oita	2–3
Caltex Oil Co.	Shimazu Kaiun	Shimonoseki	1
		Kudamatsu	2
Mitsubishi Shoji Kaisha	Nisshin Tanker	Mutsure	1
	Asahi Tanker	Iwakuni	3
	Tsurumi Yuso	Kanokawa	3
C. Itoh & Co.	Asahi Tanker	Matsuyama	3
	Chikko Kogyo	Mizushima	3
Nissho Co.	Nisshin Tanker	Mutsure	1
	Tsurumi Yuso	Matsuyama	3
Mitsui & Co.	Chikko Kogyo	Oita	2–3
Nippon Mining Co.	Nippon Tanker	Mizushima	3
Idemitsu & Co.	Nagai Kaiun	Tokuyama	2
Sumitomo Shoji Kaisha	Asahi Tanker		
Marubeni-Iida Co.			
Kanemusu-Gosho Co.	Nagai Kaiun	Kokura	1
	Asahi Tanker	Tokuyama	2

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: Honorary British Consulate concurrent with Honorary Swedish Consulate.

REPAIRS: Mitsubishi Heavy Industries, Ltd. Shimonoseki; Sasebo Heavy Industries Co., Ltd. Moji; Kitakyushu Iron Works, Tobata.

DRY DOCKS: Refer "Shimonoseki".

REPATRIATION: Possible.

AIRPORT: Distance to Kitakyushu airport: 30 minutes by taxi and to Fukuoka airport; 2 hours by train and taxi.

TIME: GMT plus 9. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police station (tel. 110) and Fire/Ambulance (tel. 119).

TELEPHONE: Telephone placed on board.

SERVICES: All services available, including hold cleaning and grain fitting.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days; but 3 days extension possible if ship stays longer. Immigration Officials board vessel on her arrival in port to examine passports, discharge books and/or other equivalent travel documents and provide 72-hour landing passes for crew members and passengers. One copy each of crew list and passenger list are required by them. Providing ship's Agent with a crew list beforehand will be a great help in expediting immigration business on ship's arrival. When ship stays in port more than 72 hours, the landing passes may be extended every 72 hours on application. In the event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men, has been booked, or unless the ships to which they are to be transferred, arrives in Japan within 5 days.

AUTHORITY: Kita-Kyushu Port Authority.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., PO Box 72, 9–9, Minato-merchi, Moji-Ku, Kitakyushu. Tel. Moji (093) 331–1311. Telegraphic "Ringer Moji".

MURORAN: 42.20 N. 140.58 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare 2 Inward/Outward Declarations, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Arranged by Agent subject receipt of ETA advice at least 24 hours prior arrival. Pilot boards vessel about one mile outside breakwater.

ANCHORAGE: Outside harbour limits: Subject notice having been given to Authorities prior arrival. Inside harbour limits: Permitted in any part.

MAX. SIZE: *Nissei Pier (Nippon Petroleum):*

Max. d.w.t.	*Max. LOA*	*Max Safe Draft*
*50,000	220 m.	10.80 m.
*30,000 (G/T)		
100,000 Sea Berth (Under construction)	390 m.	16.50 m.

*For vessels of deadweight tons, gross tons and LOA in excess of above limits it is necessary to obtain entry permission from the Harbour Master, Pilot and the Refinery in advance.

Ore Carriers: Max. LOA, 300 m., max. draft, 16.0 m.

PRATIQUE: See "Hakodate".

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically West bound vessel to Choshi, and North bound to Nagasaki Radio respectively.

TUGS: Six tugs, up to 2,000 h.p. Usually meet vessel near Inner Harbour breakwater. 10% additional charge if tug's lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Motowanishi Wharf	depth 9.5 m.
Nippon Steel Wharves	depth 9.0 m.
Nippon Steel (iron ore)	depth 14.0 m.
Nittsu Pier	depth 9.0 m.
Centre Pier	depth 9.0 m.
West Pier	depth 9.0 m.
Nikko Pier	depth 8.0 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent. Hospital facilities available.

TANKERS: See "Max. Size". N.P.R.C. Muroran Refinery. Discharge berth. About 25% of deadweight required in ballast.

Berth	*Product*	*Pipe-line*	*Discharge Rate*
50,000 d.w.t.	Crude Oil	12″×1	4,000 k/l
		10″×1	
30,000 g.t.	Fuel Oil	14″×1	1,500 k/l
	Diesel Oil	10″×1	1,200 k/l
100,000 d.w.t.	Crude Oil		5,000 k/l

DENSITY/TIDE: Density 1025. Rise and fall of tide about 4 ft.

FRESH WATER: Delivery at piers: Average rate about 40 t.p.h. Delivery by barge: Rate about 60 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Only minor repairs available, but Hakodate dockyard able undertake all grades repairs.

AIRPORT: Domestic flights only from Chitose Airport – 100 km. from Muroran.

TIME: GMT plus 9 hours. Permanent.

POLICE/FIRE: Police Muroran 2-5191; Fire Muroran 2-2111.

TELEPHONES: May only be connected on board at No. 2–2 West Pier.

SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau.

AGENT: Sub-agent of Dodwell & Co., Tokyo. Narasaki Sangyo Co. Ltd. 3–2, 3-chome, Kaigan-Cho, Muroran. Tel. Muroran (0143) 2–1171. Telegraphic "Narasaki Muroran".

NAGASAKI: 32.45 N. 129.52 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks in vicinity of Loshima lighthouse, lat. 32° 43′ 20″ N., 129° 46′ 43″ E. Pilot available any time, subject to adequate notice (no VHF system). All communication with Pilot through Agent. Pilot boat carries International signals. "G" flag in day-time and "Morse" signals at night to call Pilot. In event bad weather Pilot boards at anchorage off Megami.

ANCHORAGE: Megami anchorage located in Harbour Division No. 3 (within line between Kagenoo lighthouse and West end of Shirogashima) 60 ft. depth and capacity of 3 vessels of 20,000 d.w.t. Safe anchorage.

RESTRICTIONS: Berthing: During day-time only, except for emergency purposes. Entering into anchorage at Megami is generally permitted during day-time only except with Harbour Master's permit. Departure: No restriction from buoy or wharf with adequate notice, but no night departure from Oil Terminal.

MAX. SIZE: Max. permissible length 1,200 ft., breadth 120 ft., draft 15.0 m.

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Hayashikane Oil Co. (Kozaki Depot)	42,000	—	10.00 m.
Hayashikane Oil Co. (Dinokubi Depot)	30,000	230 m.	15.00 m.
Mobil Oil Co. (Kibachi Depot)	22,000	200 m.	11.00 m.
Idemitsu Kosan (Kibachi Depot)	22,000	200 m.	11.00 m.
General Sekiyu (Otao Depot)	20,000	230 m.	15.00 m.

PRATIQUE: See "Moji."

RADIO: Recommended Captain communicates with Agent through Chosi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.

TUGS: Tugs normally join vessel at anchorage for swinging and/or at berth for assisting vessel. Tugs arrangeable at outer harbour at vessel's special request.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Hayashikane Oil Co. (Kozaki Depot)	Fuel Oil	6″×1	500
		8″×1	800
		10″×1	800
Hayashikane Oil (Dinokubi Depot)	Fuel Oil	8″×1	800
Mobil Oil Co. (Kibachi Depot)	Fuel Oil	8″×1	400 (Berthed alongside)
Idemitsu Kosan (Kibachi Depot)	Fuel Oil	8″×1	400
		6″×1	400
General Sekiyu (Otao Depot)	Fuel Oil	8″×1	700 (Sea Buoy)

A slop discharge station operated by Nishi Nippon Tanker Service located at Io-Jima with facilities for tankers up to 500,000 d.w.t. mooring to three 20-ton bollards. Receiving capacity 1,500 cubic metres per hour. The tank cleaning facilities can accept 10 vessels of 200,000 d.w.t. per month.

DENSITY: 1025.

FRESH WATER: Capacity of water barges: 150 tons, 60 tons and 34 tons. 3 barges in total. Rate of delivery: 100 t.p.h.

FUEL: Available ex-barge only. All grades of bonded bunkers are stocked in Nagasaki. One day notice sufficient.
FIRE PRECAUTIONS: No specific precautions.
DEVELOPMENTS: A tanker berth suitable for up to 200,000 d.w.t. in operation 1975.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.
CONSULS:
French Consul Agency, tel. 23-1221
Portuguese Honorary Consul Agency, tel. 26-2311
REPAIRS: All types of repair can be carried out.
DRY DOCKS:

Length	*Width*	*Depth*	*Capacity (g.t.)*
No. 2 350 m.	56 m.	14 m.	150,000 tons
No. 3 276 m.	41 m.	9.3 m.	57,500 tons
No. 4 118.8 m.	19.1 m.	6.9 m.	4,000 tons

REPATRIATION: Possible.
AIRPORT: Distance 54 km. (centre of town to Omura airport). Time 1.5 hrs. by car. All Nippon Airway have regular daily service with 8 flights (Omura/Osaka/Tokyo) and vice versa.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 22-2141; Ambulance/Fire 22-3211 (Fire station).
TELEPHONE: Shore telephone can be installed on board vessel at Dejima wharf. Vessels at Mitsubishi Yards can communicate via shipyards' switchboard with town.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Nagasaki-Kencho.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo, Nagasaki Warehouse Co. Ltd., 2–13, Dejima-Machi, PO Box 6, Nagasaki. Tel. Nagasaki (0958) 24–1261. Telegraphic "Ringer Nagasaki".

NAGOYA: 35.05 N. 136.53 E. (See Plan)

Situated at northern head of Ise Bay. Harbour protected by breakwater 8,250 m. in length stretching from Chita peninsula to bank of Kiso River at opposite side of harbour.
DOCUMENTS: *(a)* Quarantine (only when arriving from a foreign port); 1 Maritime Declaration of Health, 1 Crew List, 1 Cargo Manifest, 1 List of Passengers (if any on board), Log Book and Registry should be readily available. *(b)* Customs: 1 Declaration Inward/Outward with ports of Call, 1 Ship's Registry, 1 Last Port Clearance, 1 Store List including arms and narcotics, 2 Manifests of Cargo for day charge (prepared by Agents), 1 Manifest of Through Cargo, 1 Crew List, 1 List of Passengers, 1 List of Crew's Baggage (only necessary if crew-members have to land personal effects ashore). *(c)* Immigration: 1 Crew List, 1 Notification of Arrival, 1 Application for Shore-passes, 1 List of Passengers, 1 Notification of Departure (to be returned through Agents after sailing). *(d)* Harbour Master: 1 Crew List, 1 Declaration Inward/Outward with ports of Call. *(e)* Port Authority: 1 Declaration Inward/Outward with ports of Call.
PILOTAGE: Request Pilot and other services to JHY (Nagoya Port Radio Station) at least 10 hours prior arrival on frequency 500 kc/s. JHY keeps watch also on 480 kc/s. Pilot station near No. 1 and No. 2 channel buoys at entrance of harbour channel. When wind over 15 m/sec. Pilot boards inside High tide Breakwater. When very rough, Pilot taken on board East side of Kinjo Signal Station. Pilot not compulsory but desired. Pilot boat white painted with white and red funnel and letters "Pilot" on hull.
ANCHORAGE: The port boundary indicated by line connecting Oono Lighthouse (34° 55′ 49″ N., 136° 49′ 28″ E.), Ise Bay Light Buoy (34° 56′ 05″ N., 136° 47′ 44″ E.), Southwest corner of Nagoya High tide Breakwater (35° 00′ 54″ N., 136° 47′ 04″ E.) and the base point at Northwest of the same Breakwater (35° 1′ 54″ N., 136° 46′ 09″ E.). Quarantine Anchorage, located outside High tide Breakwater offers safe anchorage for vessels awaiting Pilot or quarantine service. Depth this anchorage area ranges from 10 to 20 m. Sea bed silty clay.
MAX. SIZE:
Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Nisseki Terminal	34,000	195 m.	9.80 m.
Esso Standard	34,000	195 m.	8.80 m.
Maruzen Standard	20,000	80 m.	9.50 m.
Kanematsu-Gosho	34,000	200 m.*	9.50 m.
Mitsui	34,000	195 m.	9.50 m.
Mitsubishi Shoji	34,000	190 m.*	9.50 m.
Chita Futo	50,000	210 m.	11.70 m.
Idemitsu Chita Pier	100,000	—	14.00 m.
Nishi Nagoya Yusosho	30,000	200 m.	11.70 m.
Isewan Sea Berth	200,000	—	26.00 m. (Depth)
Toa Kyoseki	100,000	220 m.	14.00 m.

NB—Limitation 30,000 d.w.t. These lengths available when no vessel secured to neighbouring (RYNORU) berth.
Other vessels: 160,000 d.w.t., draft 14.0 m.
HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination Certificates.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO:
JHY (Nagoya Port Radio Station). Service area: 100 miles. Frequency: 500 k/cs. (also 480 kc/s.). Working frequency: 486 kc/s.
International VHF (Nagoya Port Radio). Service area: 36 miles. Frequency: Simplex working frequency Channel 12. Duplex working frequency Channel 16.
To be given prior arrival: Name; Capacity; draught and length; Port of departure; Last port; Time arrival outer port; time passing Kamishima Signal Station; Grade of cargo; Grade of dangerous cargo (if any); Health of crew.
TUGS: Usually join at point where vessel directs course toward allocated berth. Tug's lines normally used without charge.
MEDICAL: Hospitals conveniently located near port.
BULK HANDLING FACILITIES: Kinjo Container Terminal has 2 berths with a depth of water 10.5 m., overall berth length of 470 m. Coal pier can accommodate ships up to 10,000 tons. Depth of water 9 m.
Nippon Steel Corp., has 1 berth for handling of iron ore with 350 m. long wharf and a depth of water 14 m., 2 berths for ore and/or coal with a 500 m. long wharf and a depth of 13 m., 1 berth for scrap iron with 140 m. wharf and a depth of water 13 m.
Grain handling facilities include Wharf No. 8, 173 m. long and 10 m. deep. Tohama Wharf 135 m. long and 10 m. deep. Nisshin Wharf 150 m. long and 12 m. deep. Tokai Silo Wharf 190 m. long and 14 m. deep. Toyo Grain Wharf 170 m. long and 13 m. deep. Chita Futo Wharf 160 m. long and 12 m. deep.
TANKERS: 53 oil tanker berths over 1,000 tons including 2 off-shore berths (Sea Berth) of depth: 26 m. for 200,000 ton tankers.

Berth	*Product*	*Shoreline*	*Pumping rate (t.p.h.)*
Nisseki Terminal	Diesel Oil	8″×1	600
	Fuel Oil	12″×2	1,000
Esso Standard	Diesel Oil	6″×1	700
	Fuel Oil	6″×2	700
Maruzen Standard	Diesel Oil	4″×1	150
	Fuel Oil	8″×1	500
Kanematsu-Cosho	Diesel, Fuel	8″×1	1,000
Mitsui	Diesel Oil	6″×1	700
	Fuel Oil	6″×1	700
Mitsubishi Shoji	Fuel Oil	8″×1	1,000
Chita Futo	Diesel, Fuel	8″×1	1,000
Idemitsu Chita Pier	LPG/Crude	20″×4	2,000
Nishi Nagoya Yusosho	Fuel Oil	12″×1	1,000
Isewan Sea Berth			18,000 k/l
Toa Kyoseki	Crude	Free size×4	2,000

DENSITY: 1020.
WATER: Water supplied direct from pier.
FUEL: All grades fuel available. Delivered by barge only.
DEVELOPMENTS: Main Channel 14 m. deep and 350 m. wide will be enlarged to 17.5 m. deep. Secondary Channel 10 m. deep and 300 m. wide will be dredged to 12 m. deep and 400 m. wide.
Anchorage area 9 m. deep at present will be deepened to 10 m.
Kinjo Pier Development: 14 berths with 10 m. will be constructed.
CONSULS: The following countries are represented in Nagoya: Ecuador, France, Netherlands, Korea, Mexico, Portugal, Sweden, Thailand.
GANGWAY/DECK WATCHMEN: Not compulsory but recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew. When stevedores do this work charges are made.
CUSTOMS ALLOWANCES: For crew (per landing): 60 cigarettes, 1 bottle of spirit when sailing period exceeds one month, 2 bottles over three months.
For passengers: 3 bottles of spirit; 200 cigarettes or 50 cigars; 2 ounces of perfume; 1 watch of which price is not over Y30,000; other items of which total price is under Y100,000.
CREW IDENTIFICATION CARDS: Required.
REPAIRS: All types repairs possible. Repairs by Ishikawajima-Harima Heavy Industries Co. Ltd., Nagoya Shipyard.
DRYDOCKS: Ishikawajima-Harima Heavy Industries Co. Ltd., Nagoya Shipyard: Length 150 m., width 24.2 m., capacity 13,000 g.r.t.
Chita Shipyard of Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI), length 810 m., width 92 m., capacity 250,000 g.r.t.
AIRPORT: Nagoya Airport, 20 kilometres from Port. 2 JAL (Japan Air Lines) flights for Hong Kong and 1 flight for Manila (weekly).

HOLIDAYS: National Holidays: New Year's Day (Jan. 1st), Adults Day (Jan. 15th), Foundation Day (Feb. 11th), Vernal Equinox Day (Mar. 21st), Emperor's Birthday (Apr. 29th), Constitution Day (May 3rd), Children's Day (May 5th), Respect for The Aged Day (Sept. 15th), Autumnal Equinox Day (Sept. 23rd), Health Promotion Day (Oct. 10th), Culture Day (Nov. 3rd), Labour Thanksgiving Day (Nov. 23rd). Cargo handling not arranged on December 31st, January 1st, 2nd and 3rd, and July 20th (Maritime Day).
TIME: JST (Japan Standard Time), 9 hours ahead of GMT.
POLICE/AMBULANCE/FIRE: Police 110, Ambulance 119, Fire 119.
TELEPHONES: Telephone can be arranged on board ships berthed at most wharves. For application call 652-7581. Telegram 971–4222, Time 117, Weather 177.
AUTHORITY: Nagoya Port Authority.

AGENT: Sub-agent of Dodwell & Co.. Goyo Kaiun Kaisha Ltd. 3–4, Irifune 2-chome Minato-ku, Nagoya-shi Aichi-ken. Cable Address; "Shipgoyoh Nagoya". Domestic Telex: 446–3113 SPGOYO J. Telephone No.: (052) 651–5171.

NAHA, Okinawa: 26.12 N. 127.40 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including passport numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wines/spirits, camera, wrist-watch, radio, firearms/swords, etc. (Only at first port of call in Japan.)

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest, Cargo Manifest in transit using specific forms. Therefore Ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot services compulsory. Pilot boards in position 26° 13′ 49″ N. 127° 38′ 20″ E. International Pilot signals used.
RESTRICTIONS: Vessels entering Naha Port are controlled by the limiting depth in the entrance channel of 9.6 m.
MAX. SIZE: Length and beam not limited. Max. draft 9 m.
HEALTH: At first port of call in Japan, vessel may obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected zone within 10 days, Captain must advise crew and passengers' health condition to Quarantine Officer through Ship's Agent, prior to arrival and close all soil pipes before entering port.
RADIO: Recommended communicate with Agent through Choshi Radio or Nagasaki Radio, which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio, respectively.
TUGS: Two U.S. Army tugs of 1,530 h.p. and 1,200 h.p. One harbour tug of 750 h.p. available.
BERTHING:

Berth	*Length*	*Depth*	
North Side			
A	33.5 m.	4.5 m.	
B	152.5 m.	4.5 m.	
D	121.5 m.	4.5 m.	(Tanker & barge bunkering)
F	198.0 m.	7.5 m.	(Gen. cargo/black oil)
G	193.0 m.	8.5 m.	(Gen. cargo/black oil)
I	68.5 m.	9.0 m.	
South Side			
No. 1	175.0 m.	9.5 m.	
No. 2	152.5 m.	9.5 m.	
No. 3	152.5 m.	9.5 m.	
No. 4	152.5 m.	9.0 m.	
No. 5	152.5 m.	9.5 m.	
No. 6	152.5 m.	9.5 m.	
No. 7	183.0 m.	9.5 m.	
No. 8	61.0 m.		
No. 9	152.5 m.		
No. 10	152.5 m.	4.4 m.	

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores.
MEDICAL: All medical and hospital facilities available.
TANKER: Two berths for tankers at North side of commercial port.
Berth F—7.5 m. depth alongside.
Berth G—8.5 m. depth alongside.
FRESH WATER: Available at the berths at a rate of 20 t.p.h.
FUEL: Fuel oil No. 5 and diesel oil are available ex-wharf at a rate of 2,000 bbls. per hour.
OPENING/CLOSING HATCHES: Stevedores will carry out this work. Cost per gang according to type of cargo. Recommend stevedores for this work unless crew can complete it before berthing.
CUSTOMS ALLOWANCES: Each man allowed take 50 cigarettes ashore, but no spirits.
REPAIRS: Facilities available for minor repairs. One 100 ton floating crane owned by U.S. Army.
TIME: GMT plus 9 hours all year round.
SHORE LEAVE: Local immigration office issues shore pass valid for three days, but extension possible if ship stays longer.
AUTHORITY: Naha Trade & Commerce Bureau.

AGENT: Sub-agent of Dodwell & Co., Connell Bros. Company, Ltd., PO Box 57, Naha, Okinawa. Cable address "Seabsea Naha". Telex J 79822. Telephone (0988) 57–0391–95.

NAOETSU: 37.11 N. 138.14 E.

DOCUMENTS:
1 Inward Declaration of Vessel.
1 Cargo Manifest.
1 Through Cargo Manifest.
1 List of Provisions and Stores.
1 List of Tobacco and Personal Effects.
7 Crew Lists (preferably airmailed in advance).
2 Passenger Lists.

PILOTAGE: Pilot embarks at quarantine anchorage to take vessel directly to berth during daytime. All transmitting and receiving through Niigata Radio Station (call sign JCF, Type of Wave: 438454) or Choshi Radio Station and/or Nagasaki Radio Station. Cable Agent one week's notice of ETA and accurate ETA 24 hours before arrival, thereafter advising any change in arrival time. No Pilot boat. Pilot uses tug-boat.
ANCHORAGE: Half-circle drawn at a point of 37° 11′ 31″ N., 138° 13′ 59″ E. (lighthouse) with radius 1,600 m. Quarantine anchorage: circle 700 m. radius drawn from point 1,600 m. off lighthouse at 335°.
RESTRICTIONS: Berthing and unberthing daytime only.
MAX. SIZE: LOA 160 m. draft 9.50 m. in Summer, and 9.00 m. in Winter.
HEALTH: Pratique obtainable during daytime. Detailed information to be promptly given to Quarantine Authorities. Instruction from Authorities given by return.
RADIO: Niigata Radio Station: JCF. Nagasaki Radio Station: JOS. Choshi Radio Station: JCS.
VHF: Channel 16.
TUG: Normally joins vessel at entrance of port. Ship's lines used.
BERTHING:
West Wharf, depth alongside 10.0 m.
Centre Pier, depth alongside 7.5 to 10.0 m.
South Pier, depth alongside 5.0 to 6.0 m.
STEVEDORES: ETA, draft and hatch cargo quantities to be advised before arrival. Main bulk commodities: unloader crane (1) 150 t.p.h.; tower cranes (3) 120–130 t.p.h. and equipment.
MEDICAL: No notice required except in emergency, and attendance on Sundays/holidays.
DENSITY: 1023–1025.
FRESH WATER: Available from shore. 30 t.p.h.
FUEL: Can be brought in coastal barge from Kanmon; 10 days advance notice.
GANGWAY/DECK WATCHMEN: No professional watchmen available.
OPENING/CLOSING HATCHES: Longshoremen if shipowner guarantees payment of operation charges.
CUSTOMS ALLOWANCES: Tobacco: Each crew member allowed to retain for his private use 200 cigarettes, 50 cigars, 250 grams of tobacco, etc. Wine/and/or Spirits: 1 bottle of liquor, to last one week.
IDENTIFICATION CARD: Passport and/or seaman book required.
CONSULS: None.
REPAIRS: Minor repairs only.
REPATRIATION: Necessary documents to be submitted to Immigration and Customs Authorities in Naoetsu.
AIRPORT: Niigata. 2.5 hours by train. One flight per day to Tokyo.
TIME: GMT plus 9 hours. Permanent.
HOLIDAYS: No work 31st December and 1st, 2nd and 3rd January. Subject to gang's on other holidays.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.
TELEPHONE: No facilities for placing telephones on board.
GENERAL: During Winter and bad weather, hire of nylon rope (100 mm.) desirable in order to avoid hull damage. Rope owned by Naoetsu Agency Association. Charge made for use.
SERVICE: Technicians for repair and/or adjustment of radar or wireless despatched from Niigata or Tokyo. Hold and/or tank cleaning operations by shorehands available, however gangs are from Niigata.
SHORE LEAVE: Crews allowed ashore within limit of Joetsu City.
DELAYS: Due to port congestion.
AUTHORITY: Port Administration Office.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Niligata Rinko Kairiku Unso K.K. Niigata, Jigyo Bldg. 9–11, 2-Chome, Minato-cho, Joetsu-shi, Niigata-ken. Tel. Naoetsu (02554) 2–0417, 2–4207. Telegraphic "Rinko Naoetsu". Telex 3252–468 Naoetsu Kaiun Unso.

NAOSHIMA: 34.28 N. 133.58 E.

RESTRICTIONS: *Mitsubishi Naoshima Pier* (Private) depth of approaches 14–20 m., length of berth 160 m., depth of alongside berth 9.5 m., max. draft acceptable 9.5 m., max. length acceptable 200 m., max. width acceptable about 45 m.
For other details see "Uno".

AGENTS: See "Tamano".

NIIGATA: 37.54 N. 139.04 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.

1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot embarks at Quarantine Anchorage to take vessel directly to berth during daytime. All transmitting and receiving normally effected through Niigata Radio Station (call sign: JCF, Wave: 438454), or Choshi Radio Station and/or Nagasaki Radio Station. Radio ETA one weeks notice and accurate ETA at least 24 hours before arrival. Notify any changes to ETA.

ANCHORAGE: Anchorage is a rectangle located North-west of lighthouse at West breakwater in a distance of 1,600 m. covering an area of about 160,000 sq. m. North 37° 57′ 37″ East 139° 04′ 00″. Depth: 18-24 m. Bottom: fine sand.

Safe Anchoring: Warning and instructions have been given by Niigata Harbour Master to secure safety of vessels anchoring off Niigata Port especially in winter season, when the port is greatly affected by N.W. gale.

1. Vessels anchoring outside the breakwater within the Harbour limit must maintain their position Westside of N.W. line drawn from Niigata Lighthouse (Fl. r. sec. 13 m. 12 m.) and must avoid the vicinity of the mouth of the Shinano River or Showa Oil Co.'s Seaberth (which is connected with shore facilities by submerged pipelines).

2. Vessels anchoring outside the breakwater must maintain their positions in the sea area where the depth of water is 25 m. or more. This rule does not apply to vessels waiting for quarantine inspection and/or Pilot. Vessels under 10,000 gross tons should also keep a sufficient distance from shore.

3. Vessels over 10,000 gross tons with dangerous cargoes or oil anchoring outside the breakwater must advise their positions to the Harbour Master by radio.

4. Vessels anchoring outside the breakwater, must keep a bridge watch unless they are equipped with radio. (According to the governing law, any vessel staying outside the breakwater is treated as a navigating vessel even if she is within the harbour limit).

5. Vessels waiting at anchorage must keep watching weather forecast. In case bad weather is reported, the following necessary actions should be taken; namely, officers on duty, confirmation of ship's position, engines on standby, the use of extra anchors, sheltering, etc.

6. In case a vessel requires shelter from N.W. wind in Winter, it is suggested that such vessel proceed to Sado Island and anchor off Morotsu Port, Akadomari Port, Sado Island South Coast or Sado Channel.

7. When approaching the entrance of the port, a vessel can be drawn too close to the East Breakwater or the shallows existing East of the port entrance by force of N.W. gale, N.E. current and river flow. Therefore, vessel must enter from N.W. of Niigata Lighthouse, approaching from Quarantine Anchorage and alter course as West Breakwater Lighthouse and Niigata Port Light Beacon are seen in a line. It is dangerous for vessel to anchor at any areas East of Shinano River.

8. Prior to arrival, Japanese Charts No. 1155A, 122 and 1197 or substitutes should be provided on board. Charts 1181, 1198 may also be needed.

RESTRICTIONS: Berthing and unberthing daytime only. Entry and/or departure at time authorised by Port Authority. Shinano fairway from port entrance to Rinko wharves, depth 11 m. to 12 m.

MAX SIZE: *Tankers:*

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Nisseki Dolphin	36,000	210 m.	10.40 m.
SBM (Sealine Buoy)	120,000	—	21.00 m.
Rinko "B" Pier	40,000	210 m.	11.00 m.
Rinko "C" Pier	40,000	210 m.	11.00 m.
Rinko "E" Pier	20,000	170 m.	10.00 m.

Bulk Carriers: Max. LOA 230 m. Max. beam,, 32 m. Max. draft, 11.0 m.

HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.

If crew or passengers on board do not possess valid Smallpox Vaccination Certificates.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. West bound vessel to Choshi, and North bound to Nagasaki Radio respectively. (Also see "Pilotage".)

TUGS: Tugs normally join vessel at position of fairway. Towing operations are done by ship's lines.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Higashi: West Pier, depth alongside 12 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKER: Slop (residues): No discharge facilities.

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Nisseki Dolphin	Crude Oil	16″×1	700/1,500
	Fuel Oil	12″×1	600/1,000
SBM	Crude Oil	20″×1	3,000
Rinko "B"	Crude, Fuel	10″×2	600/1,500
Rinko "C"	Crude, Fuel	10″×2	800/1,000
Rinko "E"	Crude, Fuel	8″×1	600

DENSITY: Average in Rinko wharves approx. 1006. Average in Municipal wharves approx. 1005.

FRESH WATER: Available from all wharves. Cannot be supplied at anchorage during the winter season.

FUEL: Seven days notice usually required. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. (Also see "Regulations").

DEVELOPMENTS: The reclamation of land for Niigata East Port completed in 1975. One public berth is ready for about 15,000 d.w.t. class vessel. One shore crane with about 570 M/T discharging capacity for ore in bulk per hour.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

DRY DOCKS: No facilities for ocean going vessel.

REPATRIATION: Possible.

AIRPORT: 5 km. Round service Japan Domestic Air Line.

TIME: GMT plus 9. No alterations made to clocks during year.

HOLIDAY: 22nd August.

POLICE/AMBULANCE/FIRE: Water Police Station 44–2269; Ambulance Station 119; Fire Station 119; Main Police Station 110.

TELEPHONES: No facilities for telephones on board available.

SERVICES: Hold cleaning by longshoremen available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

REGULATIONS: Oil carriers can receive bunker by oil barge and/or shoreline except when discharging cargo.

AUTHORITY: Port and Harbour Bureau.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Niigata Rinko Kairiku Unso K.K., 2-Chome, Rinko-cho, Niigata-shi, Niigata-ken. Tel. Niigata (0252) 74–5181. Domestic Telex 3122–310. Telegraphic "Rinko Kairiku Niigata".

NIIHAMA: 33.58 N. 133.16 E.

DOCUMENTS: *No. of copies*

For Quarantine
- *1. Statement by Ship's Master — 1
- *2. Crew List — 1
- *3. Passenger List (if any) — 1
- *4. Yellow Cards for All
- *5. Derating Certificate

For Immigration
- 1. Declaration of Inward Vessel — 1
- *2. Passport or Seamen's Book for All
- 3. Crew List — 1
- 4. Application for Shore Pass. — 1

For Customs
- 1. Declaration of Inward Vessel — 1
- *2. Crew List — 1
- *3. List of Tobacco — 1
- *4. List of Crew's Baggages — 1
- *5. List of Ship's Stores — 1
- 6. Cargo Manifest (Discharging) — 1
- *7. Cargo Manifest (Through) — 1
- *8. Certificate of Ship's Registry — 1

For Harbour Master
- 1. Declaration of Inward Vessel — 1
- *2. Crew List. — 1

For Harbour Office
- 1. Declaration of Inward Vessel — 1

1. Master to telegraph ETA and Crew's Health Condition directly to Quarantine Niihama before arrival.

2.*To be prepared by Master before arrival. Others to be made up by Agent with assistance of Master on arrival.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N., 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.

ANCHORAGES: Approved anchorage area just inside harbour limit. A circle drawn at a point 33° 59′ 18″ N., 133° 16′ 31″ E. with radius of 430 m. where holding ground good and depth of water 12–15 m. No buoy moorings. Harbour protected by breakwater.

TIDE: (Springs) Max. 263 cm.; min.: −9 cm. (Neaps) max. 182 cm.; min.: 136 cm.

RESTRICTIONS: Pilot does not take vessel in during darkness. Vessel has to wait if depth during low water 8.50 m. is insufficient to pass channel.

MAX. SIZE: Pier No. 4 (Sumitomo Chemical Co. Ltd., Kikumoto Wharf). Length of vessel 160 m. Breadth (range of cranes, reaching 12 m. from the pier), draft, 9.50 m.

Berth B (Anchorage. Stern moored to Sumitomo Chemical Co. Ltd., Niihama Works). Length of vessel, 170 m. Breadth, no restriction. Draft, 9 m.

HEALTH: Quarantine Inspectors go aboard during day. Master to keep waste until Quarantine inspected in event of any suspected disease or fever on board after entered Japan.

RADIO: Choshi Radio, Nagasaki Radio.

TUG: Joins vessel at Quarantine anchorage or Section II, always using tug's lines without charge. "Niihama Maru" 700 h.p. If more powerful tugs required, can be obtained from Matsuyama or Mizushima.

BERTHING: Harbour Pilot operates during day.

Berth	*Length*	*Depth*
Berth No. 1	80 m.	7.5 m.
Berth No. 2	130 m.	9.50 m.
Berth No. 3	Dolphin	6.5 m.
Berth No. 4	120 m.	9.80 m.
Berth A	anchorage	8.0 m.
Berth B	anchorage	9.0 m.
Berth C	anchorage	9.0 m.
Berth D	anchorage	8.0 m.

Remarks: Berth No. 1: Owned by Sumitomo Chemical Co. Ltd., Niihama Works and used for loading fertiliser, nitric acid, ammonium nitrate by ship's gear.

Berth No.2: Owned by Sumitomo Metal Mining Co. Ltd., equipped with 2×5-ton luffing cranes with max. reach 22 m. and max. height 20 m.; used for discharging of Nickel Ore, copper concentrates, Nickel copper concentrates and maize and also by ship's gear.

Berth No. 3: Owned by Sumitomo Chemical Co. Ltd., Oh-e Works and used for loading and discharging of clean oil only.

Berth No. 4: Owned by Sumitomo Chemical Co. Ltd., Kikumoto Works and used for discharging of Bauxite, anthracite, salt, fluorspar and loading of alumina. 3×5-ton level mobile cranes, max. reach 22 m. and max. height 20 m.

Berth A: Public berth for general purposes, no buoy, just anchorage. However, vessel anchoring at this berth sometimes ordered by port authority to shift in order vessel approaching or leaving berth No. 4 may pass.

Berth B: Owned by Sumitomo Chemical Co. Ltd., Niihama Works and used for loading of fertiliser and discharge of phosphate and muriate of potash. Possible to use for general purposes with permission by Sumitomo Chemical Co. Ltd., Niihama Works through Agent. Vessel moors stern to wharf with 2 anchors about 4 shackles each.

Berths C and D: as above.

Average rate of Discharge	
Phosphate	70–90 tons by ship's gear
Potash	40–60 tons by ship's gear
Copper Conc.	70–90 tons by ship's gear and 130–150 by cranes
Nickel Copper Conc.	70–90 tons by ship's gear and 130–150 by cranes
Nickel Ore	40–70 tons by ship's gear and 40–70 by cranes
Bauxite	140–160 tons by cranes
Anthracite	60 tons by ship's gear and 80–100 by cranes
Salt	120–140 tons by cranes
Lumbers	13,000–15,000 BFM
Average Rate of Loading	
Fertiliser in bags	30–65 t.p.h. by ship's gear
Alumina	100 t.p.h. by two pneumatic loaders

MEDICAL: Hospitals and medical facilities available week-days only.

TANKERS: No facilities for oil carriers.

DENSITY: Entrance 1023 (rate of tide, 1 knot); channel 1022; anchorage 1021.

FUEL: Available but not in bond. Bunkers in bond available from main ports or oil stations in transhp. 2 days notice.

FRESH WATER: By barge which needs about 1 hour to supply after being alongside vessel. 4 trips daily available. By shore line, rate 10 t.p.h.

DEVELOPMENTS: Sumitomo Chemical Co. Ltd., Kikumoto Works, intend to make another Bauxite berth available for large size vessel (suitable for vessels up to 50,000 d.w.t.).

Sumitomo Metal Mining Co. Ltd., Niihama reclaiming land adjacent to Western harbour limit of port of Niihama to construct additional refinery for producing copper with a berth for 25,000 ton vessel to discharge copper concentrate. Final date of completion unknown.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Stevedores.

CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore. No spirits.

CARGO GEAR: Valid Cargo Gear Certificate sometimes required by stevedores when cargo gear maintenance appears to be poor.

CONSULS: None. Nearest in Kobe.

REPAIRS: Minor repairs only. Main engine piston overhauling possible.

DRY DOCKS: None. For nearest see "Matsuyama".

REPATRIATION: Arranged by Agent.

AIRPORT: None. Nearest at Matsuyama and Takamatsu. All Nippon Airways – 11 flights per day to Osaka and one to Tokyo.

TIME: GMT plus 9 hours. Permanent.

HOLIDAYS: National Holidays: New Year's Day, January 1st; Adult's Day, January 15th; Foundation Day, February 15th; Vernal Equinox Day, March 20th; Emperor's Birthday, April 29th; Constitution Memorial Day, May 3rd; Children's Day, May 5th; Respect-for-age Day, September 15th; Autumnal Equinox Day, September 23rd; Physical Culture Day, October 10th; Culture Day, November 3rd; Labour Thanksgiving Day, November 23rd.

Local holidays: New Year's Day (Lunar Calendar), January 30th; May Day, May 1st; Memorial Day of the Sea, July 20th; Bon Festival (Lunar Calendar), August 8th; Autumnal Festival, October 17th-18th.

Vessels may enter/leave *except* January 1st, and cargo work can be done as usual at overtime rates on above national/local holidays *except* for *Niihama* December 31, January 1, 2, 3, and October 17, 18.

Vessels may enter/leave port at overtime rates and cargo work will be done up to 1700 hrs. (day-time) against surcharges.

No cargo will be handled: *Niihama* December 31, January 1, 2, 3, and October 17, 18. No ship's movement (as well as cargo handling) can be done on January 1st.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: *Quarantine:* Hiroshima Quarantine Office, Niihama Detached Office, Nishibara-cho, Niihama, tel. Niihama 2–3966.

Customs: Kobe Customs, Niihama Branch Customs, Nishibara-cho, Niihama, tel. Niihama 2–3405.

Immigration: Niihama Port Station, Takamatsu Immigration Office, Nishibara-cho, Niihama, tel. Niihama 2–2672.

Maritime Bureau: Sanbashi-dori, Niihama, tel. Niihama 2–2855.

Maritime Safety Agency: Nishibara-cho, Niihama, tel. Niihama 2–3879.

Emergency Procedure: No Harbour Master radio available, therefore cable Agent. Telephone sub-agent since one person will be in attendance even during night, who in turn will contact person in charge.

Salvage: No salvage tug stationed, nearest from Kure.

SHORE LEAVE: Crew allowed ashore with pass.

AUTHORITY: Port and Harbour Bureau.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Sumitomo Warehouse Co. Ltd., 2–5, Sobiraki-cho, Niihama-shi, Ehime-ken. Cable Address: Sumitomosoko Niihama. Domestic Telex: 584–4432. Tel.: Niihama (0897) 37–1101.

NISHIHARA (Buckner Bay), Okinawa: 26.14 N. 127.50 E. **(See Plan)**

LOCATION: The Esso Standard (Okinawa) Ltd. Refinery is located in Nishihara village on the East coast of Okinawa, towards the Southern end of Nakagusuku Bay (Buckner Bay). Also see "Max. Size". There is also a Shell Terminal-SBM about 1 mile North of the Esso SALM.

DOCUMENTS:

Ship's Register.
6 Crew Lists.
List of Valid Smallpox/Cholera Certificates.
Cargo Manifest.
Bill of Lading.
1 Stores List.
1 Personal Effects List.
Health Declaration.

Each crew member will be issued with an Official Pass, which must be returned prior vessel sailing.

PILOTAGE: Normally vessels will be expected to enter Nakagusuku Bay through entrance marked Tatsu Kuchi, and pick up Berthing Master inside bay – South of Tsuken Jima. Inside bay Berthing Master requests that vessel keeps South of buoy marking Chikunigaa Shoal. No vessels should enter bay without first establishing communications with "Esso Control" – or without berthing instructions by W/T from Agent. Berthing may be carried out at any time of day or night – depending on weather conditions.

A safe convenient Pilot ladder is to be provided for the Berthing Master. Berthing Master stays aboard vessel throughout discharge.

MAX. SIZE: For crude vessels a single point mooring (SALM – Single Anchor Leg Type Mooring), capable of handling vessels from 90,000 d.w.t. to 250,000 d.w.t. is established in approximate position Lat. 26° 14′ N. Long. 127° 49.7′ E. about 2.5 miles offshore.

Products are shipped from a pier connected to the shore – the pier has two berths, one for vessels up to 65,000 d.w.t. and one for small vessels up to 3,500 d.w.t.

PRATIQUE: Port Officials will board vessel after berthing.

RADIO: Crude vessels discharging at Nishihara should report ETA Fairway Buoy, 72, 48, 24, 12 hours prior arrival. Berthing instructions and time of Pilot boarding will be relayed by W/T. "Esso Control" use 5 watt VHF on frequency 154.25 mHz.

Weather reports essential – particularly during typhoon season.

Naha Radio – JCX medium wave 500 kHz. Traffic lists broadcast at odd hours GMT. Short wave 6470 kHz, traffic lists broadcast at even hours GMT.

ANCHORAGE: Navigation and anchorage in the waters near the Esso product pier and crude berth will in so far as possible be restricted to those ships directed into these waters by station "Esso Control". In the interest of safety, ships will not enter the restricted area unless so directed by "Esso Control". The restricted area is within the following boundaries:

Beginning at a point described as 26° 13′ 33.88″ N. Lat. and 127° 47′ 30.24″ E. Long. (N. 25,074.89, E. 29,145.48); thence running S. 60° 00′ 00″ E. a distance of 200 m. to an angle point described as Lat. 26° 13′ 30.62″ N., Long. 127° 47′ 36.48″ E. (24,974.89, N. 29,318.69 E.); thence running S. 35° 40′ 45″ E. a distance of 1,170 m. to an angle point described as 26° 12′ 59.69″ N. Lat., 127° 48′ 00.98″ E. Long. (N. 24,024.88, E. 30,000.82); thence running N. 45° E. a distance of 3,350 m. to a point on the circumference of a circle described a 26° 14′ 20″ N. Lat., 127° 49′ 30″ E. Long.; thence running to the right a distance of 3,710 m. along said circumference, which is described by a radius of 1,060 m. with its centre located at 26° 13′ 56.18″ N. Lat., 127° 50′ 00.00″ E. Long. (N. 25,771, E. 33,300) to a point on the circumference described as 26° 13′ 30″ N. Lat., 127° 50′ 22″ E. Long. thence running S. 48° W. a distance of 1,780 m. to the Naka Sone buoy located at 26° 12′ 54.2″ N. Lat., 127° 49′ 37.5″ E. Long. thence running S. 53° W. a distance of 1,940 m. to the Wara reef located at 26° 12′ 17.7″ N. Lat., 127° 48′ 45.0″ E. Long., thence running W. 18° N. a distance of 2,810 m. to a buoy located at 26° 12′ 44″ N. Lat., 127° 47′ 07″ E. Long., thence running N. 17° W. a distance of 710 m. to a point at 26° 12′ 46.42″ N. Lat., 127° 47′ 56.61″ E. Long., (23,616.16, N. 29,880.55 E.).

TUGS: Two tug boats and a launch are available for assistance in mooring or departing. The Berthing Master in consultation with the Master will decide the number of tugs required for the berthing operation and for standby during the time at berth.

CRUDE BERTH: Single buoy mooring with vessel secured by two heavy polypropylene lines from buoy. Lines connected to chains through Bow Mooring Pipe and secured inboard. Chains secured direct to Brega Pin or by double polypropylene lines to bollards, port and starboard side of forecastle head. There is 85 ft. of water at buoy position. Vessels may remain in berth in winds of up to 50 m.p.h.

Floating hoses, two by 24 in. to two by 20 in. connected to two by 16 in. are connected on vessel's port side. There is a 42-in. line from buoy to shore. The maximum pumping rate is 75,000 b.p.h.

PRODUCT PIER: A 290° orientation of the pier allows tankers to approach the berth in a ballasted condition in either of two opposite directions. Vessels of 5 mdwt. size and above will be handled at Berth No. 1 and smaller vessels at Berth No. 2.

The water depth at the pier is approximately 47 ft. The extreme tidal variation is +7.9 ft. to −1.0 ft. and maximum storm tide will add approximately 3 ft. The maximum current is less than 1 knot.

Berth No. 1 is equipped with 1–16 in. loading arm for clean products and 2–16 in. loading arms for dark products. Each of these all-metal hydraulically controlled loading arms is fitted with a remotely operated coupling device to connect to a nominal 10 in. ASA, DIN or BS flanged connection without bolting.

Berth No. 2 is equipped with 1–6 in. loading arm for dark products. These arms are part metal, part hose and are fitted with flanges to be bolted to a nominal 6 in. ASA, DIN or BS flanged connection.

Bunker fuel is available at both berths through meters and 4 in. hose connections.

Each berth is provided with a gangway.

Vessels will deballast through the loading arms into a 24 in. ballast water line leading to refinery tankage. Under no circumstances should a vessel discharge any ballast water directly to the bay.

Fire protection at the pier consists of a foam concentrate tank and proportioning pump, a fire water pump and distribution system, fixed combination water–foam monitors and air–foam play-pipes.

TIME: GMT plus nine hours.

SHORE LEAVE: Shore leave is permitted – launch service may be arranged but is at vessel's expense.

AUTHORITY: Nansei Sekiyo Limited, Nishihara Refinery, Okinawa.

OFUNATO: 39.03 N. 141.44 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. Pilot boards about two miles from entrance of Ofunato Bay, at 38° 59′ N. and 141° 48′ E., where depth 35 m. (but not after dark). Master must radio vessel's Agent of ETA 24 hours in advance, because neither telegraphic address of pilot station nor VHF available.

ANCHORAGE: Not suitable in stormy weather. Depth of water at anchorage 30 to 40 m. Quarantine anchorage located between radius 500 m. of 38° 59′ N. 141° 48′ E.

RESTRICTIONS: Depth of water at entrance of passage 14 m., oil tanker's draft restricted to 13 m. (42 ft. 6 in.) and draft of log and coke carriers restricted to 8 m. (26 ft. 2 in.). Depth of water alongside wharf 9 m. (29 ft. 5 in.) at mean level.

MAX. SIZE: *Tankers:* Kamei Oil Piers Max. d.w.t. 35,000 Max. L.O.A., 200 m. Max. Safe draft 12.0 m.

Log and Coke Carriers: Max. LOA 200 m., max. draft 8.0 m. Tidal range 1–1.4 m.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from day-light to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.

TUGS: One tug 250 h.p., but assistance from three or four others available, and they usually join vessel about 400 m. in front of jetty and discharging wharf. Ship's lines used if necessary.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: One tanker berth. Product handled, Diesel Oil. Shoreline, 8″× 2. Discharge rate, 800 t.p.h.

DENSITY: Average density 1020.

FRESH WATER: Available from shore installation. Supply 10 – 15 tons per hour.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

REPAIRS: Minor deck and engine repairs available.

DRY DOCKS: None.

REPATRIATION: Possible.

AIRPORT: Hanamaki Airport about 17 km. from Ofunato. All Nippon Air Lines; two flights between Hanamaki/Tokyo every day.

TIME: GMT plus 9. No alterations made to clocks during year.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Discharging ex-gearless vessel at wharf unavailable, because no shore crane for discharge.

SERVICES: Surveyor: NKKK and Kentei Shin Nihonsha. Hold and tank cleaning. Provisions/Laundry/Water. Bunker: Domestic diesel oil available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days; 3 days extension possible if ship stays longer.

AUTHORITY: Ofunato Port Office.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo, Abeki Shokai, c/o Fujisawaya Shoken, 10–12 Suzaki, Ofunato-shi. Tel. Ofunato (019222) 2753. Telegraphic "Abe Ofunato".

OITA: 33.15 N. 131.35 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: If arranged at Sekisaki Pilot Station 33° 13′ N. 131° 54′ E. or Saganoseki Quarantine Station, usually use pilot boat; but Kyushu Oil Co. Ltd., Dolphin and Sumiyoshi Public Wharf, pilot boards by tug boat. At least one days notice for Pilot, as he comes from Moji.

ANCHORAGES: Waiting for berth or arrival at night: Kyushu Oil Co. Ltd., Dolphin 33° 17′ 14″ N. 131° 42′ 00″ E. Symiyoshi Public Wharf 33° 15′ 43″ N. 131° 35′ 52″ E. If anchorages full, Agent arranges with Harbour Master, and notifies Master.

RESTRICTIONS: No berthing at night.

MAX. SIZE: *Tankers:*

Berth	*Max. d.w.t.*	*Max. L.O.A.*	*Max. Safe Draft*
Kyushu Oil	60/270,000	350 m.	19.50 m.

Sumiyoshi Public Wharf: Anchorage breadth 260 m.; jetty length 184 m.; 185.92 m. length ship has berthed. Draft 9 m. Vessels have berthed at high water with 9.3 m. draft. Ore Carriers up to 20 m. draft.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from day-light to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Tug's lines used. 5 tugs available, up to 4,000 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: *Kyushu Oil:*

Product	*Shoreline*	*Pumping Rate per Hour*
Crude Oil	12″×4	10,000 k/l
Fuel Oil/Diesel Oil	6″×1	500 k/l

Following information required 3 days before arrival: Manifolds, type, size, number and distance between, also pump capacity.

DENSITY: 1024/1025.

FRESH WATER: Kyushu Oil Co. Ltd., Dolphin: Capacity: 30-50 t.p.h., by hose.

Sumiyoshi Public Wharf: Capacity 30 t.p.h., by hose.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. Also see "Moji – Fuel".

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

REPAIRS: Dockyard service-engineer available.

DRY DOCKS: None.

REPATRIATION: Possible.

TIME: GMT plus 9. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police tel. 110; Ambulance and Fire 119.

TELEPHONES: No telephones can be placed on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co., Ltd. Oita Tekko Bldg. 6th Floor 1–11 3-chome Matsubara-cho, Oita-shi Oita-ken. Cable Address: Ringer Oita. Tel. Oita (0975) 58-8266/7.

OMISHIMA (Ohmishima) Inokuchi Port: 34.16 N. 133.00 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo channel). Position 33° 13′ N. 131° 54 E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGE: Omishima Island located at centre of the Inland Sea and lies between Ehime and Hiroshima prefectures. Eastern part of island, Inokuchi surrounded by deep water where holding ground good. Oil company located at Inokuchi. No strong winds.

RESTRICTIONS: No restriction on entry; however mooring and unmooring to be carried out during day-time, regardless of tide and current.

MAX. SIZE: *Tankers:* Maruzen Pier, max. d.w.t. 20,000 tons. Max. LOA 230 m. Max. safe draft 9.40 m.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from day-light to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Join vessel at sea anchorage, always using tug's line without charge.

TANKERS: No advance information of loading/discharge lines required. No loading facility. Only one berth available for discharge. Product handled, Fuel Oil. Shoreline, 1×10″ Discharge Rate, 400 t.p.h.

DENSITY: Anchorage 1025. Berth 1025.

FRESH WATER: Not available but usually brought by barge from Onomichi (about 3 hrs. run to Omishima). Rate of delivery 80 tons to 200 tons per hour which depends on barge.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: No consuls. Nearest Consulates are in Kobe.

REPAIRS: Minor repairs only.

REPATRIATION: Possible.

AIRPORT: Nearest at Matsuyama and Takamatsu.

TIME: GMT plus 9. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.

TELEPHONES: Not available.

GENERAL: Closed port. To conform with regulations vessel obtains special permission from Maritime Bureau and Customs at Takamatsu to enter.

Customs request vessels calling Omishima to obtain permission to enter at preceding port of call by paying charge at same rate of tonnage dues prior to arrival. This procedure undertaken by Agent. No quarantine station, nearest at Matsuyama. Immigration officer comes from Niihama.

SHORE LEAVE: Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AGENT: See "Niihama".

ONAHAMA (Iwaki City): 36.56 N. 140.55 E.

The port is protected by breakwater, 8,200 ft. long and is open to the South.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's baggage, i.e. tobacco wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: No means of communication with Pilots and vessels should arrange pilotage by advising Agent of ETA. Vessels awaiting Pilot should anchor in position 36° 55′ N. 140° 54′ E. Pilot-boat carries flag "H".

ANCHORAGE: Just outside No. 1 West breakwater. Depth of water 14–22 m.

RESTRICTIONS: Restriction only by ship's draft. Depths of water alongside wharves 9 and 10 m. at low tide, and rise of tide is about 1.40 m. highest.

MAX SIZE: (Also see "Berthing").

	Length of Wharf	*Depth of Water*
No. 2	350 metres	9 m. for 165 m. and 10 m. for 185 m.
No. 3	350 metres	10 metres
	350 metres	10 metres

Each wharf used for 2 vessels, and view depths, Pilot requires restrict draft within 32 ft. 2 in.

Tankers: Sea Berth: Max. d.w.t. 80,000 tons. Max. safe draft, 13.50 m.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from day-light to sunset and Captain to show all Vaccination cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Chosi Radio or Nagasaki Radio which covers all ports in Japan. If specifically West bound vessel to Chosi and North bound to Nagasaki Radio respectively.

TUGS: Normally join vessel on passage from anchorage. Vessel's lines used.

"Bandai Maru"	800 h.p.
"No. 2. Shukutsu Maru"	675 h.p.
"Katori Maru"	675 h.p.
"Iwaki Maru"	300 h.p.
"Abukuma Maru"	1,300 h.p.×2

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Wharf	*Name*	*Length* m.	*Depth* m.	*Size* d.w.t.	*Number*
No. 1	10,000 ton berth	123	9	10,000	1
	5,000 ton berth	240	7.5	5,000	2
	Coal berth	130	7.5	5,000	1
	1,000 ton berth	200	5	1,000	2
No. 2	10,000 ton berth	165	9	10,000	1
	15,000 ton berth	185	10	15,000	1
	3,000 ton dangerous cargo pier	dolphin	7	3,000	1
	500 ton dangerous cargo pier	dolphin	7	500	1
	700 ton berth	219	4.5	700	3
No. 3	15,000 ton berth	700	10	15,000	4
	700 ton berth	184	4.5	700	2
No. 4	15,000 ton berth	400	10	15,000	2
	3,000 ton berth	250	6	3,000	2
	700 ton berth	90	4.5	700	1
No. 5&6		200	12		

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Sea Berth: Product handled, Naphtha and Crude Oil. Shoreline 16″×2. Discharge rate 9,000 k/l per hour. Bunkers not available ex-pipeline.

DENSITY: 1025.

FRESH WATER: Available from shore lines, at about 30 tons per hour. Additional 30% for overtime service; 1700–0800 hrs., Saturday afternoon, Sunday and holiday.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnage. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRY DOCKS: None.

TIME: GMT plus 9. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Iwaki (02465); Police 3-3141; Ambulance and Fire, 119.

TELEPHONES: No facilities for connecting on board.

SHIPMASTERS REPORT: June 1975

The port is protected by breakwaters, 1 running North and N.E. 11,170 ft. long and 1 running Westerly and W.S.W'ly 5,520 ft. long, the latter which affords some protection from Southerly swell.

Pilotage: The Pilot boards at the main breakwater entrance. If possible, obtain Japanese Port Chart No. 63 and approach Chart No. 68.

Anchorage: If awaiting Pilot anchor approximately 1 mile E.S.E. of the Southern extremity of the East breakwater.

Max. Size: Several new berths have recently opened, including No. 5 and No. 6.

Health: The centre of the Quarantine anchorage is located 6 cables S.E. from the Southern extremity of the East breakwater. Radio pratique is accepted if a Japanese Sanitary Inspection Certificate is held.

AUTHORITY: Onahama Port Administration and Harbour Construction Office, Fukushima Prefecture.

AGENT: Sub-agent of Dodwell & Co. Ltd., Tokyo. Abeki Shokai, 2 banch, Shitamachi Onahama, Iwaki-shi, Fukushima-ken Cable Address: Abe Onahama Domestic Telex: 8922-44 Abeona J Tel.: 0246-52-0784.

ONOMICHI-ITOZAKI (incl. Mihara, Matsunaga): 34.20 N. 133.16 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declarations, 1 Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea Ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki", In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

Inland Sea Pilot also berths vessels at anchorage berth (if Matsunaga Bay – logs), or pier in Itozaki district (Mihara section).

ANCHORAGES: Draft limitations: Itozaki-Mihara 7.5 m. Matsunaga Bay 8.5 m. Tidal range: Maximum (+) 3.91 m. Minimum (–) 0.09 m. Capacity for 3×20,000 ton vessels.

HEALTH: At first port of call in Japan, vessel must obtain free

pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name of Berth	*Length*	*Depth*	*Permissible draft and length overall*	*Capacity*	*Shore crane and pipe-line*
Municipal Wharf	135 m.	7.5 m.	7 m.×130 m.	15,000	Nil
Anchorage		8.5 m.	7.5 m.	3×20,000	Nil
		7.5 m.			

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: No facilities.
FRESH WATER: Available. Method of delivery (1) Barge. (2) Pier. Additional charge for overtime work and in event of bad weather.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 40 cigarettes to take ashore but no spirits.
CONSULS: None.
REPATRIATION: Possible.
AIRPORT: Nearest, Tokyo International Airport.
TIME: GMT plus nine hours. Permanent.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.
TELEPHONES: No arrangements for placing telephones on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.
AGENT: Sub-agent of Dodwell and Co. Chugeku Kaiun Kaisha Ltd., Onomichi Chuo-Sanbashi Bldg., No. 10–3, Tsuchido 2-chome, Onomichi-shi, Hiroshima-ken. Cable Address: Chugokukaiun Onomichi. Domestic Telex: 6422–15. Tel.: Onomichi (0848) 22–3141/4.

OSAKA: 34.39 N. 135.26 E. (See Plan)

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: 24 hours notice required. Telegraphic address: "Hanshinpilot Osaka". VHF contact on Channels 12, 16, 19, 20. Agents operate Channel 26. Three 15-ton Pilot boats with radio equipment to pilot office. Pilot boards anywhere within harbour limits. In event bad weather Pilot boards just inside breakwater when acknowledgement obtainable from Master. If awaiting Pilot, anchor inside harbour limits as near as possible to breakwater.
ANCHORAGES: Sections Nos. 7 and 8. Section 7 is quarantine anchorage. Section 8 for other vessels. Harbour Master allocates anchorage position prior vessel's arrival which radioed to Master by Agent. Max. draft about 42 ft.
RESTRICTIONS: Vessels only permitted enter from sunrise to 2000 hrs. However, order avoid danger, some wharves (oil wharf, Nakayama wharf and various shipyards where there is not enough space to conduct berthing operation), accept vessel only until sunset. Max. depth 39 ft. 4 in., Wharf No. 49.
Depth restrictions at other berths depend upon berth allocated. But less than 39 ft. 4 in.
MAX. SIZE: Max. permissible length, 750 ft., draft 34 ft. 6 in. Also see "Tankers".
HEALTH: Vessel requiring free pratique requested cable directly to "Quarantine Station", Osaka informing ETA, date of departure from last port, name of last port, number of crew and health condition. At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from day-light to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
Radio Pratique is available only for a vessel which possesses Valid Sanitary Inspection Certificate issued by the Japanese Government.
RADIO: Osaka Port Radio, 24-hour VHF service on Channels 16, 12, 19 and 20. Osaka Harbour Radar has 24-hour navigation aid and weather information service. Contact by VHF Channels 16, 14 and 22.
TUGS: Tugs join vessel just before harbour entrance. Tug's lines used, no extra charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by VHF or radio.

Wharf	*Wharf Length (m.)*	*Water Depth (m.)*	*Mooring Capacity* Gross tons	*No. of Ships*	*Main Cargoes Handles*
North Port Wharf 1	250	10.0	10,000 500	1 1	Bulk
North West Wharf 2	120	5.5	1,000	1	Bulk
Umemachi West Wharf	673	12.0 9.0	30,000 20,000 7,000	1 1 1	Coal, General Cargoes
Umemachi Pier	395	10.0	10,000	2	Bulk, Oil
Sakurajima Wharf 2	185		(Under repairs)		
Sakurajima Wharf 1	275	9.0	7,000 2,000	1 1	General Cargoes
Ajikawa Pier North Wharf	482	5.5	1,700	5	Passengers, General Cargoes
Ajikawa Pier West Wharf	120	5.5	1,000 500	1 1	General Cargoes
Ajikawa Pier South Wharf	312	6.5	2,000 1,000	2 1	General Cargoes
Ajikawa Wharf 2	360	10.0	10,000 8,000	1 1	General Cargoes
Ajikawa Wharf 3	178	10.0	10,000	1	General Cargoes
Osaka Port Silo Wharf	92	11.0	13,000	1	Bulk Grains
Ajikawa Wharf 1	320	10.0	10,000 3,000	1 1	General Cargoes, Bananas
Tempozan Wharf	130	7.5	3,000	1	Passengers, General Cargoes
Ajikawaguchi Wharf	185	10.0	10,000	1	General Cargoes
Central Pier North Wharf Central Pier South Wharf	210 210	11.0 10.0	13,000 10,000	1 1	General Cargoes
Wharf 1	500	10.0 5.5	10,000 700 500	2 1 1	General Cargoes
Wharf 2	341	10.0	10,000 5,000	1 1	General Cargoes
Wharf 5	382	9.0	6,000 500	2 1	General Cargoes, Salt, Bulk, Cement
Wharf 6 Wharf 7	359 361	10.0 10.0	10,000 10,000	2 2	General Cargoes General Cargoes
Wharf 8	336	7.5	3,000 1,000	2 1	General Cargoes, Bulk Cement
Wharf 10	437	9.0 7.5	7,000 5,000 3,000	1 1 1	Steel
Taisho Pier 1 North Wharf	471	5.5	1,000	5	General cargoes
Wharf A	260	7.5	3,000	2	Autos, Passengers, General Cargoes
Wharf B	550	7.5	3,000	4	Paper,Pulp, General Cargoes
Wharf D	580	7.5 5.5	3,000 1,000	2 3	General Cargoes, Autos
Wharf E	821	7.5 5.5	3,000 1,000	2 5	Passengers, Autos General Cargoes
Wharf I	360	5.5	1,000	4	General Cargoes
Containership Wharf No. 1 (C 1)	273	12.0	25,000 D/W	1	General Cargoes
Containership Wharf No. 2 (C 2)	250	12.0	25,000D/W	1	General Cargoes 2×30.5 ton Gantry cranes
Containership Wharf No. 3 (C 3)	300	12.0	35,000D/W	1	General Cargoes
Ferry Wharf F 1	165	7.5	8,000	1	
F 2	130	6.0	3,000	1	
F 3	148	6.0	3,000	1	Passengers,
F 4	165	7.5	8,000	1	Autos,
F 5	165	7.5	8,000	1	General Cargoes
F 6	130	6.0	3,000	1	

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If

stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs: next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: No slop discharge facilities. Wharf No. 49, Sakurajima Oil Wharf, max. LOA 210 m, max. safe draft 11.60 m. Product handled, Fuel oil, diesel oil. Minas Waxy. Shoreline 1×12in. Discharge rate 1,000 t.p.h.

Wharf No. 25. Max. LOA 210 m. Max. safe draft 10.30 m. Product handled, Fuel oil. Shoreline 1×14in. Discharge rate, 850 t.p.h.

DENSITY: Outside anchorage: 1023–1025. Near breakwater: 1020–1022. Average density inside breakwater 1020. Wharves near estuaries (Aji river, Shirinashi river, Kizu river and etc.): 1016–1020.

FRESH WATER: Methods of delivery: by barges or pipe-line. Rate of delivery: 200 ton barges – 4; 160 ton barges – 1; 60 ton barges – 1; Total – 6.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.

CARGO GEAR: See "Certificates", but no special requirements.

CONSULS: The following consulates available in Osaka:

Great Britain Denmark Mexico
Spain Korea

REPAIRS: All grades repairs possible.

DRY DOCKS: Mitsui Shipbuilding & Engineering Co. Ltd., Fujinagata Works, No. 1 dock size 446 ft. 2 in.×55 ft. 2 in., depth 17 ft. No. 2 dock size 541 ft. 2 in.×66 ft. 2 in., depth 23 ft. 5 in.

Hitachi Shipbuilding & Engineering Co. Ltd., No. 1 dock size 653 ft. 5 in.×88 ft., depth 34 ft. 3 in. No. 2 dock size 547 ft. 6 in.×75 ft. 3 in., depth 28 ft. 3 in.

Namura Shipyard Co. Ltd., No. 1 dock size 590 ft. 3 in.×90 ft. 1 in., depth 29 ft. 4 in. No. 2 dock size 478 ft. 7 in.×72 ft. 1 in., depth 29 ft. 1 in.

Sanoyasu Dockyard Co. Ltd., No. 1 dock size 508 ft. 3 in.×71 ft. 1 in., depth 24 ft. 2 in. No. 2 dock size 367 ft. 3 in.×55 ft. 6 in. depth 22 ft. 8 in.

AIRPORT: One hour required from Osaka Port to Osaka International Airport by car (about 25 km. distance). Regular airlines:

Overseas Lines, Japan Airlines, Cathay Pacific Airlines, China Airlines, Thai International Airlines, North West Airlines, Pan American Airlines, British Airways, Korean Airlines, Lufthansa Airlines, Scandinavian Airlines.

Domestic Lines, Japan Airlines, All Nippon Airways, Toa Airways.

TIME: GMT plus 9. No alterations made to clocks during year.

HOLIDAYS: Public 20 July; Sakurajima Nil; Silo Wharf 20 July; Nakayama Steel Nil.

POLICE/AMBULANCE/FIRE: Police tel. 110; Ambulance tel. 119; Fire tel. 119.

SERVICES: All services available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau.

AGENT: Dodwell Tramp Agencies, Osaka Kagaku-Seni Kaikan, 39, 5-chome, Kawara-machi, Higashi-ku, Osaka. International Telex: J63250. Cable Address: Dodtramp Osaka. Domestic Telex: 522-3948. Telephone: (06) 203-5151.

OTARU: 43.12 N. 141.01 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot district fixed by Ministry of Transport. Limit of Otaru piloting district is sea area surrounded by line drawn from Kayashiba-misaki to Horaiso-misaki and coast line. Licensed Pilots stationed in office from 0900 to 1700 hrs. When Pilot observes pilot signal or is requested by any other means he comes out to ship at once. Boarding place about one mile from North B.W. Lt. H. 70°. Pilot boat painted white and carries International Code flag "H" at forecastle deck. "Otaru Pilot" registered cable address for Otaru Pilot Association.

ANCHORAGE: Depth of water inside breakwater is 3.6 to 17.0 m. (average 9.4m.) and nearly everywhere, except some Southern parts, good anchorage. Sea area, outside breakwater, also good holding for anchors, but be careful not to foul fishing nets. Around quarantine anchorage is best anchorage of ship staying outside breakwater.

RESTRICTIONS: Quarantine and Customs business between 0800 hrs. and 1700 hrs. Pilot: Vessel allowed to enter and leave day and night. Pilot assistance officially not compulsory but in practice necessary, and Pilots available 24 hours.

MAX. SIZE: *Buoys:* Four mooring buoys available for large vessels.

Pier and wharves: Three piers, two wharves, and one coal pier. Also No. 4 pier now under construction.

Mooring Buoys

Buoy Nos.	*3*	*4*	*5*	*6*
Position from North B.W. Lt.	307° 1/3 1,065 m.	298° 752 m.	279° 3/1 494 m.	218° 650 m.
Buoyance (ton)	8	12	15	15
Available capacity (g/t)	10,000	10,000	10.000	12,000

Cargo handled: grain, soyabeans, timber, fertiliser, foodstuffs.

Piers and Quays

	Length (metres)	*Depth of water* (metres)	*Capacity* (g/t)	*Main usage*
Pier No. 1:				
Berth No. 1–2	339	8.7–10.0	10,000×1 6,000×1	General cargo
3	127	7.5–9.0	3,000×1	Ore
4–5	293	8.1–9.4	6,000×2	Grain
Pier No. 2:				
Berth No. 7–8	293	8.7–9.8	6,000×2	Banana and GC
9	126	7.9–8.5	3.000×1	GC
10–11	293	8.0–9.5	6,000×2	GC and grain
Pier No. 3:				
Berth No. 13–14	343	8.3–10.0	8.000×1 10,000×1	GC, grain and Lumber
15	127	8.3–10.0	3,000×1	GC, grain and
16–17	361	8.3–10.0	10,000×2	Lumber
Wharf A:				
Berth No. 6	128	5.3–7.3	1,000×1	GC
18	129	5.2–5.7	1,000×1	GC
Sakai-machi Quay				
Berth No. 1–2–3	352	6.2–7.3	2,000×3	GC
Umaya-machi Quay				
Berth No. 1–2–3	392	6.6–7.5	3,000×2	Oil, cement, GC

HEALTH: See Hakodate.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Two tugs available for large vessels. Tugs M/S "Sakura Maru" 147 g/t 1,000 h.p. M/S "Tatwiea Maru" 38 g/t 180 h.p. Both belong to city's Harbour Bureau.

Position: Tug boat waits and joins vessel near appointed berth according to Agent's request. Tug's line in general use.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additonal.

MEDICAL: No advance notice required unless urgent.

TANKERS: Available berthing for small vessels only, 1,000 g/t and usual berthing 300–500 g/t. Japanese tankers only. Draft: max. permitted 7.2 m. discharging: about 100 k/t per 1 hr.

DENSITY: Average 1025.

FRESH WATER: Good drinking-water at all piers and wharves. Two water barges (both 150 tons) available when off shore in harbour. International code flag "YJ" used as "I want fresh water".

Remarks: Charges for water supply outside office hours (1700–0830) increased by 50% of basic. Very bad weather add 50%.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

FIRE PRECAUTIONS: No smoking at tanker berth, Umaya Machi Ganpeki No. 1 and No. 3 berth.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS:
American Consulate, Sapporo in Sapporo City only. Tel. 0122–22–5121.
U.S.S.R. Consulate, Sapporo in Sapporo City only. Tel. 0122–56–3171.
Korean Consulate, Sapporo in Sapporo City only. Tel. 0122–62–0288.
REPAIRS: All type of deck and engine repair are possible.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Distance from airport to Agent's office at Otaru about 80 km. Service bus air station in Sapporo to airport by each airline. Charge: Y200. – Flights: JAL (from Chitose airport to Haneda airport) 19 times per day. ANA (from Chitose airport to Haneda airport) 15 times per day. Kokunai Koku twice per day.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: Stevedores do not work on 1st May.
POLICE/AMBULANCE/FIRE: Tel. Police 110; Ambulance and Fire 119.
TELEPHONES: Arrangable on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Bureau.
AGENT: Sub-agents of Dodwell & Co., Tokyo. Narasaki Sangyo Co. Ltd., Otaru Branch, Mitsui Bldg., 1–9 1-chome, Ironai-cho, Otaru-shi. Tel. Otaru (0134) 3–3281. Telegraphic "Narasaki Otaru".

OWASE: 34.04 N. 136.15 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare 2 Inward/outward Declarations, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Ocean-going vessels calling at Owase have cargo destined to Toho Oil, Owase Refinery only. There is no local Pilot Association in this port and the Oil Refinery's Dock Master boards all vessels as a Pilot. Pilot boarding time is passed to ship by ship's Agents after consulting with Pilot (Dock Master) and he boards vessel 1 mile East of Toto Island.
ANCHORAGE: Quarantine Anchorage position is 34° 4′ 13″ N. 136° 16′ 43″ E. Depth Water 60–80 m. Radius 500 m. However, it is not advisable for vessels to stay there for a long time as there are many fishing boats nearby.
RESTRICTIONS: According to Agreement between Fishery Association and Oil Refinery, ship's movement is prohibited at night.
MAX. SIZE: See "Tankers".
HEALTH: At first port of call in Japan vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Tugs usually join vessel at Harbour Limit (near Sabaru Island) and tug's line is used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
MEDICAL: No advance notice required unless urgent. Hospital facilities available.
TANKERS: *Toho Oil Owase Pier:* Max. d.w.t. 150,000. Max. LOA, 300 m. Max. safe draft 16.50 m. Product handled, crude oil. Shoreline 2×12 in. Discharge rate, 4,000 k/l per hour.
Toho Oil Sea Berth: Max. d.w.t. 210,000. Max. LOA, 350 m. Max. safe draft 18.00 m. Product handled, crude oil. Shoreline 2×20 in. Discharge rate 8,500 k/l per hour.
FRESH WATER: Fresh water can be supplied to the vessel from pipe at Quay. Supply Capacity 30 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS/REPAIRS/AIRPORT: None.
TIME: GMT plus 9 hrs. Permanent.
TELEPHONES: Emergency numbers, Owase Police Office (05972); 2–0004; Owase Fire Station (05972) 2–2020; Owase Hospital (05972) 2–2118. No facilities for placing telephones on board.
SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but extension possible if ship stays longer.
AUTHORITY: Port and Harbour Dept.
AGENT: See "Yokkaichi" (Uyeno Unyu Shokai).

SAKAI: (Including Senboku and Hannan Port). 34.34 N. 135.27 E. **(See Plan)**

DOCUMENTS:
Ship's Register.
Last Port Clearance.
7 Crew Lists including Passport Nos.
2 Passenger Lists.
1 Store List
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (if first port of call in Japan).
Ship's Agent will prepare inwards/outward Declaration, 1 Cargo Manifest in transit using specific form. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Cable address "Hanshinpilot Osaka". 24 hours notice required. VHF (Osaka Port Radio), Channel 16, JBD Osaka Radio, Channels 25, 26 and 27. Three boats capacity 15 tons, 147 h.p. Pilot boards anywhere within harbour area, but preferably at quarantine anchorage – sector No. 7. Bad weather: unable to take Pilot. Boarding measures: Safe Pilot ladder. Anchorage for vessel waiting Pilot: as Pilot boarding area.
Inland sea Pilot cable address: "Anjin Kobe" can also be used for following wharves: Kansai Oil Co. Ltd., Sakai Wharf; Koa Oil Co. Ltd., Sakai Wharf.
ANCHORAGE: Quarantine inspection carried out at quarantine anchorage Sect. No. 7 where max. draft 12.5 m. Vessels with draft over 12.5 m. have to obtain free pratique at other ports.
RESTRICTIONS: *(a)* Arrival notice for ships over 500 tons gross must be given to Harbour Master 48 hrs. prior to arrival.
(b) Entrance passage draft limitation: 11.20 m.
MAX. SIZE:

Name of Wharf (Jetty)	*Max. draft* m.	*Max. LOA* m.
Nippon Steel Wharf 3-A/3-B	14.0	255
,, ,, ,, 2-H	10.2	181
Ube Kosan Wharf (Export)	9.0	130
,, ,, ,, (Import)	10.2	174
Public Wharf 3 & 6	9.0	160
,, ,, 1, 2, 4, 5 only for vessel less than 500 tons		
Osaka Seiyosho Wharf	9.0	144

Tankers:

Name of Berth	*Max. d.w.t.*	*Max. LOA (m)*	*Max. Safe draft (m)*
General Wharf	130,000	290	15.50
Kansai Oil Jetty	130,000	320	15.50
Koa Sekiyu Crude Oil	150,000	320	15.50
Ube Kosan, Sakai "D" Wharf	20,000	170	9.20
Marubeni Sakai	50,000	250	12.50
Kansai Oil Jetty (LPG)	160,000	320	15.50
Mitsui Toatsu (LPG)	50,000	200	14.00
Osaka Gas Semboku Jetty (LNG)	37,000	230	10.00

HEALTH: See "Osaka."
Radio Pratique is available only for vessels which possess Valid Sanitary Inspection Certificate issued by the Japanese Government.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Join vessel at anchorage under instruction or attending Pilot. Tug lines used, cost in tug hire.
BERTHING:
Sakai:

Berth	*No.*	*Water Depth (m)*	*Total length (m)*	*No. of berths*	*Ship tonnage (D.W.T.)*
Shiohama wharf	1	7.0	120	1	4,000
Ohama wharf	1	4.5	60	1	700
,, ,,	2	5.5	270	3	2,000
,, ,,	3	7.0	240	2	4,000
,, ,,	4	9.0	165	1	10,000
,, ,,	5	10.0	370	2	15,000
,, ,,	6	7.5	130	1	5,000
Senboku:					
Matsunohama wharf	1	5.5	540	6	2,000
Komatsu wharf	1	5.5	360	4	2,000
,, ,,	2	7.5	390	3	5,000
Shiomi wharf	1	4.5	480	8	700
Hannan:					
Kishiwada wharf	1	10.0	185	1	15,000
,, ,,				1	20,000
,, ,,				1	15,000
Mooring buoys				1	10,000
,, ,,				1	5,000
Kaizuka wharf	1	−6.5	202	2	2,000

There are many additional berths with depth of 2m. – 4m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
General Wharf	Fuel Oil	12″×3	7/8,000
	Crude Oil	12″×3	9,000
Kansai Oil	Fuel Oil	10″×1	600
Jetty	Crude Oil	36″×1	7/8,000
Koa Sekiyu			
Crude Oil	Fuel/Crude	32″×1	5,000
Ube Kosan, Sakai			
"D" Wharf	Naphtha	12″×1	700
Marubeni Sakai	Fuel Oil	16″×1	2,500
Oil Terminal	Minas Oil	18″×1	2,500
Kansai Oil	Propane	12″×1	1,000
Jetty (LPG)	Butane	10″×1	1,000
Mitsui Toatsu	Propane	12″×1	1,000
(LPG)	Butane	12″×1	1,000
Osaka Gas			
Semboku Jetty (LNG)	LNG	8″×5	2,000

DENSITY: Osaka Gas Wharf and Nippon Steel Corporation Wharves 1020 to 1025.
All other wharves, 1010 to 1025.
FRESH WATER: Minami Hakuchi anchorage by barges. All other wharves by shore line.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stocks ports at max. 7 days prior notice. Also see "Moji-Fuel".
GANGWAY/DECK WATCHMEN: Recommended and compulsory for tankers working cargo.
OPENING/CLOSING HATCHES: Stevedores open and close hatches with terms subject to charter party.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCE: Each man allowed 200 cigarettes to take ashore but no spirits.
CARGO GEAR: See "Certificates" but no special requirements.
CONSULS: None.
REPAIRS: See "Osaka".
DRY DOCK: Hitachi Shipbuilding & Engineering Co. Ltd., Sakai Shipyard, Dock No. 2, length 455 m., width 63 m., depth 11 m., capacity 400,000 d.w.t.
REPATRIATION: Possible.
AIRPORT: International Airport Osaka, 45 km. distant.
TIME: GMT plus 9. hrs. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: See "Osaka".
TELEPHONES: Available except Nippon Steel Wharf and Public Wharf.
SHORE LEAVE: Local Immigration Officers issue shore-leave pass valid for 3 days, but a 9-day pass is obtainable in case where a vessel stays in port for longer period.
DEVELOPMENTS: 40 berths under construction at Sakai-Seaboku. Max. depth 12 m. 58 berths under construction at Hannan, depths from 4 m.–7.5 m.
AUTHORITY: Port Administration Office.
AGENTS: See "Osaka".

SAKAIDE: 34.19 N. 133.51 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position 34° 38′ N.; 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGE: Port located on North coast at East part of Shikoku Island in Inland Sea.
Boundaries and Areas. Area bounded by line joined with three points, East corner of Sosha river mouth, Mamako-Hana of Semi Jima and Tako-Saki of Shotsuji-Yama.
Depth of water inside harbour limit: 11 m. outside harbour limit: 13 m.
RESTRICTIONS: Vessels entering and/or leaving during daytime only at wharves; but done day and night at sea anchorage provided favourable weather conditions prevail.
MAX. SIZE: East section of Centre pier, length 160 m., breadth no limit, depth 9 m.
West section of Centre pier, length 110 m., breadth no limit, depth 7.50 m.
Mitsubishi Chemical Industries wharf, length 250 m., breadth no limit, depth 12 m.
Anchorage inside breakwater, length no limit, breadth no limit, depth 7–9 m.
Anchorage outside breakwater, length no limit, breadth no limit, depth 10 m.
Tankers: Max. d.w.t., 50,000. Max. LOA 400 m. Max. safe draft 12.50 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from Cholera infected area within 10 days, Captain must advise crew and passengers health condition prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
VHF: *Shipmaster's Report:* There is a VHF radio station at Sakaide in position 34° 21′ 00″ N. 133° 51′ 00″ E. Watch is kept from 0600 to 2000 hrs. each day, using Channel 16. The radio station will indicate where to anchor if there is a delay in berthing.
TUGS: Wharves. Join vessel at sea anchorage, using tug's line without charge. Sea anchorage. No tug required in normal conditions.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: There is an oil tanker berth for the Asia Kyoseki refinery at No. 2 pier. Depth 13 m. Product handled, Crude oil. Shorelines 2×20 in. (One for high sulphur and one for low sulphur). Discharge rate 2,000 t.p.h.
DENSITY: Inside harbour limit 1025. Outside harbour limit 1025.
FRESH WATER: Sea anchorage. No water barge available but usually brought from Onomichi (about four hrs. run to Sakaide). Rate of delivery 80 tons to 200 tons per hour dependent on barge.
Centre pier: can be supplied by shore line with capacity 25 tons per hour.
Mitsubishi Chemical Industries wharf: Can be supplied by shore line with capacity 60 tons per hour.
FUEL: All grades of bonded bunkers are stocked in Tokyo, Ise Bay, Osaka and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.
FIRE PRECAUTIONS: No specific precaution.
DEVELOPMENTS: There is a Sea-Berth under construction.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per gang per hour depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificate sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.
CARGO GEAR: See "Certificates", but no special requirements.
CONSULS: None. See "Kobe".
REPAIRS: Only minor repairs.
DRY DOCKS: Kawasaki Heavy Industries Ltd., Sakaide, which is suitable to dry dock. Dock No. 2 for 500,000 d.w.t. vessel. 450 m.×72 m.×12.3 m. Not yet in action for ship repairs. Only used at present for ship building and after services.

REPATRIATION: Possible.
AIRPORT: No airport. Nearest Takamatsu, All Nippon Airways 11 flights to Osaka and one to Tokyo.
TIME: GMT plus 9. No alterations made to clocks during year.
HOLIDAYS: National Holidays – see "Niihama". Local Holidays: New Year's Day (Lunar Calendar) January 30th; May Day May 1st; Memorial Day of the Sea July 20th; Bon Festival August 8th.

No ship's movement can be effected on January 1st, 2nd and 3rd, August 8th and October 15th.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119. Sakaide Maritime Safety Base, 6–2858.
TELEPHONES: No facilities for placing telephones on board.
GENERAL: Mitsubishi Chemical Industries Co. Ltd., Sakaide Works. As wharf of above works located outer harbour limit of Sakaide port, the undermentioned procedures required: In conformity with regulations, vessel required to get special permission for entering into closed port, which will be given from Shikoku Maritime Bureau.

Customs request vessel calls Mitsubishi Chemicals wharf to obtain special permission for entering. If tonnage dues paid prior arrival, this procedure will be attended to by Agent.

Waiting anchorage: Avoid Bisan Seto Boundary according to special water zone navigation order. Imperative to exclude water surfaces with established Fishery Privilege.

Vessels waiting to berth at centre pier are lightened at anchor.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: See "Niihama".

SAKATA: 38.57 N. 139.48 E.

Located at mouth of Mogami River. Strong wind blows from Japan Sea November to March.

In Winter season, wave height between 3 to 5 m., length 70 to 80 m. and period 7 to 10 seconds. Current South to North along coastline at 0.15 m. sec.
TIDAL RANGE:

Higher high water	+40 cm.
Spring tide high water	+28 cm.
Neap tide high water	+24 cm.
Mean sea level	+20 cm.
Neap tide low water	+16 cm.
Spring tide low water	+12 cm.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory but required. Order Pilot through Agent. Pilot boards about 600 m. off port entrance. In bad weather, wait instructions from Agent.
ANCHORAGE: All sea areas available for anchorage. No prohibited anchorage areas. Pilot station and quarantine anchorage position 38° 56.5′ N., 139° 48.0′ E.
RESTRICTIONS: Ship movements in daytime only.
MAX. SIZE: Restricted by depth alongside West Pier, 10 m.
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Niigata. Call sign JCF. Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: One of 800 h.p.
BERTHING:

Name	*Depth*	*Length*	*No. Berths*
East Pier	7.5 m.	260 m.	2
Nishi Pier	10.0 m.	185 m.	
West Pier	10.0 m.	185 m.	1
Ohama Pier	4.5 m.	260 m.	3
Ohama Pier	9.0 m.	330 m.	2
Sodeoka Pier	7.5 m.	390 m.	3
Buoy (Logs only)	11.0 m.	230 m.	1

STEVEDORES: Working hours: 0800 to 1700 hrs.

Phosphate rock in bulk handled at a rate of 200 to 250 t.p.h by shore cranes.

Logs, 1,400 cu.m. per day are handled by ship's gear.

Rice, 900 to 1,000 tons per day loaded by ship's gear.

Manganese ore in bulk, 150 t.p.h. by shore crane, 120 t.p.h. by truck crane, 60 t.p.h. by ship's gear.
MEDICAL: No advance notice required unless urgent. Medical facilities available at Sakata City Hospital.
TANKERS: Draft not to exceed 8.5 m.
FRESH WATER: Available only from wharf at a rate of 25 t.p.h.
FUEL: Bunkers lightered from Hakodate provided at least 7 days' notice given.
GANGWAY/DECK WATCHMEN: Not specially required, unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: 200 cigarettes and three bottles of spirits per man.
CONSULS: Korean Consulate Tel. 0222–21–2751. Consul: Mr. Cho Kian.
REPAIRS: Minor repairs only.
REPATRIATION: Crew replacement conducted basis "landing for transfer to another vessel".
AIRPORT: Yamagata Airport, situated 105 km. from Sakata. Two flights per day.
TIME: GMT plus 9 hours. No alterations.
HOLIDAYS: Public offices closed on Sundays and National holidays. Cargo work every day except 1st, 2nd and 3rd January.
POLICE/AMBULANCE/FIRE: Police (urgent) 110; (usual) 2–6611; Ambulance (urgent) 119; Fire (urgent) 119; (usual) 2–3214.
TELEPHONES: No facilities for placing on board.
SERVICES: Compass adjustment.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extensions possible if ship stays longer.
AUTHORITY: Sakata Port Management Body.
AGENT: Sub-agent of Dodwell & Co., Tokyo. Sakata Kairiku Unso Co., Ltd., P.O. Box 35, 6–19, 2-chome, Funaba-cho, Sakata-shi, Yamagata-ken. Cable address: Kairikusakata Sakata. Domestic Telex: 8733–08, Tel.: Sakata (0234) 22–1801.

SASEBO: 33.10N. 129.43 E.

DOCUMENTS: See "General – Customs and Immigration".
PILOTAGE: Compulsory. Vessel should keep Pilot closely advised through Agent, of ETA Pilot station at least 24 hrs. prior arrival and any subsequent change. Pilot boards vessel 1 mile N.W. Kogosaki lighthouse. (33° 06′ N. 129° 38′ E.). In bad weather, Pilot will board at 33° 05′ 48″ N. 129° 40′ 24″ E.

Telegraphic address of Port Captain "JNK" 500 kc/s (Sasebo Maritime Safety Office).
ANCHORAGE: Ample good holding ground in inner harbour, but is controlled by U.S. Navy and only following anchorage available for commercial vessels: No. 3 Section, Depth 10 m.-37 m. Capacity (g/t) 20,000 tons and over × 20.
RESTRICTIONS: Entry and departure from sunset to sunrise only allowed under extenuating circumstances subject to Port Captain's special permission (MSTS chartered vessels excepted). No particular restrictions upon draft or tide conditions. Berthing during day only. Controlling depth of water – in the passage 23-54 m., at anchorage 10-37 m.
WEATHER: South-westerly winds prevail in Summer, while Northerly blows frequently in other seasons. Max. wind velocity recorded 26.1 m/sec. In early Spring dense fog prevails, but renders navigation impossible only for 7 days or so.

Tidal range 2.6 m. Current rate max. 1.5 knots in vicinity of harbour entrance at rising tide. At ebb tide, it flows in opposite direction and is faster than during flood, but not so strong as to hinder navigation.
MAX. SIZE: See "Berthing". No particular limitation for entering port. For berthing however, acceptable length, draft and breadth will be decided case by case in accordance with conditions of each berth consulting with Pilots, U.S. Navy and Port Captain. No tanker installations outside port.
HEALTH: See "Moji". Quarantine station: 33° 05′ 30″ N., 129° 42′ 00″ E. 1.5 mile East of Kogosaki lighthouse. Quarantine service from sunrise to one hour before sunset. "Q" flag should be hoisted until free pratique granted. When vessel arrives from plague and cholera infected or suspected area within 10 days (plague) and five days (cholera), 24-hour special quarantine required. All sanitary scuppers must be closed and garbage not thrown overboard after vessel reaches 60 miles off Japanese coast. Vessel chartered by MSTS or USN (GAA, T/C, CVC, V/C) shall be cleared by U.S. Navy Quarantine and service available after sunset also.
RADIO: See "Yokohama".
TUGS: Normally join vessel about 0.5-1 hour prior berthing and tug's lines used. Charge for use of lines included in tug hire.
BERTHING:

Wharf	*Length* m.	*Depth*	*Capacity* (g/t)	*Cargo*	*Remarks*
Iorizaki	80.5	32′	20,000×1	Oil	Under U.S. Navy's control
Motofune No. 1	79.5	32′	20,000×1	,,	,, ,, ,,
Motofune No. 2	79.5	32′	20,000×1	,,	,, ,, ,,
Akasaki No. 1 & 2	298.0	40′	20,000×2	,,	,, ,, ,,
Akasaki No. 3	219.0	40′	20,000×1	,,	,, ,, ,,
Yokose	88.0	45′	20,000×1	,,	,, ,, ,,
India Berth No. 1	254.4	31′	20,000×1		For repairs
,, ,, No. 2–3	363.5	31′	20,000×2	Repairs	
,, ,, No. 4–6	575.5	31′	20,000×3	Repairs and general cargo	
,, ,, No. 7–8	363.5	31′	20,000×2	General cargo	
,, ,, No. 9	151.5	31′	20,000×1	General cargo	

No. 1–5: Exclusive use of SSK (Shipyard)
No. 6–9: Under control of the U.S. Navy. No. 6 and 7 berths can be used for commercial vessels, subject to the U.S. Navy's permission.

Wharf	Length m.	Depth	Capacity (g/t)	Cargo	Remarks
Maehata Gaibo No. 1	185.0	33′	20,000×1	Grain and general cargo	
Ekiura Wharf	150.0	16′	1,000×2	General cargo	
Hizukushi Wharf	103.0	15′	500×2	,,	,,
Maehata Wharf	143.0	15′	500×3	,,	,,
Maehata Gaibo No. 2	190.0	36′	25,000×1	Grain and general cargo	

No. of Buoy	Depth	Capacity (g/t)
10		Over 10,000
23	9–23 m.	5,000 to 10,000
7		Under 5,000

These buoys also controlled by U.S. Navy and their use for commercial purposes subject to U.S. Navy's permission, except following buoy which is free for commercial vessels:

	Depth	Capacity (g/t)
No. 9	27 ft.	5,000×1

STEVEDORES: Maximum 10 gangs available.

Classification	Regular employees	Temporary labourers
Stevedores	100	150
Longshoremen/Warehousemen	100	200

2 shifts: 0800–1700 and 1800–0700 hrs. Normal working hours: 0800–1700 hrs. Overtime work possible by applying to Customs. No work can be arranged during New Year holidays (1st to 3rd January), 31st December and 1st May.

TANKERS: Diameter of lines: 8 in. No slop (Residue) discharge facilities. Number of tanker berths as follows:

Berth	Length	Depth	Remarks
Akasaki No. 1, 2, 3.	517 m.	40′	under U.S. Navy's control
Motofune No. 1 & 2.	159 m.	32′	under U.S. Navy's control
Iorizaki	80.5 m.	32′	under U.S. Navy's control
Yokose	88 m.	45′	under U.S. Navy's control

DENSITY: 1025.

FRESH WATER: Available by barge one each of 200 and 100 tons. Rate of delivery 30-60 t.p.h./barge. Water from hydrant at India Berth Nos. 6, 7, 8 & 9. Rate of delivery 25 t.p.h./hydrant.

FUEL: No stock of bonded oil, but lightered from other ports. Adequate notice required order avoid delay. Rate of delivery from barges 100/200 tons per hour.

Suppliers	Installation	Notice required days
Shell Sekiyu K.K.	Nagasaki	3
	Shimonoseki	4
Esso Oil Co.	Shimonoseki	4
	Sakai	6
Mobil Oil Co.	Kokura/Moji	4
	Oita	5
Caltex Oil Co.	Shimonoseki	4
	Kudamatsu	5
Mitsubishi Shoji Kaisha	Shimonoseki	4
	Kanokawa	5
C. Itoh & Co.	Matsuyama	5
	Mizushima	5
Nissho-Iwai Co.	Shimonoseki	4
	Matsuyama	5
Mitsui Bussan Kaisha	Oita	5
Kanematsu-Gosho Co	Kokura	4
Idemitsu Kosan Kaisha	Tokuyama	5
Marubeni-Iida Co.		
Sumitomo Shoji Kaisha	Tokuyama	5

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES; Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo maintenance appears to be poor.

CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.

CARGO GEAR: Shore cranes:

No.	Capacity	Location	Owners
1	250 tons	India Berth No. 5	S.S.K.
2	15 tons	India Berth No. 3 & 4	S.S.K.
1	15 tons	India Berth No. 7 & 8	U.S. Navy
2	10 tons	India Berth No. 1 & 4	S.S.K.
1	1 ton	Hizukushi Wharf	Nishi Kyushu Whse. Co.
1	4 tons	Maehata Wharf	Sasebo City

Floating cranes:

No.	Capacity		Owners
3	30 tons	U.S. Navy	Their use for commercial purposes is subject to U.S. Navy's permission.
1	150 tons	U.S. Navy	
1	15 tons	S.S.K.	
1	12 tons	S.S.K.	

IDENTIFICATION CARDS: See "General – Immigration".

CONSULS: None.

REPAIRS: All deck and engine repairs possible.

DRY DOCKS: Sasebo Heavy Industries Co. Ltd. No. 3, dry dock: Length 370 m. Width 70 m. Depth 15 m. Max. ship (d.w.t.) 300,000. Another 5 dry docks available.

AIRPORT: Itazuke Airport, Fukuoka, about 120 km. (about 220 min. by taxi). Served by regular airlines. Nagasaki Airport, Nagasaki, about 50 km. (about 70 min. by taxi). Seven flights daily (All Nippon Airways).

TIME: GMT plus 9 hours. No alterations to clocks throughout year.

POLICE/AMBULANCE/FIRE: Police Station: Sasebo 23-7161 (if emergency: 110). Ambulance Sasebo 23-5121 (Sasebo Fire Station). Fire Sasebo 119 (Sasebo Fire Station).

TELEPHONES: No facilities exist for placing telephones on board.

GENERAL: *Customs:* When vessel arrives direct from foreign port, Customs officials board for search. Following documents to be submitted. Crew List, Passenger List, Store List, Manifest of crew personal effects (must be signed by individual crew member). Arms and ammunition List, Narcotics List, List of Port of call on current voyage, Discharging Cargo Manifest, Through Cargo Manifest, Declaration inward/outward (Form No. C2000). Following will be checked on board. Ship's Registry, Last port clearance.

When vessel comes from Japanese port, Customs officals will not attend on board, except special case. Master or Agents to attend at Customs House for entry formalities with following documents. Discharging Cargo Manifest, Through Cargo Manifest, Declaration inward/outward, Ship's Registry, Last Port Clearance, documents entrusted with the Master by Customs at previous port.

On vessel's departure, clearance issued by Customs after confirming payment of tonnage dues.

Immigration: Immigration officials board vessel on arrival to examine passports, discharge books and/or other equivalent travel documents and provide a 72-hour landing pass for crew members and passengers. Two copies each of crew list and passenger list are required by them. Providing vessel's Agent with these documents beforehand will help in expediting immigration business on arrival. When vessel in port more than 72 hours, landing passes will be extended every 72 hours on application.

In event that crew members, without entry visas, to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring prompt departure from Japan (within 72 hours) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within five days. Services are rendered from 0900 hrs. to 1700 hrs.

MEDICAL: Hospital: U.S. Station Hospital (for U.S. military personnel only). Sasebo Dojinkai Hospital. Bussaka Dental Hospital. Tanaka Dental Hospital.

SERVICES: Hold cleaning. Compass adjusting. Fumigation.

AUTHORITY: Sasebo Harbour Administration.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Nishikyushu Warehouse Co. Ltd., Tategami-cho, Sasebo-shi, Nagasaki-ken. Tel. Sasebo (0956) 24–6161. Telegraphic "Ringer Sasebo".

SHIMIZU: 35.01 N. 138.31 E. (See Plan)

DOCUMENTS: *Quarantine* (only when arriving from a foreign port):

1 Maritime Declaration of Health.
1 Crew List.
1 List of Passengers (if any on board).
Log Book and Registry should be readily available.

Customs:

1 Declaration Inward/Outward with Ports of Call.
1 Ship's Registry.
1 Last Port Clearance.
1 Store List including arms and narcotics.
2 Manifests of Cargo for discharge (prepared by Agents).
1 Manifest of Through Cargo.
1 Crew List.
1 List of Passengers.
1 List of Crew's Baggage (only necessary if crew-members have to land personal effects ashore).

Immigration:

2 Crew Lists.
1 Application for Shore-passes.
2 Lists of Passengers.
Notification of Departure, (to be returned through Agents after sailing).

Harbour Master:

1 Declaration Inward/Outward with Ports of Call.

Port Authority:

1 Declaration Inward/Outward with Ports of Call.

PILOTAGE: Pilot boats: black hulls and white house with H flag at bow. G flag: when requiring a Pilot. Pilot station: 35° 01′ 30″ N. 138° 31′ 30″ E. (to be altered at a later date to the point 80° 2600 m. distant from Masaki Lighthouse 35° 01′ 02″ N., 138° 31′ 06″ E.). Night Pilotage: charge – 50% extra applicable from one hour before sunset to one hour after sunrise.

ANCHORAGES: See Section 3 on Chart of Shimizu.

MAX. SIZE: Dry-cargo max. draft 12 m. Length and breadth no restriction.

HEALTH: Free pratique automatic calling at another Japanese port. Radio Pratique available.

RADIO: Cable Agent giving ETA, draft and any other information via Shimizu Radio. Call sign: JGQ. Transmitting frequency 500, 512, 486 kc/s. Receiving frequency 500, 480 kc/s. Area within 200 km.

VHF: Call sign: Shimizu Port Radio. Channels 16, 12, 14 Simplex, 20 Duplex. Power 50 W. Area 50 km.

TUGS: Normally join in-coming vessels near Pilot station. Tug's lines usually used no extra charge. Up to 2,000 h.p. available.

BERTHING: *Public*

Berth	*Depth* (m.)	*Length* (m.)	*Max. Size* d.w.t.	*No. Berths*
Hinode Wharf	10.6	411	20,000	2
	9	183	10,000	1
	7.3	226	5,000	2
Fujimi Wharf	11	185	20,000	1
	9	659	10,000	4
Okitsu Wharf	12	440	30,000	2
	10	1,480	15,000	8
	7.5	168	5,000	1
	5.5	180	2,000	2
Sodeshi Wharf	12	450	30,000	2
	10–12	330	30,000	1
	9	165	10,000	1
	7.5	135	5,000	1
	7.5	72	1,000	1
National Railway Wharf	7.3	266	5,000	2
Orido Buoys No. 1/3	11		20,000 10,000	2 1
Private				
Honen Dolphin	12	—	40,000	1
Nihon Keikinzoku Wharf	11	276	32,000	1
Toa Nenryo Sea-Berth	22	—	250,000	1

SPECIALISED CARGO HANDLING FACILITIES:
Container Berth: Okitsu Wharf No. 11/12, depth 12 m. length 440 m. (2 berths), Gantry cranes Capacity 30.5 ton and 30 ton.
Grain Berth: Fujimi Wharf No. 5, depth 11 m. length 185 m. 2 suckers. Honen Dolphin, depth 12 m., 3 suckers.
Wood Chip Berth: Fujimi Wharf No. 3/4, depth 9m. length 330 m., 3 unloaders. Sodeshi Wharf No. 16, depth 10–12 m. length 330 m., 2 unloaders.
Bauxite Berth: Nihon Keikinzoku Wharf, depth 11 m. length 276 m. 2 unloaders.
TANKERS: Toa Nenryo Kogyo Co. Ltd. operate a sea-berth suitable for tankers up to 250,000 d.w.t. in depth of 22 m. at low water. Honen Dolphin 11 m. deep.
DEVELOPMENTS: Sodeshi Wharf construction to be completed end 1980. New facilities will include 4 berths for vessels of 30,000 tons, water depth 12.0 m. 5 berths for vessels of 5,000 tons, depth 7.5 m. These facilities are specially for container vessels. 3 gantry cranes and other facilities are also under construction.
STEVEDORES: Enable Agents order gangs important obtain accurate ETA in good time. Latest time to order gangs 1600 hrs. previous day. Gang shifts: Normal and deferred shift 0830 hrs. every day. Night shift 1700 hrs. every day except last Sunday in month. Any request for attendance preceding 0830 hrs. non-acceptable.
MEDICAL: Masters to advise by radio prior arrival if medical attendance required.
DENSITY: 1023–1024.
FRESH WATER: Most berths supply by shore installations, otherwise barge.
FUEL: All grades of oil delivered by barge only.
FIRE PRECAUTIONS: Harbour fire-fighting corps with a fire-fighting boat.
GANGWAY/DECK WATCHMEN: Available for gangway, hold, checking hawsers, bridge, telephone, etc.
OPENING/CLOSING HATCHES: On liners normally by stevedores with assistance of crews, otherwise according Charter Party.
CERTIFICATES: Ship Registry, Radio and Safety equipment Certificate, Derating Exemption Certificate, etc.
CUSTOMS ALLOWANCES: Tobacco: 50 packets permitted per each crew per day. Wine six bottles per crew member.
IDENTIFICATION CARDS: Passport or Seaman's Book.
CONSULS: None.
REPAIRS: Most repairs and overhauls possible.
DRY DOCKS: NKK Shimizu yard (largest dock 210×24.6 m.).
AIRPORT: 180 km. distant from Haneda International Airport.
TIME: GMT plus 9 hrs. Permanent.
HOLIDAYS: No work on from December 31 to January 3 and Shimizu Port Festival Day (Aug. 5).
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119; Water Police (52) 0200.
TELEPHONE: Available on board.
SHORE LEAVE: Normally allowed.
AUTHORITY: Shimizu Port Administration Office.
AGENT: Sub-Agent of Dodwell & Co. Ltd. Suzuyo & Co., Ltd. 12, 3-chome Irifune-cho, Shimizu-shi, Shizuoka-ken. Cable Address: Suzuyo Shimizu. Domestic Telex: 3965-671, 672, 677 Suzuyo Smz. Tel.: Shimizu (0543) 53-3111/3914 and 52-1398.

SHIMONOSEKI (including Mutsure): 33.57 N. 130.58 E. (See Kanmon-Ko) **(See Plan)**

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: See "Moji".
ANCHORAGE: Nishiyama anchorage located off Hikoshima Island, on Western end of Honshu Island. Max. draft 9.5 m. capacity 10,000×2.
Mutsure anchorage: undermentioned area is open port. The sea area surrounded by:
(a) Line connecting Daibahana on Takenoko Island and top of Wagora Island.
(b) Line connecting top of Wagora Island and Udonohama on Mutsure Island.
(c) Coastline between Udonohama and Unoishibana on Mutsure Island.
(d) Line connecting Unoishibana and Anse-no-Shiri in Shimonoseki.
(e) Line connecting Anse-no-Shiri and point at 370 m. from Daibahana on the line connecting Daibahana and top of Wagora Island.
(f) Line Long. 130° 54′ E.
Anchorage includes a part of quarantine anchorage and Mutsure oil berth; depth 10-25 m.
RESTRICTIONS: See "Moji".
MAX. SIZE:

Wharf		*Length*	*Depth*	*Capacity (g/t)*
Western wharf	(Nos. 3–4)	340 m.	6.5 m.	15,000×1
Daiichi Pier	(Nos. 9–10)	330 m.	8.5 m.	24,000×1
	(Nos. 12)	330 m.	8.0 m.	13,000×1
Daini Pier	(Nos. 15–16)	340 m.	8.5 m.	15,000×1
	(Nos. 17)	210 m.	9.1 m.	25,000×1

For tank installations, see "Tankers".
PRATIQUE: See "Moji".
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to Choshi and North bound to Nagasaki Radio respectively.
VHF: See "Yawata".
TUGS: See "Moji".
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
BRIDGES: No bridges at present, but construction begun on suspension bridge, across Kanmon Strait.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: Shell oil berth situated at Hikoshima, on Southwestern end of Honshu, facing Moji across Kanmon Strait. In vicinity of berth, flood tide sets to East, ebb tide to West, current about 5-6 knots. Mooring berth consists of four buoys, approximately 140 m. offshore, space between buoys being approx. 270 m.
Max. dimensions of vessel which can be safely accommodated are 18,000 d.w.t., length OA 170 m., breadth unlimited, draft 9 m. Product handled, fuel oil. Shoreline 1×8 in. Discharge rate 500 t.p.h.
Vessels only berthed or unberthed when tide sets to West during daytime only. In approaching berth, as vessel comes against tide, full engine power and tug assistance required. One 10 in. pipe connected to vessel; discharge efficiency per hour 500-600 kl.
Nissin Tanker Pier located about 610 m. South of Mutsure lighthouse. At this berth, West-going current stronger than East-going and ship taken to berth only on Westerly current, with stern towards South. Most suitable berthing time is 2-3 hrs. after commencement of West-going current. Max. dimension of vessel which can be accommodated at this berth is 100,000 d.w.t., LOA 250 m., draft 11 m. Product handled, fuel oil. Shoreline 2×8 in. Discharge rate 1,500 t.p.h.
DENSITY: 1025.
FRESH WATER: Good fresh water supplied either from water barge or from hydrants alongside wharves. Rate of delivery from water barge 50 t.p.h. and from hydrants 40-50 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. seven days prior notice. Also see "Moji, Fuel".
DEVELOPMENTS: At present, No. 18 wharf, mostly reclaimed land, used for ferry boat service linking Shimonoseki to Pusan, which opened service June 1970. After completion of reclamation, further 3 berths (Nos. 19, 20 & 21) will be equipped for larger vessels, where maximum draft planned 10 m.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.
CARGO GEAR: See "Certificates", but no special requirements.

CONSULS: Korean Consul, Tel. (66) 5341.
REPAIRS: All types of repairs possible.
DRY DOCKS: Mitsubishi Heavy Industries Ltd. four dockyards (Nos. 3 & 4 for smaller vessels).
Hayashikane Shipbuilding K.K. three dockyards (Max. 1,100 g.t.).
Towa Shipbuilding K.K. one dockyard (Max. 1,000 g.t.).
Mitsubishi Heavy Industries Ltd.
Dimensions of dock

	Length metres	*Breadth metres*	*Draft metres*
No. 1 Dock	164.13	25.0	7.04
No. 2 Dock	150.10	20.0	6.88

Max. size of vessel for docking

	Length metres	*Breadth metres*	*Draft metres*
No. 1 Dock	160.00	22.50	5.50
No. 2 Dock	143.00	19.30	5.00

REPATRIATION: Possible.
AIRPORT: Approx. 80 km. to Fukuoka airport; about 1.5 hrs. by train. Approx. 18 km. to Kitakyushu airport; 40 minutes by taxi.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police station 110; Ambulance/Fire Station 119.
TELEPHONE: Possible to place telephone on board.
SERVICES: All services available.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port and Harbour Bureau.
AGENTS: See "Moji".

SHIMOTSU (including Kainan): 34.06 N. 135.08 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot request to be given to pilot station through Agent. Advance notice of ETA: 72 hours and 24 hours before arrival. No VHF available. Pilot usually attends by tug boat. No special pilot boat. Pilot boards 34° 07′ 25″ N. and 135° 06′ 45″ E. No alternative area in event of bad weather. Location of anchorage for awaiting pilot – 34° 07′ 25″ N. and 135° 06′ 45″ E., as pilot station.
ANCHORAGES: Quarantine anchorage, 20 metres depth.
RESTRICTIONS: Entry daytime only.
Yura Bay: Vessels no longer than 110 metres berth. Daytime entrance only regardless of tide and current.
MAX. SIZE:

	Max. d.w.t.	*Length*	*Draft*
Tonen O-1	200,000	No limit	20.00 m.
Tonen E-1	70,000	No limit	13.00 m.
Maruzen Buoy Berth	35,000	230 m.	10.00 m.
Maruzen Jetty 5	56,000	250 m.	11.60 m.
Fuji Kosan Jetty 9 (Kainan)	70,000	250 m.	12.50 m.

Also see "Tankers".
HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination Certificates.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: Recommended Captain communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound, to Choshi, and Northbound, to Nagasaki Radio respectively.
TUGS: Tugs join at Quarantine anchorage, tug lines used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.
MEDICAL: No advance notice required unless urgent.
TANKERS: There are no slop facilities.

Berth	*Product*	*Shorelines*	*Discharge Rate t.p.h.*
Tonen O–1 Jetty	Crude Oil	12″×2 16″×3	12,000/4,500
Tonen E–1 Jetty	Crude Oil	12″×2	2,500
	Fuel Oil	10″×1	2,000
Maruzen No. 5 Jetty	Crude Oil	14″×1	1,500
Maruzen Buoy Berth	Fuel Oil	10″×1	500
	Lube Oil	10″×1	500
Fuji Kosan Jetty 9 (Kainan)	Crude Oil	12″×2	3,500
	Fuel Oil	10″×2	800

DENSITY: Average density 1012.
FRESH WATER: Available at every berth by shore lines, rate about 25 metric tons per hour.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. Some grades available in Shimotsu/Kainan subject to enquiry.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Only minor deck and engine repairs.
DRY DOCKS:
Yura Dockyard: Mitsui Shipping & Engineering Co. Ltd. have constructed a 350,000 d.w.t. new dockyard in Yura, 50 nautical miles South of Kobe 33° 57′ 30″ N. 135° 07′ 00″ E. Vessels calling at Yura port are requested to note the following information:
Tonnage dues should be paid at Wakayama since Yura is closed port.
Dock Master boards at position 280 degrees 2,000 metres from Arijima lighthouse for entering Yura and Pilot is not required.
Vessel is requested to wait at Wakayama Anchorage if dry dock or wet basin is not available.
Vessel is requested to call at Shimotsu for free pratique if necessary.
REPATRIATION: Possible.
AIRPORT: Osaka International Airport.
TIME: GMT plus 9 hrs. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110 and Ambulance/Fire 119 (in case of emergency).
TELEPHONES: No facilities for placing telephones on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: See "Kainan".

SHIOGAMA: 38.20 N. 141.03 E.

Tohoku Oil Co. Refinery Terminal, Sendai.
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including passport numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Personal Effects.
Agent should be provided with necessary information to prepare Inward/Outward Declarations and Cargo Manifests.
PILOTAGE: Not compulsory but can be arranged at request of Master. Pilot not available after dark. Pilot boards at Fairway Buoy "A", position 38° 13′ 15″ N. 141° 08′ 15″ E.
ANCHORAGE: Depth: 28 m. Bottom: Rock and sand. Anchorage not suitable in rough weather and as no sheltered anchorage nearby it is advisable for vessels to proceed offshore.
RESTRICTIONS: *For vessels entry into and sailing from Sendai:* Priority of entry and sailing from the port is given to ferries. Entry and sailing of other vessels is restricted to times outside ferry schedules. Entry of tankers controlled by Tohoku Oil Refinery Co. Ltd. under supervision of Harbour Master.
Depth of water in channel 28 m. length 7 miles, width 300 m.
MAX. SIZE: Max. d.w.t. 75,000. Max. LOA 350 m. Max. safe draft 16.20 m.
HEALTH: There is no quarantine anchorage at Sendai at present, vessels proceeding to Sendai must obtain free pratique at either quarantine anchorage Shiogama, position 38° 18′ 12″ N. 141° 08′ 48″ E. and/or 38° 16′ 07″ N. 141° 13′ 05″ E. (for vessels over 30,000 d.w.t.).
At first port of call in Japan vessel must obtain free pratique. Quarantine Officers attend only from daylight to sunset. Master required to produce all vaccination cards and Derat Exemption Certificate.
If vessel arriving from cholera-infected area within ten days, Master must report crew and passengers' health condition to respective Quarantine office through Agent prior to arrival, and close all soil pipes before entering port.
RADIO: Choshi Radio or Nagasaki Radio.
BERTHING: *Tohoku Oil LPG Pier:* Vapour Line: 1 × 8 in., Liquid line connection (Propane) 2 × 12 in., Butane 1 × 12 in., Depth alongside 17.0 m.

Public Wharves: One Pier length 250 m., depth 12.0 m. One Pier, length 925 m., depth 10 m.
Azuma Seiko Private Wharf: One pier length 275 m. depth 12 m. One pier length 200 m. depth 10 m. Shore cranes, 2 × 15 tons. Cargo handled, steel scrap and wire rods.
TANKER BERTH: Dolphin berth situated in 17 m. depth of water. Length between dolphins, 125 m.
Vessel discharges through two 16 in. Chiksan loading arms each capable of receiving 4,000 t.p.h. Also 1×8″ Chiksan loading arm for Bunker.
There are no facilities for dirty ballast.
Storage capacity:
Crude Oil: 102,000 K/L × 5
55,000 K/L × 1
Fuel Oil: 31,000 × 5
Position of Oil Pier: 38° 16′ 18″ N. 141° 02′ 06″ E.
FRESH WATER: Supplied by shore line at 40 t.p.h.
FUEL: Nearest bunker stock port Tokyo Bay. Lightered subject to 7 days' prior notice. Local supply may be possible.
TIME: GMT plus 9 hours. No alterations during the year.
DEVELOPMENTS: 15 public wharves under construction to accommodate vessels of 15,000 – 40,000 d.w.t. for discharging and loading of general and bulk cargoes. Depth alongside 10 – 12 m.
AUTHORITY: Port Administration Office.
AGENT: Abeki Shokai, (Higashi-Shiogama Eki Mae) 9-10, 4-chome Kitahama Shiogama-shi, Miyagi-ken. Cable Address: "Abe Sendai" Domestic Telex: 8592-86 Abesen J Tel.: 02236–5–0785.

TAGONOURAKO: 35.08 N. 138.42 E.

SHIPMASTERS REPORT: JULY 1975
PORT LIMITS: Commences 5 cables from the harbour entrance. A vessel is considered an "arrived ship" at this point.
DOCUMENTS: As for "Shimizu".
PILOTAGE: Ordered 24 hours in advance through Agents. If possible vessels should obtain Japanese Chart 1075 for the approaches and Japanese Harbour Plan No. (P) 98. Two fixed green leading lights visible 13 miles lead the ship through the entrance on a bearing of 323.5° True. Vessels should approach on this transit until 1 mile off the breakwater entrance which is marked by an occ. G. 6 second 12 mile light on the West breakwater and a occ. R. 6 second 13 mile light on the East breakwater. The Pilot will board from a tug 1 mile from the entrance. 2 tugs will attend for the entrance transit.
ANCHORAGE: Due to the steep nature of the coast no roadstead anchorages are available. In the event of having to wait for Pilot or weather to moderate it is necessary to steam outside the entrance.
RESTRICTIONS: The allowable draft should be verified with the Agents before arrival as this does vary, the average being 6.5 m. alongside the berth. The entrance channel has a minimum depth of 9 m. at all times.
MAX. SIZE: LOA 600 ft., beam 100 ft. These extremes are likely to be increased as the port develops.
PRATIQUE: Radio pratique is available if vessel holds a valid Japanese Sanitary Inspection Certificate, if not then quarantine will be cleared at Shimizu.
RADIO: Chosi radio. When nearing Shimizu a call can be made via Shimizu Radio VHF requesting them to telephone ETA to Tagonoura Pilot.
TUGS: 2 tugs normally required. These are ordered from Shimizu in advance by Tagonoura Agents. The same applies on departure.
BERTHING: The harbour is still under construction. Approximately 5,000 ft. of berthage is presently available with depths between 5 and 9 m. however, vessels exceeding 150 m. in length are restricted to 6.5 m. maximum.
SPECIALISED CARGO FACILITIES: Tagonoura handles bulk phosphates, etc. Also liquid chemical carriers and tankers.
BRIDGES: None.
STEVEDORES: Private arrangements.
MEDICAL: Hospital and immediate services available.
TANKERS: Specific details unknown.
DENSITY: 1021
FRESH WATER: Unlimited. Available on the berth, rate less than 15 t.p.h. cost Yen 100 per ton.
FUEL: All grades and lubricants available from Chiba and Toyko.
REPAIRS: Minor repairs only available.
DRYDOCK: None.
SURVEYORS: Available at short notice from Shimizu, all societies.
GANGWAY/DECK WATCHMEN: Available but not necessary.
HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: As per "Shimizu".
CARGO GEAR: Ship's gear.
REPATRIATION: Possible. Frequent train services to Toyko.
AIRPORT: Haneda, Toyko.
TIME: J.S.T. GMT plus 9 hours throughout.
TELEPHONES: Available on the wharf only.
SERVICES: All services available at short notice from Shimizu or Toyko.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: 3 day passes issued, extended if necessary.
GENERAL: Vessel called 26th June to 2nd July discharged 10,000 tons phosphate rock.
DEVELOPMENTS: Deepening of the harbour and further berth development is in progress.
AUTHORITY: Tagonoura Port Administration.

TANABE: 33.44 N. 135.21 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory, but if required Agent to be advised 72 hours prior arrival. No pilotage sunset to sunrise. Anchorage waiting for Pilot 33° 42′ N.; 135° 19′ E. Pilot station 2,200 m. 315° from Banshono-hana lighthouse. Depth, 38 m.
ANCHORAGE: Waiting anchorage, 1,900 m. 40° from Banshono-hana lighthouse. Depth, 19 m. Bottom, sand and mud.
RESTRICTIONS: Max. draft, 9.5 m. (31ft.), high tide. Usual draft, under 8.5 m. (28 ft.).
HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: If required, ordered from Wakayama subject three days advance notice. Tug's line used, no extra charge.
BERTHING: Two buoy-berths, depth 10 m. and 7.5 m.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700-1900 hrs. (50% additional of basic stevedorage), 2100-0500 hrs. next morning (130% additional). Sundays/holidays (60% additional).
MEDICAL: No advance notice required unless urgent.
DENSITY: About 1.03.
TIDE: Tidal range. Maximum plus 2.13 m. Minimum minus 0.21 m.
FRESH WATER: Available by water-barge, capacity 30 tons. Daytime delivery only to buoy berths. 48 hours notice required.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
AIRPORT: Shirahama Airport about 25 km. distant. Domestic flights only, daily to Tokyo, Osaka, and Nagoya.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Tanabe police office, tel. 0739-22-1226; Ambulance, Chu-o Hospital, tel. 0739-22-8383; Fire department, tel. 0739-22-0931.
SERVICES: None available locally but obtainable from Osaka.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Port Administration Office.
AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Shimamoto Kaiun K.K., 193 Kamiyashiki, Tanabe-shi, Wakayama-ken. Tel. Tanabe (0739) 24-2424. Telegraphic, Shimamoto Tanabe. Telex 5562-103.

TOBATA: 33.55 N. 130.51 E.

(See Kanmon-Ko).

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: See "Yawata".
ANCHORAGES: No. 5 Section, Wakamatsu. Depth: 9–11 m. Capacity (g/t) 15,000×2. Quarantine anchorages also used when necessary.
WIND/TIDE: South-easterly winds prevail in the warm seasons and North-westerly winds in the Winter season. The maximum velocity recorded in the past being 18 m./sec. The tidal range is 2.145 m. The current at the channel leading to new port runs Southward at the flood and Northward at the ebb. The maximum speed of the current is about 3 knots. There is no current in the dock.
RESTRICTIONS:
(a) Vessels exceeding 20,000 tons gross may berth only within one hour before and/or after slack tide. Vessel's under 20,000 tons gross may berth regardless of current, if it does not exceed 5 knots.
(b) Night entry: Vessels under 10,000 gross tons may berth at Nos. 1, 2, 3 and 8 wharves until 2200 hrs. in Summer season and 2100 hrs. in Winter season, subject to Harbour Master's permission and Pilot's agreement.
(c) Night departure: Vessels under 20,000 gross tons allowed to sail from Nos. 1, 2, 3, 8 wharves and Nos. "A", "B", "C" buoys until 2200 hrs., regardless of current, provided they are moored with bow outward.
(d) Least depth in channel, 14.0 m.
MAX. SIZE:

(a)	*Wharf*	*Length* (m.)	*LOA* (m.)	*Depth* (m.)
	1	200	180	11.0
	2	200	180	12.0
	3	250	220	13.0
	4			17.0
	8	316	250	12.0
	9	280	170	10.0
	Uchiura No. 5	221	175	8.5
	Shoko wharf	165	150	8.5

(b)	*Buoy*	*Ship's LOA* (m.)	*Depth* (m.)
	A	180	12.5
	B	200	12.5
	C	180	12.5

PRATIQUE: See "Moji".
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Two tugs join vessel at entrance of harbour (in front of harbour signal station). Vessels exceeding 20,000 tons gross require 3 tugs. One of them will join vessel at Mutsure leading into main harbour and 2 join vessel at entrance of port (in front of harbour signal station).
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. See "Max. Size".
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).
MEDICAL: Kinjyo Hospital, Yawata; Shimada Surgical Hospital, Yawata. No advance notice required unless urgent.
DENSITY: Average density in the port is about 1019–1021 in Summer season, 1025–1026 in Winter season.
FRESH WATER: Available in connecting lines from shore side at wharves Nos. 1, 2, 3, 8, 9. No. of hydrant 5 4 5 5 5. At buoys: from barges, arranged from Wakamatsu. Rate of delivery: 55–70 t.p.h., ex-hydrant, 60 t.p.h., barge. Overtime (0500–0800 hrs.) (1700–2200 hrs.), 50% add.; (2200–0500 hrs.), 100% add.; bad weather, 50% add.; Sundays and holidays, 50% add.; minimum quantity at Tobata, 30 tons; minimum quantity at Mutsure, 50 tons.
FUEL: Available ex-barge. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: No tanker berth. Each tugboat equipped with fire extinguishing system for attending emergencies on request.
DEVELOPMENTS: No. 4 Wharf completed. Depth of water about 17 m., but also 2nd plan for 19 m. Berthing capacity, over 150,000 d.w.t.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: See "Yawata".
REPAIRS: All types of deck and engine repairs possible afloat.
DRY DOCK: No dry dock.
REPATRIATION: Possible.
AIRPORT: See "Yawata".
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Tobata Police Office, tel. 093–87–4321; Wakamatsu Water Police, Tobata Branch, tel. 093–87–1561; Ambulance/Fire: Tobata Fire Department, tel. 093–87–2621.
TELEPHONES: See "Yawata".
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kitakyushuko Kanti-Kumiai.
AGENTS: Sub-agents of Dodwell & Co. Tokyo. Holme Ringer & Co. Ltd., 2nd Floor, Service Center Bldg., Outside West Gate, Tobata Works, Nippon Steel Corp., Kawashiro-cho, Tobata-ku, Kitakyushu-shi. Cable Address: Ringer Tobata. Domestic Telex: Ringer Kik 7145–75. Tel.: (093) 861–02212, 871–1561 (Ext. 5678).

TOKUYAMA: 33.59 N. 131.45 E.

Port situated in Yamaguchi Prefecture on Western part of mainland, facing Seto Inland Sea. Surrounded by Oshima peninsula on the East, by Otsu-Shima and Uma-Shima (islands) on the S.W. and by the land on the North Forms a grand bay with deep water suitable for shelter. Sen-Shima and Kurokami-Shima (islands) lying in harbour, divide it into Tokuyama section and Tonda section.
DOCUMENTS:
(a) Customs. When vessel arrives direct from foreign port, Customs officials will board her for search. The following documents are to be submitted:
Crew List.
Passenger List.
Store List.
Manifest of Crew Personal Effects (must be signed by individual crew member).
Arms and Ammunition List.
Narcotics List.
List of Ports of Call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration Inward/Outward (Form No. 02000).
The following will be checked on board: Ship's Registry, Last Port Clearance. When vessel comes from Japanese port, Customs officials will not attend on board, except special case. Master or Agent are to attend at Custom House for entry formalities with the following documents:
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration Inward/Outward.
Ship's Registry.
Last Port Clearance.
Documents entrusted with Master by Customs at previous port.
On vessel's departure a clearance is issued by Customs, after confirming payment of tonnage dues. Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
(b) Immigration. Immigration officials attend from Tokuyama. They board vessel on arrival to examine passports, discharge books and/or other equivalent travel documents, and provide 72-hr. landing passes for crew members and passengers. One copy each of Crew List and Passenger List are required by them. Providing ship's Agent with a Crew List beforehand will be a great help in expediting immigration business on vessel's arrival. When vessel stays in port more than 72 hrs., the landing passes will be extended every 72 hrs. on application. In event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hrs.) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within five days.
PILOTAGE:
Inland Sea Pilot (Sekisaki/Tokuyama): Not compulsory. Agent gives 24 hrs. notice to Pilot Association Moji, and advice if ETA changed. (Master to cable "Anjin Moji" in case ETA changed and believes that his advice, if relayed by Agent, will not reach in good time; for example, at night before date of arrival at Sekisaki). Location: 3 miles South of Sekisaki lighthouse (33° 13′ N., 131° 54′ E.). Pilot boards on vessel's arrival at pilot station day and night. No alternative area in event of bad weather. No VHF.
Harbour Pilot (Tokuyama Harbour or Tokuyama-wan): Not compulsory. Pilot boards in Tokuyama-wan at quarantine anchorage, or other anchorage to pilot to berth. Master who has not taken Pilot at Sekisaki should enter harbour without Pilot (no pilot station at entrance). Master to inquire position for anchoring from Agent prior arrival. Agent will advise Master in consideration of vessel's size, draft or nos. Of other vessels, especially supertankers in port.

ANCHORAGE: Quarantine anchorage, 34° 01′ N. 131° 46′ E., depth water 36 ft. Deeper water of more than 60 ft. about two miles S.W. of quarantine anchorage where quarantine board supertankers. If harbour congested, vessels, especially supertankers, anchor outer harbour. In this case quarantine go to outer harbour if advised by Master or Agent. In emergency or unable contact Agent, vessel can talk with Harbour Master by VHF, Channel 16, calling "Tokuyama Hoan". No restriction for entry into and/or departure from the anchorages after nightfall.

MAX. SIZE: Biggest recorded vessel to enter, 215,000 d.w.t., 64 ft. draft.

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA (m)*	*Max. Safe Draft (m)*
Idemitsu Kosan Sea berth	No limit	No limit	19.50
Idemitsu Kosan Ohura No. 3 Jetty	50,000	250	12.00
Idemitsu Kosan Ohura No. 4 Jetty	50,000	250	12.00
Idemitsu Kosan	70,000	300	12.00
Idemitsu Kosan Centre Pier	35,000	220	11.00
Nippon Seiro Nishigamori Jetty	18,000	180	11.00

HEALTH: Radio Agent for free pratique not less than 12 hrs. and not more than 36 hrs. before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If crew or passengers on board do not possess Valid Smallpox Vaccination Certificates.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Join inside harbour. For supertankers outer harbour if requested. Tugs' lines used. Eight tugs available, up to 4000 h.p.

BERTHING: Also see "Tankers". No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

(a) Wharf	*Length (m.)*	*Depth (m.)*	*Capacity (g/t)*	*Cargo*
Tokuyama Soda Salt Pier	117	10.5	15,000×1	Salt
Tokuyama Soda Cement pier	162	10	2,500×1	Cement
Toyo Soda Fertiliser pier	160	9.5	10,000×1	Fertiliser
Toyo Soda Salt pier	110	10	15,000×1	Salt
Toyo Soda Salt pier	60	8	4,000×1	Salt
Toyo Soda Cement pier	125	10	10,000×1	Cement
Nisshin Seiko pier	66	5	1,000×1	Steel
Public Chikko wharf	200	6	3,500×1	General
Public Harumi wharf	140	7.5	7,000×1	General

(b) Buoy	*Depth (m.)*	*Capacity (g/t)*	*Cargo*
Sea Berth	20.0	100,000	Oil
Nippon Seiro berth	12	20,000	Oil

(Refer to Oil Terminals)

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

Loading/Unloading facilities

(a) Gangs: Maximum 20 gangs are available.

Classification	*Regular Employees*	*Temporary labourers*
Stevedores	160	180
Longshoremen	80	60

Tokuyama Kairiku Unso Kabushiki Kaisha; Kamigumi & Co. Ltd.; Toyo Koun Co. Ltd.; Sankyu Transportation & Engineering Co., Ltd.

(b) Lighters: No lighter is available, but semi-motor schooners are arrangeable in case of need.

(c) Shore crane: None.

(d) Floating crane: No. 1. Capacity, 100 tons. Owners, Maruike Kaiun (from Kudamatsu).

(e) Average performance of loading/unloading: Loading: Cement in bags, 55–65 t.p.h./gang; Soda ash in bags, 40–50 t.p.h./gang; Fertilisers in bags, 55–65 t.p.h./gang. Discharging: Salt in bulk, 65–75 t.p.h./gang.

Working hours: One labour shift. Normal working hours: 0800 to 1700 hrs. Overtime is possible by applying to Customs. No work can be arranged for during New Year holidays (1st to 3rd January).

MEDICAL: No advance notice required unless urgent. Hospital: Asanoumi Hospital, Asami Hospital, Ono Dental Plant.

TANKERS: No slop facilities.

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*	*Hoses*
Idemitsu Kosan Sea berth	Crude Oil	36″×1 30″×1	10,000	16″×2, 14″×1 Flexible, 8 ton derrick for each hose.
Idemitsu Kosan Ohura No. 3 Jetty	Crude Oil	18″×1	5,000	12″×2 Chiksan joint.
Idemitsu Kosan Ohura No. 4 Jetty	Crude Oil Fuel Oil Diesel Oil	18″×1 14″×1 14″×1	5,000 4,000 4,000	16″×2, 14″×1 Flexible. 12″×2 Chiksan joint, 8 ton derrick for each flexible hose.
Idemitsu Kosan	Crude Oil Fuel Oil Naphtha	24″×2 30″×1 24″×1	5,000 4,000 3,000	Chiksan joint. 12″×2. Total 4 Chiksan.
Idemitsu Kosan Centre Pier	Crude Oil Fuel Oil Diesel Oil Kerosene Naphtha	18″×1 12″×2 10″×1 10″×1 14″×1	2,000 1,500 1,500 800 1,000	8″×2 Flexible.
Nippon Seiro Nishigamori Jetty	Raw Oil Fuel Oil	12″×1 10″×1	700 500	8″×1 Flexible.

Idemitsu Sea berth: is located in Tokuyama Bay at the position of 33° 59.5′ N., 131° 46.1′ E., consisting of seven mooring buoys. 130,000 d.w.t. tanker can be accommodated at this berth, being moored to buoys fore and aft. Four powerful tug boats and two line boats are engaged in berthing/unberthing. The depth of water is 20 m.

Nippon Seiro Refinery: The mooring berth consists of one oil pier and two mooring buoys, to which vessel is moored fore and aft, keeping about 15 m. off the pier. The depth of water is 12 m.

Nippon Geon Wharf (25 ft.) (for LPG).

DENSITY: Salt. 1025.

FRESH WATER: Water barges available, one each of 450 tons, 350 tons and 160 tons. Hydrants at Idemitsu Central pier, Toyo Soda wharf. The rate of delivery: 50 t.p.h. from barge, 20 t.p.h. from hydrant.

FUEL: Ex-barge. Delivery rate 80–100 t.p.h. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice. Bunkering alongside Refinery berths not permitted.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRY DOCKS: Kasado Dockyard in Kudamatsu-wan, entrance three miles E. of Tokuyama-wan entrance. Largest dry dock for 50,000 tonners and four other dry docks/building docks.

AIRPORT: Hiroshima (about 2.5 hrs. by taxi/train), Ube (2 hrs. by taxi/train) two flights a day.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police, tel. 110; Ambulance and Fire, tel. 119.

TELEPHONES: No facilities for placing on board.

SERVICES: From Moji, Kobe or Osaka.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., c/o Sankyu Transportation & Engineering Co. Ltd., Shunan Branch, 12–7 Chikko-cho, Tokuyama-shi, Yamaguchi-ken. Cable adress: "Ringer Tokuyama". Domestic Telex: 6765–93 Sankyu J. Tel.: Tokuyama (0834) 22–0039.

TOKYO: 35.43 N. 139.45 E. (See Plan)

DOCUMENTS:

3 copies Inward/Outward Declaration – (Form C.2000).
1 copy Berth Application (normally prepared by Agent).
1 Cargo Manifest (Form C.2030).
1 List Ship's Stores (Form C.2060).
1 Parcel List.
1 Passenger Manifest (Form C.2070).
1 Crew Manifest (Form C.2080).
1 Statement by Master (Form C.2020).
1 Declaration for Payment Tonnage Dues.
1 Maritime Declaration of Health.
1 Application for Shore Passes.

PILOTAGE: 12 hrs. advance notice of ETA required. Pilot boats named Musashi, Takao, Tsukuba and Asuka. No light or sound signals, use ship's radio in case necessity arises. Address: Tokyo

Pilot Union, 3-26-82 Kaigan, Minato-ku, Tokyo (at the Southern tip of the Shibaura Wharf). Tel. (453) 1691.

Pilot boards vessel outside harbour. Vessel awaits Pilot around "Quarantine Anchorage".

Vessels requiring a Pilot for the Uraga Channel should radio request to Anjin Yokosuka advising ship's details and arriving time at No. 1 Uraga Channel light buoy. Uraga Channel Pilot embarks three/five miles S.S.E. of Kannonsaki lighthouse, and will disembark on arrival at destination port limits. Applications for Uraga Channel Pilot should reach pilot office 24 hrs. before vessels arrival at No. 1 Uraga Channel light buoy.

ADVANCE APPLICATIONS: Passenger ships and large vessels using mooring facilities must submit applications for use of facilities to port managers (the Port and Harbour Bureau of Tokyo Metropolitan Government) through shipping firms or Agents 24 hrs. before entry into port so that they may have berths designated.

When they want to use anchorage facilities, they must submit applications for use of anchorage areas to Tokyo-Yokohama Port Director (the Port and Harbour Section of the Tokyo Maritime Safety Agency) to have anchorage sites designated. Small vessels of less than 300 gross tons do not need to submit anchorage application.

When ships of over 500 gross tons want to enter port at night (from sunset to sunrise), must submit applications in advance to Port Director and receive permission. Copy of written permission given to captain of ship when ship has entered port.

A ship carrying explosives or any other dangerous cargo must submit two copies of application in advance for permission to use port to Port Director. Such ships required to stay outside port in No. 3 Area. However, they will be allowed to enter port when Port Director considers it allowable.

RESTRICTIONS: No. 1 fairway is long and narrow (4,200 m. × 300 m.) and carries considerable traffic. Vessels under 500 tons not permitted use fairway when vessel over 5,000 tons is in transit. Depth in channel 12 m.

DEPARTURE PROCEDURE: Ship over 300 tons departing must hoist signal in daytime and two white lamps at night and make two prolonged blasts of whistles or siren 30 minutes before starts to move and then act according to signals given by signal station on Shibaura Quay. Departure notice must be submitted to Maritime Safety Agency and port managers (Operations Section of Port and Harbour Bureau). Foreign ships must submit required documents in addition to above notice to Tokyo Custom House, Immigration Control Office and Tokyo Medical Inspection Station to receive permission from these quarters.

ANCHORAGES: See "Advance Applications".

Quarantine anchorage on starboard hand of No. 1 fairway.

Sector A triangular sea area formed by line passing through point 180° and 400 m. from light buoy No. 16 and point 105° and 240 m. from same light buoy. Accommodates one 1,000 ton class ship or two ships of 500 ton class or smaller.

Sector B circular area with radius 120 m. from point 295° and 380 m. from tide signal post of No. 3 Daiba. Accommodates one 1,000 ton class ship.

Sector C (263,330 sq.m.) is a space between Harumi Wharf and Toyosu Wharf. Accommodates five 2,000 ton class vessels.

Sector D (141,350 sq.m.) sea area enclosed by line drawn from point 217° and 400 m. from Northwestern tip of Tsukishima Fishery Base through No. 8 mooring buoy. No. 15 buoy and Southern tip of Tsukishima Fishery Base. Accommodates five vessels smaller than 1,000 tons, but two if vessels larger than 700 tons.

MAX. SIZE: (Draft). Bulk carrier, 9.3 m. or less; general cargo, 9.3 m. or less. (Quay and Pier capacity). Passenger vessels up to 20,000 gross tons or cargo vessels up to 15,000 d.w.t. ,

(Tide). Vessels of said size will not be affected by tide. Largest vessels to enter: bulk carrier, 19,947 d.w.t.; general cargo vessel, 19,599 d.w.t.

Tankers: One berth, Tokyo Gas Wharf. Max. d.w.t. 25,000. Max. LOA, 205 m. Max. safe draft 9.70 m.

PRATIQUE: Radio Agent for free pratique not less than 12 hrs. and not more than 36 hrs. before arrival, advising full details of vessel and health condition on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.

Crew List.

Passenger List.

The following vessels will not be able to get radio pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or suspected case, of infectious disease within 15 days of arrival.

If crew or passengers on board do not possess valid Smallpox Vaccination Certificate.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

Medical inspection of plants: When a report is received in advance from a ship by telegraph or other means of communication, Tokyo Office of the Yokohama Plant Disease Prevention Station must be notified by telephone or verbally in request for an on-the-spot inspection of plant in question.

Medical inspection of animals: When a report is received from a ship in advance by telegraph or other means of communication, the Tokyo Branch or the Haneda Branch of Animal Disease Prevention Station must be notified by telephone or verbally in request for an on-the-spot inspection of the animals.

RADIO: Vessels entering are watched at all times at Torigasaki, the entrance gate to Tokyo Bay, and record of passing the point is taken. As each ship passes point, this is immediately communicated by VHF radio telephone to head office of Tokyo Signal Communications Company. From here news communicated on normal telephone or on exclusive direct call telephone to interested parties (also see "VHF").

Recommended Captain communicates with Agents through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

VHF:

A. Transmitting antenna:	Located 39° 26′ N. 139° 39′ E.
B. Type:	Single communication – Yagi type. Plural communication – corner reflector type.
C. Direction:	Southern part of entrance to Tokyo Bay and Port of Tokyo.
D. Frequency class:	F3.
E. Frequency:	Single communication – 156.6 mc/s., CH 12 156.7 mc/s., CH 14 156.8 mc/s., CH 16 (for calling, answering and safety) Plural communications – 161.6 mc/s., CH 20 161.7 mc/s., CH 22
F. Antenna power:	50 W.
G. Call sign:	Tokyo Port Radio.
H. Range:	Approx. 1,000 km (straight range) S.E. side – About 20 nautical miles South of Mojimazaki. S.W. side – About five nautical miles North of Oshima Island. North side – Tokyo Port and Chiba port.
I. Operating time:	All times.

Ship telephone: Uses VHF and is a service between navigating or anchored ships and subscriber telephones on land, and between ships connected via base station on land. Communicating sphere approximately 50 to 100 km. from base station. Base stations located so as to allow communication with any ship sailing along Japanese coasts.

Charges for device: Y1,000 for one telephone set and actual cost for use by ship.

Service charges: (in case Japan Telegraph and Telephone Public Corporation installed the unit) Y22,000 a month for long term, Y1,100 a day for short term.

Call charges: Within specified call area for ship telephone in general – Y90 up to 3 minutes and additional Y30 per minute after the 3 minutes.

TUGS: The port has two tug companies: (i) Toko Service Co. Ltd., 3-25-8, Kaigan, Minato-ku, Tokyo. Tel. (452) 4781. (ii) Shibaura Tsusen Co. Ltd., 3-1-3, Kaigan, Minato-ku, Tokyo. Tel. (451) 3871. Upon notification to either, tugs will be waiting in neighbourhood of scheduled berth. Ship's lines to be used.

BERTHING: Any vessel entering port required to:

(1) Submit one each of "Declarations Inward/Outward of Vessels" to TMG and TMSA. See "Documents". (2) Submit "Application for Berth" to TMG. See "Documents". (3) Submit "Application for Designation of Anchoring Site" to TMSA (Form No. 13) regarding anchoring area. Berthing will be in order of arrival, passenger and special cargo vessels excepted.

Name of Wharf	*Length* (m.)	*Depth* (m.)	*No. of Berths*
Shinagawa	1,143	10.0	6
Shinagawa	476	8.0	3
Shibaura	910	7.8	6
Hinode	564	6.7	6
Takeshiba	103	6.7	1
Takeshiba	206	6.7	2
Harumi	Dolphin-3 (24 m.)	9.0	1
Harumi	132	9.5	1
Harumi	132	10.0	1
Harumi	797	9.0	5
Harumi	190	10.0	1
Harumi	456	10.0	2
Toyosu	140	7.0	1
Toyosu	210	7.0	1
Toyosu	200	7.5	1
Toyosu	Dolphin-7 (250 m.)	10.0	1
Oi Marine Products Wharf	450	12.0	2
Land Lot No.15	400	10.0	2
Keihin Port Development	500	12.0	2
Oi Wharf	1,800	12.0	6
Liner Wharf Reclaimed Land	1,800	10.0	9

There are many private wharves and other smaller public wharves in use and under construction.

BULK HANDLING FACILITIES: Containers handled at 2 berths at Shinagawa Wharf equipped with gantry cranes lifting capacity 30 tons and 37.5 tons.

There are also 8 container berths at Oi Wharf equipped with 16 gantry cranes of 30.5 tons capacity.

STEVEDORES: Advance advices should be made 24 hours at latest before vessel's arrival order arrange necessary gangs.

Discharge rates (approx.):

(a) Iron, steel and scrap, using crane or magnet, about 1,000 tons/day.

(b) Coal, crane and bucket, 1,500/2,000 tons/day.

(c) Ores, grabs and bulldozers, 1,000 tons/day.

(d) Timber, 1,000 tons/day.

(e) Grain, crane with bucket or suction, 1,000 tons/day.

MEDICAL: Hospitals, clinics and all specified facilities. Advance notice not necessary.

TANKERS: No slop discharge facilities (but see "Services"). One tanker berth only. Products handled, Naphtha and Crude oil. Shorelines, one 12 in. for each product. Discharge rates 1,000 t.p.h. (Naphtha) 900-1,000 t.p.h. (Crude).

FRESH WATER: Water supply from hydrant by Tokyo Metropolis, and waterboat by private management.

(a) Water supply on wharves		
Application	Bureau of Port and Harbour Offices in charge of each wharf.	
Work of water supply	Tokyo Port Service Association.	
(b) Water supply by water boat		
Extra charge	Overtime from 1700 to 2300	50%
	from 2300 to 0700	100%
	Special district	50%
	Festal day	50%

In the case of less than 15 tons per time, it will be considered 15 tons supply.

FUEL: All grades available. 24 hrs. notice required.

FIRE PRECAUTIONS: (Tankers).

1. Must enter port at dead slow speed preceded by patrol boat of TMSA, one tug boat each side of vessel and followed by fire patrol boat.

2. Engine to be kept ready for immediate use in case of emergency.

3. Tow lines to be placed over bow and stern with eyes close to water surface.

Note: No vessels allowed alongside a tanker during loading or discharging.

DEVELOPMENTS: 27 public wharves, 2 car ferry berths, 7 timber berths, 12 berths for dangerous cargo and 6 specialised berths to be constructed.

GANGWAY/DECK WATCHMEN: Necessary only in the case of valuable cargo.

OPENING/CLOSING HATCHES: Normally by crew.

CUSTOMS ALLOWANCES: (Tobacco) 200 cigarettes a week. (Wine and/or spirits) 760 cc's per crew member per week.

IDENTIFICATION CARDS: Not required.

CONSULS: No consulates. But most countries have embassies in Tokyo.

REPAIRS: All grades of repairs available.

DRY DOCKS: Largest dry dock: length 180 m.; width 24 m.; depth 7.27 m. Capable of accommodating vessel of 16,750 gross tons.

Also one other dry dock for ocean-going vessels.

REPATRIATION: All facilities. Crew accommodation:

(1) Tokyo Seamen's Club, 1-4-9 Kaigan, Minato-ku, Tokyo, Tel. (433) 5688.

(2) Tokyo Shibaura Seamen's home, 1-11-8, Shibaura, Minato-ku, Tokyo. Tel. (451) 3249.

(3) Kaiko-ryo, c/o Tokyo Central Wholesale Market, 5-2-1, Tsukiji, Chuo-ku, Tokyo. Tel. (541) 0934.

AIRPORT: Distance to Tokyo International Airport, approx. 18 km.

TIME: GMT plus 9 hours. Permanent.

HOLIDAYS: National Holidays: New Year's Holidays (Dec. 31st–Jan. 3rd); New Year's Day (Jan. 1st); Adult Day (Jan. 15th); Foundation Day (Feb. 11th); Vernal Equinox Day (around Mar. 21st); Emperor's Birthday (Apr. 29th); Constitution Commemoration Day (May 3rd); Children's Day (May 5th); Respect-for-Age Day (Sept. 15th); Autumnal Equinox Day (around Sept. 23rd); Tokyo Festival (Oct. 1st); Physical Education Day (Oct. 10th); Culture Day (Nov. 3rd); Labour Thanksgiving Day (Nov. 23rd).

No cargo work on 1st or 3rd Sundays of each month, and no work from 31st December to 3rd January inclusive. Cargo work can be arranged on all other days including National Holidays.

POLICE/AMBULANCE/FIRE: Tokyo Water Police, 1-11-12, Kaigan, Minato-ku, Tokyo. Tel. (433) 2411. Call Fire Stations for ambulances. Tokyo Water Fire Station, 5-1-23, Kachidoki, Chuo-ku, Tokyo. Tel. (531) 3121-3.

TELEPHONES: (also see "VHF").

Installed on ships moored at piers or jetties to allow telephone communications between ships and subscriber telephones on land and between ships.

SERVICES: Two tank cleaning companies available with barges of capacity 100 tons for disposal of residues. All other usual services available.

SHORE LEAVE: Crew members allowed ashore upon ship Master's request to Tokyo Immigration Office if have valid passports or seaman's pocket ledgers. In case a crew member has a criminal record or has been expelled from Japan, he will not be allowed ashore.

PORT REGULATIONS: Maintenance of order in Port of Tokyo is under the responsibility of TMSA in accordance Port Regulation Law. In case of an occurrence of disaster, TMSA and the Tokyo Water Fire Station will take charge of refuge, rescue and fire fighting.

DELAYS: Congestion in the port. Bad weather.

AUTHORITY: Bureau of Port and Harbour, Tokyo Metropolitan Government.

AGENTS: Dodwell Tramp Agencies, CPO Box 297, Togin Building, 4–2, 1-chome, Marunouchi, Chiyoda-ku, Tokyo. Tel. (03) 211–2141. Telegraphic: Dodtramp Tokyo. International Telex: J22274, J22602 and J24469.

TOMAKOMAI: 42.35 N. 141.35 E.

MAX. SIZE:

Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. Safe Draft (m.)*
Idemitsu Sea Berth	280,000	350	21.50
Idemitsu West Dolphin	70,000	250	12.60

TANKERS:

Berth	*Type of cargo & Diameter Number of shorelines*	*Discharge Rate*
Sea Berth	16″×4 (suction pipes) Raw Fuel Oil. Shoreline 48″.	15,000 K/L (If discharged by 4 suction pipes and received 2 Tanks).
West Dolphin	12″×2 (suction pipes) Raw Fuel Oil. Shoreline 30″.	5,000 K/L (If discharged by 2 suction pipes).
	Minas Raw Fuel Shoreline 28″.	5,000 K/L (If discharged by 2 suction pipes).
	"B" & "C" Fuel Oil Shoreline 24″.	5,000 K/L (If discharged by 2 suction pipes).
	"A" Fuel Oil. Shoreline 18″.	1,500 K/L (If discharged by 2 suction pipes).
	Light Oil Shoreline 18″.	1,500 K/L. (If discharged by 2 suction pipes).

TOYAMA: 36.46 N. 137.13 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
6 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. No telegraphic address for Pilot station, but Pilot arranged through Agent whom keep advised ETA which may be sent through Niigata Radio. Pilot boards 1 mile off East breakwater from small tug. In event bad weather recommend remain outside port until weather clears. Pilot available daytime only.

ANCHORAGE: The harbour at the Jintsu river mouth is always calm. Covers about 125 acres, with depths of from 16.5 ft. to 33 ft. over mud and sand. Room at anchorage for at least four vessels over 5,000 gross tons. Anchoring position for ocean tankers is 36° 48′ N.; 137° 14′ E.

MAX. SIZE: Length 170 m. Draft 9.5 m. (Summer) and 9.10 m. (Winter). Tidal range max. 0.45 m. Also see "Tankers".

HEALTH: See "Fushiki".

RADIO: (Also see "Pilotage"): Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Usually join vessel at port entrance but can join outside harbour for large vessels. Used only when Pilot aboard.

"Narita Maru" – 2,060 h.p. uses own lines free of charge.
"Nihonkai Maru" – 1,800 h.p. uses own lines free of charge.
"Raicho Maru" – uses ship's lines.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

MEDICAL: No advance notice required unless urgent.

TANKERS: Max. size: 200,000 d.w.t., Max. LOA, no limit, and Max. safe draft 19 m. for Sea Berth of Nihonkai Sekiyu K.K., Toyama. Two lines, diameters 16 in. Reducing pieces supplied as necessary. Discharge rate 7,500 t.p.h.

DENSITY: 1015–1019 min./max.

FRESH WATER: Available ex-wharf at Nos. 1, 2, 3, 4 and 5 wharves; average 40 t.p.h. Other berthing positions supplied by barge which ordered from Fushiki and is filled up at Toyama.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

FIRE PRECAUTIONS: Nihonkai Oil Co., Toyama, issue Safety Regulations to Master on arrival tanker sea-berth.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: Nil.
REPAIRS: Minor repairs only.
DRY DOCKS: Nihonkai Juko Co. Ltd., Toyama. No. 1 dock, used for construction. No. 2 dock, ship-building capacity: length, 104 m.; width 15 m.; depth, 1.8 m. Size of dock: length, 112 m.; width, 14.6 m.; depth, 4 m. Max. building capacity, 4,000 g.r.t. No. 3 dock, ship-building capacity: length, 150 m.; width, 20.8 m.; depth, 5 m. Size of dock: length 168.2 m.; width, 21.88 m.; depth, 9.2 m. Max. building capacity, 10,750 g.r.t.
AIRPORT: Toyama airport, distance about 10 kms. Two daily flights.
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police, Toyama North Police Station, Toyama (0764) 37–7171; Ambulance, Toyama Iwase Fire Station, Toyama (0764) 37–7141 or 119; Fire, Toyama Fire Station, Toyama (0764) 37–7141.
TELEPHONES: No facilities for placing on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Toyama-Kencho.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo. Fushiki Kairiku Unso Co., Ltd., Toyama Port Office, 82, Higashiiwase-Irifune-cho, Toyama-shi, Toyama-ken. Cable Address: Fushikikairiku Fushiki. Tel.: (0764) 38–1100.

TOYAMA SHINKO: 36.47 N. 137.10 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
6 Crew Lists including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 2 Cargo Manifests and 1 Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot available any time during daylight. Not compulsory. No telegraphic address of Pilot station, therefore, direct advice to local Agent always required. Pilot meets vessels 209° 2 miles off leading light of Fushiki Port, thence takes vessel to Fushiki Quarantine Anchorage ground, due to many fishing-nets on both sides of fairway. No Quarantine Anchorage ground established presently at Toyama-Shinko, therefore, every vessel obtains free pratique at Fushiki. If requiring to come into Quarantine Anchorage without taking Pilot, necessary to advise Agent in advance. In case of bad weather and need to await outside port, recommend cruising in Toyama Bay until sea abates. Bay area too deep to anchor and also danger of fishing-nets. When approaching position for Pilot, give exact ETA to Agent by using Niigata Radio and/or VHF to Fushiki Harbour Master. Small wooden pilot-boat painted yellow. No particular light or sound signals required. Even if the vessel already obtained free pratique in other port, need to approach the aforesaid position for Pilot, because of no Pilot position located in Toyama-Shinko.
ANCHORAGE: No anchorage at Toyama-Shinko, therefore, if vessel required to await for berth or some other reason, use Fushiki Outer Anchorage ground where safe at all seasons with depth from 8 to 11 m. Sand and clay bottom. Room at anchorage for at least six vessels over 5,000 gross tons.
RESTRICTIONS: Pilot not available during darkness. No restrictions on tide, because small tide in all seasons. If draft over port limitation, vessel enters port after making adjustment by lightening in Outer Harbour in Fushiki.
MAX. SIZE: Length 200 m., draft 34 ft. Tidal range is max. 0.45 m.
PRATIQUE: See "Fushiki".
RADIO: (also see "Pilotage"). Recommend Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Tugs normally join vessel at port entrance, but sometimes in Fushiki Outer Harbour for larger vessels. Maritia-Maru (2,060 h.p.) and Nihonkai-Maru (1,800 h.p.) provide lines, free of charge and Raicho-Maru (760 h.p.) uses ship's line. In case public tug, i.e. Nihonkai-Maru and Raicho-Maru used, always require Pilot on board.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Average density between 1015 and 1019 in all seasons.
FRESH WATER: Available, from wharves No. 1, 2, 3 & 4, average 10 t.p.h. In other berths, to be supplied by barge, average 50 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker ports at maximum 7 days prior notice.
DEVELOPMENTS: *(a)* Planning to make one berth for 80,000 tons d.w.t. vessel, 280 m. long, 14 m. deep. However, the berth already constructed, and necessary to dredge to make deeper than present depths of 10.5 m., together with making channel from 200 m. to 300 m. wide with 14 m. depth. *(b)* Planning to make 3 berths for 15,000 tons d.w.t., and 2 berths for 5,000 tons d.w.t.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCE: Only allowed 50 cigarettes to take ashore, but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: No dry docks. Nearest available in Toyama.
REPATRIATION: Possible.
AIRPORT: Toyama Airport about 25 km. distance. Two regular services a day. ANA only.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAYS: 1st May and New Year's Day, most probably from 31st Dec. to 3rd Jan.
POLICE/AMBULANCE/FIRE: Police, Shinminato Police Station, Shinminato (07668) 2–3141; Ambulance, Shinminato Fire Station, Shinminato (07668) 2–3175; Fire, Shinminato Fire Station, Shinminato (07668) 2–3175.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Hold cleaning available.
SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer. Attending from Fushiki Immigration Office, Fushiki, due to no office in Toyama-Shinko.
AUTHORITY: Toyama-Kencho.

AGENTS: Sub-agents of Dodwell & Co. Ltd. Tokyo, Fushiki Kairiku Unso Co. Ltd., 6–6 Fushiki-Minatomachi, Takaoka-Shi, Toyama-ken. Head Office in Fushiki; Takaoka (0766) 44–1300/9 and Toyama-Shinko Branch; Shinminato (07668) 4–3330. Telegraphic address: Fushikikairiku Fushiki, only to Fushiki Head Office.

TSUKUMI: 33.05 N. 131.52 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory, but recommended unless Master well acquainted with locality. Pilot embarks vessel at anchorage, position 33° 05′ 30″ N. 131° 54′ 00″ E. Request for Pilot made through Agent; Master to report ETA 24 hours prior arrival.
ANCHORAGE: Good holding anchorage available; depth of water about 25 m. Loading and/or unloading of cargo usually effected alongside wharves and in event of loading/unloading at anchorage, when rough weather prevails, difficulty sometimes experienced on account of swell from open sea. Therefore suggested that vessel anchor as close to shore as possible consistent with safety.
RESTRICTIONS:
(a) Berthing: Night entry or berthing after nightfall, though not impractical (depending on weather) is not recommended unless special arrangements (stevedores, etc.) necessitate vessel's immediate berthing.
(b) Departure: Night departure allowed, weather permitting, and subject Pilot's agreement.

MAX. SIZE:

Wharf	*Length*	*Depth*	*Capacity (g/t)*
Noshima Pier	168 m.	16.0 m.	60,000
Prefectual W. (Noshima W.)	164 m.	9.0 m.	10,000×1
Onoda Cement No. 1 W.	82 m.	8.0 m.	3,500×1
Onoda Cement No. 2 W.	185 m.	8.0 m.	10,000×1
Nittetsu Pier	155 m.	10.5 m.	18,000×1
Todaka Pier	120 m.	9.0 m.	15,000×1

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all vaccination cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

Quarantine Office was closed on 1st October 1972 therefore vessels are required to obtain free pratique at Mutsure/Hesaki, Oita, Saganoseki or Saiki.

RADIO: Recommended Captain communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: One tugboat named "Bungo" 1,600 h.p., 150 g/t.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

DENSITY: Average density about 1024.

FRESH WATER: Available. On prefectual wharf and Onoda No. 2 wharf, on Nittetsu Pier, and by barge on anchorage.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

FIRE PRECAUTIONS: By Marine Security Guards.

DEVELOPMENTS: New prefectural wharf. Now under construction. Length, 200 m.; depth, 15 m.; capacity, 20,000 g/t×1, 3,000 g/t×1.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: Nil.

REPAIRS: Local workshop available only for minor repairs.

REPATRIATION: Possible.

AIRPORT: Oita airport; one hour from Tsukumi by train. Regular airlines: ANA, JDA, TAW.

TIME: GMT plus 9 hours. No alterations to clocks during year.

HOLIDAYS: 14th–16th August.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: No special services available, but if required will be arranged by Agent who calls from another port.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.

AUTHORITY: Usuki Doboku (Public Works) Office.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Azuma Shipping Co. Ltd., Nakatsuru Bldg., 2nd Floor, 15–5, Semento-machi, Tsukumi-shi, Oita-ken. Cable Address: Ringer Tsukumi. Domestic Telex: 7755–77. Tel.: Tsukumi (09728) 2–2144.

TSURUGA: 35.40 N. 136.03 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Daylight hours only. Pilot arranged through Agent. Await Pilot at quarantine anchorage (see "Anchorages").

ANCHORAGES: Quarantine anchorage is best area for anchoring to avoid heavy weather (being protected from the North by mountains). Position 35° 40′ 08″ N.; 136° 02′ 55″ E.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Join ship inside breakwater and use tug's line.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. Depths alongside up to 12.0 m.

New Wharf depth 10 m.
Kanegasaki Wharf, depth 9.5 m.
Railway Wharf, depth 8.5 m.
Horai Wharf, depth 7.3 m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: No facilities for big tankers.

DENSITY: Average density through year 1023.

FRESH WATER: Available from wharf, and by barge.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspectors ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

AIRPORT: Distance one hour by train. Two flights daily to Tokyo.

TIME: GMT plus 9 hours. Permanent.

POLICE/AMBULANCE/FIRE: Police, 2–4000; Ambulance and Fire, 119.

TELEPHONES: Not available for placing on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

SERVICES: Hold cleaning.

AUTHORITY: Tsuruga Port Office.

AGENT: Sub-agents of Dodwell & Co., Tokyo. Tsuruga Kairiku Unso Kaisha Ltd., P.O. Box 11, 10–2, Sakura-machi, Tsuruga-shi, Fukui-ken; Cable Address: Kairiku Tsuruga, Domestic Telex: 5176–693, Tel.: Tsuruga (07702) 2–3111.

UBE: 33.56 N. 131.15 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory but recommended unless Master well acquainted with area. No Harbour Pilot stationed at Ube but Inland Sea Pilot will attend.

Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hrs. notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hrs. and 72 hrs. advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel). Position 33° 13′ N. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N. 131° 03′ 12″ E.

ANCHORAGE: Sea bottom is mud.

	Depth	
	4–7.5 m.	*7.5–10 m.*
Sheltered	73,000	233,100 sq. m.
Unsheltered	12,175,500	680,000

RESTRICTIONS:

(a) Outer harbour: No restriction.

(b) Inner harbour: Berthing/unberthing is practicable only during daytime.

(c) Deep draft vessels may berth at high water only.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards, Derating Exemption Certificate. In case vessel arrives from cholera infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agents prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agents through Choshi Radio or Nagaskai Radio which cover all ports in Japan. If specifically Westbound vessel to Choshi and Northbound to Nagasaki Radio respectively.

TUGS: "Naruto Maru" 2,800 h.p. stationed at Ube. Other tugs available from Moji or Tokuyama. Tug's lines used at no extra charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Wharf	*Length*	*Depth*
Public Okinoyama Wharf	370 m.	10 m.
Public Shibanaka Wharf	185 m.	10 m.
Ube Cement wharf	247 m.	9 m.
Ube Kosan Chisso wharf	188 m.	9 m.
Ube Kosan Urea wharf	223 m.	9 m.
Ube Kosan No. 2 pier	131 m.	9 m.
Central Glass wharf	162 m.	9 m.

Wharf for Limestone:

Name of wharf: Okinoyama Limestone Wharf (Ube Kosan No. 5 Wharf). Length of wharf 165 m. Maximum safe draft 11.00 m. Maximum d.w. tonnage 30,000 tons. Fairway 300 m. wide, 2.25 miles long, 8.80 m. deep, with shallow spot 8.40 m. at low water. Accessible max. draft 10.50 m. Facilities Loaders × 2; 1,500 tons per unit/hour. Entry and Departure Berthing/unberthing is practicable only during daytime. Deep draft vessel may unberth at high tide only.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: Seibu Sekiyu Co. Refinery.

(a) Geographical Location: 33° 49′ 48″ N. 131° 13′ E. 163°, 11,400 m. from Motoyama Misaki.

(b) Entry Permission: Sea berth located outside harbour limit of Ube port and treated as a closed port. Vessels therefore required to obtain special permission for entry from Customs at any open port prior to arrival.

(c) Restrictions: Max. 230,000 d.w.t. Max. LOA, 325 m. Max. safe draft 19.5 m.

(d) Diameter/No. of shore pipes: Float-sink hose: 16 in.×2 lines connecting to manifold; sub-marine hose: 20 in.×2 lines; sub-marine pipe-line: 48 in.×1 line.

(e) Discharging Rate: 7,800 t.p.h. (Crude oil).

DENSITY: 1025.

FRESH WATER: *(a)* Water barges available from Moji and supply about 50 t.p.h. *(b)* Water from wharf supply at Central Glass Ube Cement and Ube Chisso wharves.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. seven days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Sasebo Heavy Industries Co., Ltd., Moji; Kitakyushu Iron Works, Tobata; Ube Dockyard Co., Ltd.

DRY DOCKS: None.

AIRPORT: 30 mins. by road.

TIME: GMT plus 9 hrs. Permanent.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extension possible if ship stays longer.

SERVICES: All services available.

AUTHORITY: Yamaguchi-Kencho.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo.

Dry Cargo: See "Moji".

Tankers: Uyeno Unyu Shokai, Yamaguchi Branch Office, Oaza Nishioki, Onoda-shi, Yamaguchi-ken; Cable address: Uyenoshell Ube, Domestic Telex: 6845–42, Tel. Ube (0836) 88–1171.

UNO: 34.29 N. 133.57 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preverably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from one of three pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 38′ N.; 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel.) Position 33° 13′ N.; 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N.; 131° 03′ 12″ E.

ANCHORAGE:

Harbour anchorage	*Bottom*	*Depth*	*Position from Tobisu Beacon*
No. 1 anchorage	Sand and/	18.0 m.	320°–800 m.
No. 2 ,,	or Sand/Shell	14.0 m.	300°–750 m.
No. 3 ,,		21.0 m.	40°–1,200 m.
No. 4 ,,		18.0 m.	150°–500 m.
No. 5 ,,		29.0 m.	23°–850 m.
No. 6 ,,		18.0 m.	25°–1,300 m.
Mitsui			
No. 1 anchorage		Same No. 1 anchorage	328°–700 m.
No. 2 ,,		,,	293°–600 m.
No. 3 ,,		,,	252°–600 m.

MAX. SIZE:

No. 1 Pier: 150 m. from South end, draft limit 8.5 m.; 120 m. from above to North end, draft limit 7.5 m.

No. 3 Pier: Depth of approaches, 15–20 m.; length of berth, 150 m.; depth alongside berth, 13 m.; max. draft acceptable, 10 m.; max. length acceptable, 150 m.; max. width acceptable, 20 m.

Mitsui Kindoku (HIBI), Private Pier: Depth of approaches, 16–20 m.; length of berth, 176 m., d.w.t. 30,000 tons; max. draft acceptable, 12 m.; max. length acceptable, 176 m.

HEALTH: At first port of call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Captain to show all Vaccination Cards and Derating Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Captain must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

TUGS: Tugs join vessel at out-harbour area. Tug's lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.
TANKERS: None.
DENSITY: Winter 22.7; Summer 23.98.
FRESH WATER: Available at pier (40 t.p.h.) ex-shore pipe. Available by water barge, 50 tons capacity from Okayama.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consuls available, but marine note of protest can be attested by local notary public at Okayama.
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS:

Dry dock	*Length*	*Width*	*Depth*	*d.w.t. tons*
No. 1	545 ft. 6 in.	76 ft. 1 in.	26 ft. 9 in.	20,500
No. 2	560 ft.	74 ft. 1 in.	26 ft. 9 in.	19,000
No. 3	670 ft.	103 ft. 3 in.	32 ft.	46,000

Tamano: Mitsui floating dock, max. size 150,000 d.w.t.
REPATRIATION: Possible.
AIRPORT: Okayama airport 25 km. Only domestic airlines; 3 flights to Osaka, via Tokyo, daily.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police (for emergency), 110; Ambulance, 119; Fire, 119.
TELEPHONES: No arrangements for placing telephones on board.
GENERAL: 3 days notice of special requirements essential.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Tamano Port Administration Office.
AGENTS: See "Tamano".

WAKAMATSU: 33.54 N. 130.48 E.

(See "Kanmon-Ko").
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilots obtained from 1 of 3 Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. *Note:* No VHF communication available with Inland Sea Pilot stations.

1. Wadamisaki, at entrance to Kobe (vessels transmitting Kii Straits). Position 34° 38′ N.; 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel). Position 33° 13′ N.; 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N.; 131° 03′ 12″ E.

ANCHORAGES: No. 5 section, Wakamatsu. Depth 9-11 m. Capacity (g/t), 15,000×2. Also quarantine anchorage.
RESTRICTIONS: Easterly winds prevail in warm season, dense fog prevails sometimes in Spring and Winter, but generally clears in a few hours in the morning. Tidal range about 1.5 m. and current in leading channel about 1.5–2.5 knots, but no current in port. Due to narrow channel leading to main harbour and shallow water at entrance of channel, length and draft of vessels are generally limited as follows:
Buoy: Ship's length overall, 165 m.; draft, 8.5 m.; 11,000 g.r.t
Fairway leading into main harbour about 200 m. wide and 2 miles long, running parallel to a breakwater and reclaimed land. In this channel, as in main harbour and fairway, vessels observe only one-way traffic and on an outgoing signal from the shore, wait outside for outgoing vessel until channel is cleared. Vessels with draft of more than 7 m. can enter/depart only at high tide. Entry permitted only from sunrise and vessel to be berthed before sunset. Night departure prohibited.
MAX. SIZE:

Buoy	*Ship's LOA*	*Draft*	*Capacity*
	m.	m.	
"B"	165	8.5	11,000×1
"C"	165	8.4	11,000×1
"E"	160	8.1	10,000×1
"N"	147	6.7	7,000×1
"O"	147	7.3	5,000×1
"L"	165	8.5	10,000×1

HEALTH: See "Moji".
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specially Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: 2 tugs join vessel under Wakato bridge at corner of fairway leading to main harbour.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
BRIDGES: Wakato bridge. Height of mast limited to 38 m. for passing under bridge.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).
MEDICAL: No advance notice required unless urgent.
TANKERS: No tanker berths.
DENSITY: Average density in port about 1019–1021 in Summer season; 1025/1026 in Winter season.
FRESH WATER: Available. Rate of delivery: 50–60 t.p.h. ex-barge. Minimum quantity at buoy, 10 tons; minimum quantity at No. 5 sec., 30 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: No tanker berth. Each tugboat is equipped with fire extinguisher system for attending emergency case at request.
DEVELOPMENTS: Land reclamation N.E. Wakamatsu for discharge wharves (coal/iron ore). Depth to be 12 m.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: See "Yawata".
REPAIRS: All grades deck and engine repairs afloat.
DRY DOCKS: None.
AIRPORT: See "Yawata".
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Wakamatsu Water Police, tel. 093-76-2731; Wakamatsu Police Office, tel. 093-97-2731; Ambulance/Fire: Wakamatsu Fire department, tel. 093-76-4031; Defence/rescue department, tel. 093-76-4353.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kitakyushuko Kanti-Kumiai.
AGENT: See "Tobata".

WAKAYAMA: 34.13 N. 135.08 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Wakayama-Shimotsu licensed Pilots. ETA advices to Agent. Pilot boards 1,500–2,500 m. off Wakayama breakwater. Chart Nos. 1150 and 1143 (Japanese Maritime Safety Board). No pilot boat. Pilot boards from tug.
ANCHORAGE: For waiting Pilot and/or berth. (Nature of bottom, sand mixed with mud.) (Sumitomo Metal Ore Carrier): 4,800 m. 292° and 3,500 m. 272° from White lighthouse; depth about 30 m.

(Wakayama Log Carrier): 2,000 m. 245° and 230° from Red lighthouse; depth about 22 m.
RESTRICTIONS: Pilot available daytime only. Channel depth, (Southern Section) 9.0 m; (Northern Section) 14.0 m.
MAX. SIZE: (Wakayama Log Carrier): South Section, LOA 160 m., d/w 20,000 tons, draft 9.0 m.; LOA 200 m., d/w 35,000 tons, draft 10 m. (Sumitomo Metal Pier, South Section): LOA 250 m., d/w 140,000 tons, draft 14.0 m.
HEALTH: Radio Agent for free pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When free pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area, or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or suspected cases, of infectious disease within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination Certificate.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio or Kobe Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio or Kobe Radio respectively.
TUGS: Tug assistance normally commences from outer harbour. Tug lines used and charge included in towage. 8 tugs available, up to 3,000 h.p.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1630–2130 hrs. (60% additional of basic stevedorage), 2130–0400 hrs. next morning (130% additional), 0400–0830 (60% additional), Sundays/holidays (100% additional).
MEDICAL: No advance notice required unless urgent.
TANKERS: No tanker berth.
DENSITY: 1025–1030.
FRESH WATER: Available, Water boat, capacity 90 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 200 cigarettes to take ashore for one week but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only. Suwa Shipyard Co., Ltd Tel. 0734–31–1694.
DRY DOCK: None
REPATRIATION: Possible.
AIRPORT: Itami, Osaka, about 3 hours by car.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 9 days, but 9 days extension possible if ship stays longer.
AUTHORITY: Wakayama-kencho.

AGENTS: Sub-Agents of Dodwell & Co. Ltd., Tokyo.
Wakayama North Port (Sumitomo Steel Mills), Sumikin Kaiun Co. Ltd., c/o Sumitomo Kinzoku K.K., 1850, Minato, Wakayama City. Tel. Wakayama (0734) 55–5151. Telegraphic, "Shipsumikin Wakayama".
Wakayama South Port (Lumber/log discharge), Shimamato and Co., Ltd., 5–7, Chikko, Wakayama City. Tel. Wakayama (0734) 22–5111. Telegraphic, "Shimamoto Wakayama".

YAWATA: 33.52 N. 130.49 E.

(See "Kanmon-Ko").
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: *Harbour pilotage:* Compulsory for entry and departure but not when passing through straits. Pilots embark Eastbound vessels at Mutsure quarantine anchorage (see "Moji"), Westbound vessels at Hesaki quarantine anchorage (see "Moji"). Two Pilots embark vessels exceeding 20,000 gross tons, charging 180% pilotage.
Sea pilotage: Vessel approaching from East obtain Pilot by radio request made at least 24 hours in advance. Pilot embarks 3 miles South from Sekisaki lighthouse; 33° 13′ N.; 131° 54′ E.
Pilots should be kept closely advised of accurate ETA Pilot station. If any changes, Masters requested radio immediately to Pilot offices direct or through Agent reporting revised ETA. Cable addresses of Pilot offices: Harbour Pilot, "Kanmonpilot Moji". Inland Sea Pilot, "Anjin Moji". Require 24 hours notice of ETA, but can attend with 2–3 hours notice in emergency cases.
ANCHORAGES: No anchorage at Yawata, but quarantine anchorage used in essential cases. See "Quarantine".
RESTRICTIONS:
(a) Because of narrow channel leading to Yawata and shallow water at entrance of channel, length and draft of vessel limited, except for berthing at Nishi-Yawata wharf, where 20,000 gross tonnage with 200 m. length overall and 8.3 m. draft may be accommodated. Limits:

	Wharf	*Buoy*
Length (overall)	166 m.	155 m.
Draft	8.5 m.	8.5 m.
Gross tonnage	10,000 tons	10,000 tons

Vessel slightly exceeding above may be berthed at the Pilot's discretion, subject weather conditions and efficiency of engine, steering, etc.
(b) Fairway leading into main harbour about 200 m. wide and 2 miles long, running parallel to breakwater and reclaimed land. In this channel, as in main harbour and fairway to Yawata, vessels observe one-way traffic and, on a "not-clear" signal from shore, wait outside for outgoing vessels to clear channel. Vessels with draft of more than 7 m. can enter/depart only at high tide.
(c) Entry permitted only from sunrise and vessels to be berthed before sunset. Night departure prohibited.
(d) Wakato suspension bridge crosses channel between Tobata and Wakamatsu. Height of bridge from water line at fairway 42.675 m. at spring high tide; height of mast of vessels passing under bridge limited to 38 m.
(e) Easterly winds prevail in warm season. N.W. winds in Winter. Dense fog sometimes in Spring and Winter, but generally clear in morning. Tidal range about 1.2 m. Tidal current in channel about 1.5 to 2.5 knots, but no current in port.
(f) Port privately owned and controlled by Nippon Steel Corp.

MAX. SIZE:

Wharf No.	*Length m.*	*Depth m.*
15	150	9.0
16	150	9.0
17	150	9.0
18	179	9.0
19	185	9.0
20	185	9.0
Nishi-Yawata	320	9.0
Makiyama	160	8.5

Buoy No.	*Depth m.*
4 berth (F–G buoys)	9.0
5 berth (G–H buoys)	9.0
6 berth (H–I buoys)	9.0
7 berth (I buoy-anchor)	9.0
10 berth (F buoy-anchor)	9.0
12 berth (G buoy-anchor)	9.0
14 berth (H buoy-anchor)	9.0
16 berth (I buoy-anchor)	9.0

HEALTH: See "Moji".
QUARANTINE:
(a) Quarantine station at Western entrance: Half-mile East of Mutsure lighthouse 33° 58′ 15″ N., 130° 53′ 43″ E.
(b) Quarantine station at Eastern entrance: 125°, 1,500 m. from Hesaki lighthouse 33° 56′ 24″ N., 131° 30′ 12″ E.
(c) Quarantine inspection not allowed inside port except when weather or other special reasons prevent quarantine boat from approaching ship at anchorage.
(d) Quarantine service is rendered from sunrise to one hour before sunset.
(e) "Q" flag should be hoisted until ship in free pratique.
(f) Vessels exceeding 20,000 gross tonnage may undergo quarantine on application when they berth inside port.
(g) When ship arrives from plague-infected or suspected area within 10 days after she left such place, 24 hours special quarantine required. All sanitary scuppers must be closed and garbage must not be thrown overboard after ship reaches 60 miles off Japanese coast.

RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.

VHF: Vessel can keep in direct contact with port authorities in regard to arrival, berthing instruction, etc, through VHF, details as follows:

	Kitakyushu (Moji)	*Shimonoseki*
(a) Call sign:	"Kitakyushu port radio"	"Shimonoseki port radio"
(b) Location of radio facilities:	The transmitting and receiving station located at top of Mt. Hinoyama, Shimonoseki, for the above both radio.	
(c) Type of wave:		
Channel: Simplex 16	(Calling, responding)	16 (Calling, responding)
Simplex 12	(Communication)	12 (Communication)
Simplex 14	(Communication)	14 (Communication)
Duplex 20	(Communication)	20 (Communication)
Outport:	50 W.	50 W.
(d) Operating hours:	0600–2000.	
(e) Communicating range:	Within a radius of 50 miles from the station.	
(f) Communicating language:	English and Japanese.	

TUGS: Two tugs join vessel at corner of fairway leading into main harbour. Ship's lines used when vessel berths.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
BRIDGE: See "Restrictions".
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).
MEDICAL: No advance notice required unless urgent.
TANKERS: No tanker berth.
DENSITY: Average density in port about 1020–1022 in Summer season, 1024–1025 in Winter season.
FRESH WATER: At buoys: Water barges available from Wakamatsu, rate of delivery about 50 t.p.h. At wharves: (No. 16, 17, 18, 19, 20 and Nishi-Yawata wharf.) From hydrants: 25–40 t.p.h. For supply at Nishi-Yawata wharf, one day prior notice required. Overtime charge: (0500–0800 hrs.) (1700–2200 hrs.), 50% add.; (2200–0500 hrs.), 100% add.; bad weather 50% add.; Sundays and holidays, 50% add. Minimum quantity at Yawata, 10 tons. Minimum quantity at Mutsure anchorage, 50 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: No tanker berth. Each tugboat is equipped with fire extinguisher system for attending emergency cases.
DEVELOPMENTS: All the present discharging berths (wharves) for coal, ore (including Nishi-Yawata scrap wharf) converted to loading berths.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: British Consul, who is also acting Swedish Consul, is stationed with Holme Ringer, Moji (tel. 093–33–1311). American Consul stationed at Fukuoka (tel. 092–75–9331). Korean Consul stationed at Fukuoka (tel. 092–77–0461).
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: No dry dock available.
REPATRIATION: Possible.
AIRPORT: Fukuoka airport; approx. 70 kms.
(a) International line:
JAL, for Pusan (Tuesday and Thursday);
for Taipei-Hongkong (Monday and Thursday);
CPA, for Taipei-Hongkong (Wednesday and Saturday);
KAL, for Pusan-Seoul (Mon., Tues., Wed., Fri., and Sat.).
(b) Domestic line:
JAL and ANA, regular service.
Kitakyushu airport; approx. 20 kms. Flights often suspended by heavy rain and fog.
(c) Domestic line:
ANA, regular service.
TIME: GMT plus 9. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Yawata Police Station, tel. 093–67–6631; Wakamatsu Water Police, Yawata Port branch, tel. 093–67–0611; Ambulance/Fire, Yawata Fire Department, tel. 093–67–4831.
TELEPHONES: Nippon Senpaku Tsushin K.K. available at Moji (tel. 093–33–1089). In case of Mutsure anchorage, extra boat charge and personnel expenses will be incurred. Due to insufficient number of telephones require adequate advance notice for installation. Suitable ship's electrical voltage; DC–22/28 v. AC–100 v. 110 v. 120 v. (to keep at least within 10 v.).
GENERAL: Whenever vessel takes bunkers in port, advisable to close deck scuppers' holes before pumping in order to avoid overflow oil into sea.
SERVICES: Tank cleaning, sand blasting (Fuji Co., Tobata), chemical cleaning (Fuji Co., Tobata). Hold cleaning (Tsuyama Kosan K.K., Yawata; Fuji Co., Tobata). Compass adjusting (Kajiwara Koki, Shimonoseki). DF calibration (Nippon Radio Co., Tobata). Life-raft servicing and inspection (Kikutani Sengu, Shimonoseki; Marinair International, Kobe; International Marine, Kobe; Marine International; Yokohama and Tokyo); this service requires name of maker in advance. Radio and radar repairs available, but requires name of makers/type of the machine in advance. Laundry (Sunrise Cleaning, Tobata; Moji Dry Cleaning, Moji). Watchmen service available. Charts: only Japanese charts available locally; BA and HO charts can be obtained from Kobe and Yokohama respectively, with adequate notice. Grain fitting (Ushio Co., Moji; Fuji Sobi, Moji); this work is usually carried out at Moji (public port). Fumigation (Toyo Fumigation Co., Moji), this work is not permitted at Yawata but at Moji. Floating crane, capacity 200 tons (Kondo Kaiji, Wakamatsu; Nichibei Kosan). Diver (Nippon Salvage Co., Moji; Tsuyama Kosan, Wakamatsu). Salvage service (Nippon Salvage, Moji) Painting service (Fuji Co.).
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Kitakyushuko Kauti-Kumiai.
AGENTS: See "Tobata".

YOKKAICHI: 34.57 N. 136.38 E.

DOCUMENTS: See "Yokohama".
PILOTAGE: Not compulsory; Pilot available at 34° 56′ 15″ N.; 136° 40′ 40″ E. Vessels requiring Pilot cable Agent at least a day ahead advising exact ETA Pilot station. Wireless station for communicating with entering ships and for other port business, call signal JCZ. Radio wave in use is A1.A2 500 kc/s. and A1.A2 486 kc/s., output A1 50 W. and A2 110 W. Zone of communication about 100 km. Yokkaichi signal station also equipped for assigning berths to entering ships and for other port business. VHF communication available, call signal Yokkaichi Port Radio, Channel 16. Working Channel 14, 0600 to 2000 hrs. any day.
ANCHORAGE: Vessels anchor 34° 56′ 15″ N., 136° 40′ 40″ E. where authorities board and grant free pratique; max. depth 13 m.
RESTRICTIONS: Entry restricted by vessel's draft and pratique. Max. draft inside port 12 m. Quarantine authority attend vessel usually from dawn to sundown on any day. Berthing daytime only. Unberthing any time except tankers daytime only.
MAX. SIZE: Maximum permissible draft *inside port* 12 m.
Tankers:

Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. Safe Draft (m.)*
Showa Outer SBM	No limit	No limit	19.30
Showa Inner SBM	170,000	No limit	16.00
Showa Wharf "E"	45,000	211	10.00
Daikyo SBM	No limit	No limit	9.50
Daiyo Umaokoshi Pier	60,000	245	9.80

HEALTH: Request for radio pratique to be addressed to Agents not less than 12 hrs. before arrival.
TIDE: Tidal current of Ise Bay runs Northward along East side of Mie Pref. and turns round at mouth of Kiso River and runs Southward for Chita peninsula.

Tidal level:	High tide	Tidal level (average) +7.74 ft.
	Mean tide	+4.30 ft.
	Low tide	±0.00 ft.

TUGS: Normally stand-by to assist vessel inside breakwater of entrance to fairway; tug's lines used.
BERTHING: Depths alongside:

Berth No.	*Depth*
1	8 metres
2–3	8.5 metres
4–5	8.5 metres
8	10 metres
9	10 metres
11	10 metres
13	11 metres
14	10 metres
15	10 metres

SPECIALISED CARGO HANDLING FACILITIES: *Bulk Cargoes:*
No special berth for this, No. 2 wharf has a cereal silo which can store 30,000 tons of imported grain. Two pneumatic unloaders with unloading capacity of 300 t.p.h. per machine, at the Northern berth of the pier to connect the silo with conveyors.
Containers: One container berth, depth 36 ft. with a container crane of 37.5 tons capacity.
Liquid Chemicals/LPG Carriers: Private berth.
TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Showa Outer SBM	Crude Oil	16″×2	4,500/6,500
Showa Inner SBM	Crude Oil	12″×2	4,500/5,000
Showa Wharf "E"	Naphtha	12″×1	500/900
	Fuel Oil	12″×1	500/900
	Kerosene (Load)	10″×1	300/500
	Lub. Oil (Load)	3″×1	200/300
Daikyo SBM	Crude Oil	16″×2	4,500/6,000

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Daiyo Umaokoshi Pier	Crude Oil	12″×2 (Chiksan)	3,000/4,000
	Fuel Oil	12″×1 6″×1	700/900
	Kerosene (Load)	6″×2	380/400

DENSITY: Average 1025.
FRESH WATER: Available, rate of delivery 50 t.p.h. from shore pipes at Government wharves; 100 tons from barge; before 2200 hrs. additional cost 50%; after 2200 hrs. additional cost 100%.
FUEL: Most domestic and bonded oil available, ex-barge. Min. five days notice required.
CONSULS: None.
REPAIRS: Minor repairs only.
AIRPORT: No airport.
POLICE/AMBULANCE/FIRE: Police, tel. 110; Ambulance/Fire, tel. 119.
TELEPHONES: Telephone can be arranged from shore connection at Government wharves. No connections at tanker berths.
GENERAL: Lightening: Not allowed, except a cargo of oil or chemicals.
SERVICES: Technicians for vessel's instruments can be arranged from other ports.
REGULATIONS: Under adverse weather conditions:

1. If a typhoon is reported approaching, and upon advice from refinery representative, loading or unloading operation will be suspended and vessel will leave berth to a designated area for refuge.
2. During a violent thunderstorm, cargo work will be stopped upon receiving order from refinery, and vent-line valves securely closed.
3. During stormy weather, with gusty winds condition, Master shall follow weather reports closely and shall endeavour to prevent any accidents by taking all possible precautions, such as reinforcing mooring ropes and arranging adequate emergency personnel to stand-by for any emergency.

Liability for Accidents: If accident is judged by Maritime Safety Office and Port Captain to be ship's fault, either through negligence of these Safety Regulations or otherwise, Master shall immediately cease operations, if necessary, and simultaneously follow in good faith the instructions of refinery and Port Captain, and take all necessary actions. Master shall inspect and verify cause of accident in the presence of refinery representative and ship's Agent, and shall be held responsible for reporting the accident, in writing, to the parties concerned. Until this is completed and full agreement reached with refinery representatives, the vessel shall not leave the jetty, unless otherwise requested. For actual confirmation of the accident, and damage liability, Public Surveyor (Messrs. Japan Marine Inspections Co. Ltd.) is fully entitled to inspect the accident.
AUTHORITY: Yokkaichi Port Authority.

AGENTS: Sub-agents of Dodwell & Co. Ltd., Tokyo.
Dry Cargo Vessels: Yokkaichi Warehouse Co. Ltd., 6, Chitose-cho, Yokkaichi Mie-ken. Cable address: "Soko Yokkaichi". Domestic Telex: 4948–179 Yonso J. Tel. Yokkaichi (0593) 53–5211.
Tankers: Uyeno Unyu Shokai Yokkaichi Office c/o Showa Yokkaichi Sekiyu K.K. 1, Shiohama-cho, Yokkaichi-shi Mie-ken. Cable address "Uyenoshell Yokkaichi". Domestic Telex 494–8276. Tel. Yokkaichi (0593) 45–2271/8.

YOKOHAMA (incl. Negishi and Tsurumi): 35.27 N. 139.38 E. **(See Plan)**

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Nos.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: As Yokohama/Kawasaki a busy port, all movements – entering, leaving port and shifting within port – regulated by Harbour Authorities, and Agent has to make application for movement one day before, also tugboat(s) arranged through Agent. If any change necessary to arrangement already made, two hrs. notice sufficient to make rearrangement with Pilot. If Pilot required at area off Ashika Shima Lt. Bn. in Tokyo Bay for passing Uraga Strait, 24 hrs. prior notice required for dispatching Pilot. (In rough sea Pilot cannot be obtained in that area.) No station pilot boat; Pilots use small launches and often make use of tugboat when it is employed at same time, for embarking and disembarking especially when sea rough. In either case, launch or tugboat with Pilot on board displays "H" flag or lights prescribed in International Regulations. Pilot for Yokohama/Kawasaki port picked-up off Yokohama fairway entrance buoys No. 1 and No. 2, but in case ship has to wait for berth, usually does not take Pilot and proceeds to anchorage shown on chart as "Quarantine Anchorage" or as near as safety permits, and anchors. In this case Pilot boards at anchorage. If anchor or picks-up Pilot inside harbour limit, pilotage cheaper because assessed on two stages; "From Bay to Sea" and "From Sea to Berth", but Master requested to anchor outside fairway. Vessel to provide properly approved Pilot ladder.
Uraga Channel:
Vessels requiring a Pilot for the Uraga Channel should radio request to Anjin Yokosuka, advising ship's details and arriving time at No. 1 Uraga Channel light buoy. Uraga Channel Pilot embarks 3 to 5 miles S.S.E. of Kannonsaki lighthouse, and will disembark on arrival at destination port limits. Applications for Uraga Channel Pilot should reach pilot office 24 hrs. before vessels arrival at No. 1 Uraga Channel light buoy.
Recommendations: To be followed by tankers of 100,000 d.w.t. or more when they navigate through the Uraga Channel with cargo loaded:

1. Twelve hrs. and three hrs., respectively, before such a vessel expects to pass the Uraga Channel No. 1 light buoy, it should report the following items to the Yokohama Maritime Safety Division. Also, after the three-hours-in-advance report, it should keep its radio station open. This, however, is not required if the vessel is South bound:
   (*a*) Name of vessel.
   (*b*) Signal letters, d.w.t. tonnage, type and quantity of cargo, name of port intended to enter (not required in a three-hours-in-advance report).
   (*c*) Availability of international VHF transmitter-receiver equipment aboard.
   (*d*) Time at which the vessel expects to pass the Uraga Channel No. 1 light buoy.
2. Refrain from sailing through the Channel when visibility is poor (less than about one nautical mile).
3. Avoid sailing through the Channel at night unless it is essential to do so.

Follow any instruction that may be issued from the Director of the Yokohama Maritime Safety Division as to the time for sailing through the Channel.

4. Maintain look-out at stem.
5. Between the neighbourhood of the Uraga Channel No. 2 light buoy and that of the Uraga Channel No. 5 light buoy, avoid overtaking other vessels (weighing about 500 g.r.t. or more) unless it is essential to do so.

ANCHORAGES: 12–26 m. in quarantine anchorage, and 26–34 m. in other areas. For details refer to chart published by Hydrographic Division of Japan MSA.
RESTRICTIONS: Entry or departure or movement inside port not allowed from sunset to sunrise, but ships less than 15,000 g.r.t. without dangerous cargo can be given special permission to enter, leave port and move inside the port (only in Yokohama). In Kawasaki, which is very narrow and long, no special permission given. Depths of shallows in Yokohama, Tsurumi and Kawasaki fairways 11.6, 11.2 and 12.0 m., and Pilot Association make these the max. drafts accessible to the berths inside the respective fairways. Ship with max. draft of 11.6 m., when entering Yokohama through Yokohama fairway, has to wait for tide.
MAX. SIZE: *Tankers:*

Name of Berth	*Max. d.w.t.*	*Max. LOA*	*Max. safe draft*
Keihin Yokohama (Sea berth)	No limit	No limit	19.50 m.
Shell Oil (Main Jetty)	No limit	180 m.	10.00 m.
General Sekiyu	No limit	182 m.	9.30 m.
Mobil Oil	No limit	176 m.	9.45 m.
Asia Oil No. 5	No limit	No limit	12.00 m.
Nisseki Koyasu	No limit	250 m.	12.00 m.
Nisseki Negishi A (E.)	No limit	310 m.	17.00 m.
Nisseki Negishi B	No limit	250 m.	13.60 m.
Shell	No limit	260 m.	11.70 m.

PRATIQUE: Radio Agent for free pratique not less than 12 hrs. and not more than 36 hrs. before arrival, advising full details of vessel and health conditions on board. When free pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
The following vessels will not be able to get radio pratique:
A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.
If crew or passengers on board do not possess valid Smallpox Vaccination Certificates.
If a vessel does not possess a valid Derat or Derat Exemption Certificate.
RADIO: Recommended Captain communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to Choshi, and Northbound to Nagasaki Radio respectively.
TUGS: Under control of Pilot, compulsory in Yokohama/Kawasaki for foreign ships, and normally join ships in fairway between outer breakwater and Lt. Hos. and Entrance Lt. Buoys. If ship is at anchor in quarantine area or near to it, tug(s) joins ship at anchor. Usually two tugs used for mooring and/or unmooring, but depends largely upon special conditions of berth and weather conditions. Tug's lines used and charge included in towage.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Mooring Buoys:

District	Mooring capacity (g.t.)	No. of berths	Buoys
1st District	1,000	2	A, B, C, D
	1,500	2	H1, H2
	2,000	1	H3
	7,000	2	Nos. 12–13
	12,000	1	No. 11
	15,000	7	Nos. 1–10
2nd District	12,000	1	Nos. 20, 21
	15,000	2	Nos. 22–25
	30,000	1	D6
3rd District	12,000	2	Nos. 36–38
	15,000	2	Nos. 32, 42, 43, 44
	20,000		

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional). Sundays/holidays (60% additional).

VHF: Call sign Yokohama Port Radio. (See details under "Kawasaki/VHF").

MEDICAL: No advance notice required unless urgent.

TANKERS: Masters of tankers seldom requested to fit reducing pieces before arrival for connection of shore lines since oil installation have own appliances. Two slop disposal facilities, one in district No. 5 in Yokohama which is private enterprise and can dispose of dense residues, and one in District No. 1 in Kawasaki

Private Piers

Piers and Wharves	Length (m.)	Depth (m.)	Mooring capacity (g/t)	Number of berths	Kind of Cargo
Shell Sekiyu Co. Main Jetty	106	10.0	20,000	1	Mineral oil
Ogishima Pier	87	12.0	80,000	1	Crude petroleum
General Sekiyu Co. Ltd. Pier		9.0	15,000	1	Refined oil
Mobil Sekiyu Co. Main Pier	103	9.0	15,000	1	Mineral oil
Nippon Petroleum Refining Co. Ltd. Pier	10	9.0	15,000	1	Mineral oil
Tokyo Gas Co. Tsurumi Wharf	225	5.5	1,000	1	Coal
Suehiro Wharf	140	6.0	3,000	1	Coal
Tokyo Shibaura Electric Co. Ltd. Pier	30	5.0	3,000	1	Electrical machinery
IHI Co. Ltd. Tsurumi Wharf	36	6.0	1,500	1	Machinery
Nippon Kokan Co. Ltd. Tsurumi Iron Works, Wharf	130	9.0	7,000	1	Iron Materials
Nippon Futo Warehouse Co. Ltd. Pier		6.0	1,500	1	Chemical
Asahi Glass Co. Ltd. Tsurumi Pier	104	5.5	1,000	1	Glass
Naigai Yuso Co. Ltd. Tsurumi Pier	40	5.0	1,000	1	Theriac
Daikoku Warehouse Co. Ltd. Pier	87	6.0	1,000	1	Steel
Maruzen Sekiyu Co. Ltd. Pier	20	5.5	1,000	1	Theriac
Nitto Kagaku Ltd. Yokohama Pier No. 1–4	35×4	5.0	1,000	4	Crude petroleum
Tokyo Electric Power Co. Ltd.					Crude petroleum
Yokohama Power Plant Pier No. 1	84	9.0	10,000	1	Heavy oil
No. 2	49	9.0	3,000	1	Heavy oil
Daito Tsusho Yokohama Pier	81	6.0	3,000	1	Heavy oil
Ensuiko Co. Ltd. Yokohama Pier	100	9.5	15,000	1	Sugar
Asia Sekiyu Wharf No. 3	100	7.0	2,000	1	Crude petroleum
No. 4	28	5.0	1,500	1	Crude petroleum
No. 5	60	12.0	40,000	1	Crude petroleum
No. 6	140	6.0	2,000	1	Crude petroleum
Kobe Seikojo Co. Ltd. Yokohama Pier		5.0	1,000	1	Steel materials
Osaka Cement Co. Ltd. Pier	96	7.0	1,000	1	Cement
Mitsubishi Cement Co. Ltd. Pier	122	6.0	3,000	1	Cement
Ajinomoto Co. Ltd. Pier	113	9.0	10,000	1	Grain
Showa Sangyo Co. Yokohama Pier		9.0	10,000	1	Grain
Nippon Petroleum Refining Co. Ltd.					
Yokohama Refinery Pier A	30	12.0	90,000	1	Mineral oil
B	15	7.0	2,000	1	Mineral oil
C	18	9.0	18,000	1	Mineral oil
C	18	9.0	2,000	1	Mineral oil
D	14	7.0	3,000	1	Mineral oil
E–F	20	6.0	1,500	2	Mineral oil
Showa Denko Co. Ltd. Yokohama Work Pier	235	9.0	10,000	1	Ore
Sangyo Shinko Co. Yokohama Pier	70	6.0	1,000	1	Scrap
Nisshin Warehouse Co. Ltd. Pier	244	9.0	13,000	1	Grain
Government Silo Pier	130	9.0	18,000	1	Grain
Nippon Seifun Co. Ltd. Pier	13.2	9.0	20,000	1	Grain
Asahi Kigyo Pier	12	6.0	3,000	1	Cement
Nippon Submarine Cable Co. Pier	35	6.9	2,000	1	Cement
Nissan Motor Co. Ltd. Honmoku Wharf No. 1, 2	180×2	10.0	18,000	2	Car
No. 3	150	4.5	3,000	1	Car
Mitsui & Co. Ltd. Honmoku Wharf	207	11.0	21,000	1	Grain
Nippon Express Co. Ltd. Honmoku Wharf	207	11.0	14,000	1	Steel
Kokusai Futo Co. Ltd. Pier	348	17.5	150,000	1	Bulk, corn
Sumitomo Metal Industry Co. Ltd. Yokohama Pier	189	7.5	1,600	2	Steel materials
Nippon Petroleum Refining Co. Ltd.					
Negishi Refinery Pier A	420	17.0	150,000	2	Crude petroleum
B	104	13.0	50,000	1	Heavy oil
C2–4	99×3	7.0	3,000	6	Refined oil
D1–4	90×4	4.5	500	8	Refined oil
H1–3	105×3	7.0	3,500	6	Refined oil
Lubricating Oil Shipping Pier	90	5.0	700	2	Lubricating oil
L.P.G. Shipping Pier	20	4.5	500	1	L.P.G.
Sulfur Shipping Pier	30	6.0	1,000	1	Sulfur
Asphalt Shipping Pier		6.2	1,500	1	Asphalt
Tokyo Bay Concrete Co. Ltd. Pier	12.5	5.0	1,000	1	Cement
River Steel Co. Ltd. Pier	20	5.0	1,000	1	Steel materials
Ube Kosan Co. Ltd. Yokohama Pier	43.2	7.5	3,000	1	Cement
Suishan Kosha Pier	45	6.0	700	1	Fishery products
Electric Power Development Co. Ltd.					
Isogo Wharf	140	7.5	8,000	1	Coal
Tokyo Gas Co. Ltd. Negishi Pier	100	12.5	50,000	1	Heavy oil, L.P.G.
Nisshin Oil Mills Ltd. Isogo Pier		10.8	50,000	1	Soyabean
Nisshin Oil Mills Ltd. Isogo Pier	5	5.0	500	1	Heavy oil
Yokohama Maritime Safety Office Pier	85	10.0	1,800	1	
S.S. "KDD Maru" Pier		7.5	4,500	1	
The others				35	

Public Piers

Piers	*Length (m.)*	*Depth (m.)*	*Mooring capacity (g/t)*	*Number of berths*	*Remarks*
Yamashita Pier	1,860		20,000	1	
			15,000	9	
Osambashi Pier	966	10.0–12.0	10,000	6	Alternative mooring 45,000 ton class one berth 25,000 ton class two berths 10,000 ton class one berth
Shinko Pier	1,783	7.2–10.2	20,000	1	Berth No. 7 is used by U.S. Army
			15,000	1	
			10,000	6	
			4,000	2	
			3,000	1	
Takashima Pier	888	7.3–10.0	15,000	2	
			6,000	2	
			3,000	2	
Yamanouchi Pier	402	8.0	6,000	3	
Detamachi Pier	520	7.5	5,000	4	
Mizuho Pier	1,259	9.0–10.0	15,000	5	This pier is used by U.S. Army
			8,000	2	
Honmoku Pier	5,435		2,000	1	
			15,000	26	
Honmoku Container Terminal	1,100	12	25,000	2	Container Berth
			35,000	2	

which is run by Kawasaki city and can dispose of diluted slop or oily ballast. (Also see "Max. Size").

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Keihin Yokohama Sea Berth	Crude	16″×3	10,000
Shell Oil	Gasoline	8″×2	850
Main Jetty	Chemical	8″×1	150
General Sekiyu	Fuel	8″×3	1,000
(Tsurumi Terminal)	Others	6″×1	200
Mobil Oil	Clean Oil	6″×2	1,000
(Tsurumi Terminal)	Dirty Oil	8″×1	1,200
Asia Oil No. 5	Crude	8″×2	2,000
	Fuel	8″×1	900
	Minas	8″×1	800
Nisseki Koyasu	Crude	12″×2	3,000
Nisseki Negishi A (E.)	Crude	12″×3	7,500
	Fuel	12″×1	3,500
Nisseki Negishi B	Fuel	12″×2	3,500
Shell Sekiyu	Fuel	12″×3	1,200
	Crude	12″×3	4,800

DENSITY: Average approx. 1023.

FRESH WATER: Can be taken either at wharf ex-pipe or at buoy or anchorage by barge.

Place	*Rate of delivery*
South Pier	70 tons per hour
Government Silo	70 tons per hour
Nippon Petroleum Refinery, Negishi	70 tons per hour
Buoy or anchorage	100 tons per hour (subject to ship's condition)

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.

FIRE PRECAUTIONS: Oil installations in Yokohama/Kawasaki generally do not allow bunker barge to come alongside ships moored to their berths.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS:

American Consulate-General	tel. 681–0841/2
Her Britannic Majesty's Consulate	,, 201–1540/2
Consulate of France	,, 201–1840
Consulate-General of Argentine Republic	,, 7410–4194
Consulate-General of the Republic of China	,, 641–3641/5
Consulate of Brazil	,, 641–0097
Consulate-General of the Republic of Panama	,, 641–8549
Consulate-General of Peru	,, 641–0022
Consulate of the Republic of Korea	,, 201–4531
Honorary Consulate of Paraguay	,, 401–6343
Honorary Consulate of the Netherlands	,, 651–1661/9
Honorary-Consulate-General of El Salvador	,, 211–1371
Royal Swedish Honorary Consulate	,, 201–4171
Royal Thai Honorary Consulate	,, 641–1361
Royal Norwegian Honorary Consulate	,, 641–7361
	,, 691–6583
Royal Greek Honorary Consulate-General	,, 681–1713

REPAIRS: Any kind of repairs can be effected at this port.

DRY DOCKS: The largest dry dock, owned by Ishikawajima-Harima Heavy Industries Ltd. (and another six smaller dry docks owned by Mitsubishi Heavy Industries Ltd., Nippon Kokan K.K.). Max. length, 1,161 ft. 5 in.; breadth at entrance, 183 ft. 8 in.; height of sill above bottom dock,, 5 ft. 3 in.; depth on sill at high water, ordinary spring tides, 20 ft. 3 in.

REPATRIATION: Possible.

AIRPORT: Haneda International Airport 25 km. and served by many regular airlines.

TIME: GMT plus 9 hrs. No alterations made to clocks during year.

HOLIDAYS: Only observed at Public terminals.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance, 119; Fire, 119.

TELEPHONES: Telephones can be placed on board.

SERVICES: Almost all requirements by ships could be met, if time permits.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days; but 3 days extension possible if ship stays longer.

DEVELOPMENTS:

Honmoku Pier construction plan: A 26-berth pier of 5,200 m. with a water depth of 10 m.. for ships of 15,000 tons and a 3-berth container pier 750 m. long and with a water depth of 12 m. for 25,000 ton ships has been completed. Under construction are a 1-berth container pier 350 m. long and a 1-berth dangerous cargo pier 230 m. long. These will have a water depth of 12 m. and are intended for vessels of 30,000 tons.

Daikoku Pier construction plan: A 1,826,000 sq.m. land reclamation plan is being carried out in front of Daikoku-cho in order to build an 11-berth pier, 2,200 m. long with a water depth of 10 m. for vessels of 15,000 tons and a 2-berth container pier 600 m. long with a water depth of 12 m. for ships of 30,000 tons.

Shinko Pier remodelling plan: Stage I. Existing pier space of 244,000 sq.m. to be extended to 419,000 sq.m.

Stage II. Existing berths Nos. 9 to 12 to be converted to a berth 240 m. long with a water depth of 4.5 m. and an 800 m. long 4-berth pier with a water depth of 10 m.

Stage III. Road and rail links and bridges to be improved.

Ferryboat Pier construction plan: This pier has an area of 37,500 sq.m. and is designed for handling medium and long-distance ferries. The plan calls for a 600 sq.m. passenger terminal building, a 17,500 sq.m. parking lot for 340 lorries, 2 berths for 8,000 ton ships and 1 berth for a 1,000 ton ship.

AUTHORITY: Port and Harbour Bureau.

AGENTS: Dodwell Tramp Agencies, PO Box 271, Yokohama Port, 5th Floor, Minato Building, 33, 3-chome, Hon-ho, Naka-ku, Yokohama. Tel. (045) 201-6991. Telegraphic, Dodtramp Yokohama. International Telex. J47721.

YOKOSUKA: 35.17 N. 139.40 E.

DOCUMENTS:

Customs:
- Port Call Notification.
- Cargo List.
- List of Crews dutiable possessions.
- Passenger List.
- Crew List.
- Ship's Nationality Certificate.
- Port Departure permission paper.

Immigration:
- Crew List.
- Port Call Notification.
- Passport or Crew Pocket Book.

Quarantine:
- Declaration of Health.
- Crew List.
- Passenger List.

Plant Protection Station:
- Plant Importation Inspection Application.

Maritime Safety Agency:
Port Call Notification.
Application for Loading, Transfer and Unloading of Explosives and Combustibles.
Application for Transport of Explosives and Combustibles.
Port Authority:
Port Call Notification.
Application for use of Facility.

PILOTAGE: In applying for Pilot at time of entry and departure, Pilot station should be contacted 20 hours in advance of beginning of Pilotage through Agent. 44 Pilots available. Pilot boat has telephone.

ANCHORAGES: At 4th District of Yokosuka Port. Depths 10–30 m.

RESTRICTIONS: The 1st, 2nd and 3rd District of Yokosuka Port under compulsory pilotage districts.

MAX. SIZE: At buoys: length 200 m., draft 9.6 m. At wharves: length 200 m., draft 9.6 m.

HEALTH: Quarantine station to be informed in advance name of last port, ship's name, tonnage, number of crew, number of passengers, ship's nationality, etc. In event any suspected disease, Agent should be advised. When isolation of ship needed, it will be transferred to Nagahama Quarantine Station in Yokohama.

RADIO: Local radio station.

TUGS: Can be arranged through Agent. Tugs normally join vessel in 3rd District when vessel enters Nagaura and New Port, and in 7th District when it enters Kurihama. Tug's lines to be used. Charge for tug's lines included in charge for tug.

BERTHING: Agent submits application for berth to Port Authority (Nagaura and Kurihama port offices and Yokosuka New Port Wharf Company).
Nagaura Pier No. 1, depth 9 m.
Nagaura Pier No. 2, depth 10 m.
Kurihama Pier depth 7.5 m.
New Port Pier No. 1, depth 10 m.
New Port Pier No. 2, depth 10 m.
Five buoy berths in depths of 9.5 to 13 m.

STEVEDORES: Agent will arrange stevedores.

MEDICAL: Agent can arrange doctor who understands foreign languages.

TANKERS: No berthing facility for commercial tankers. Only U.S. Naval Base, Yokosuka, has berthing facilities.

FRESH WATER: Available by barge or ex wharf. 50% additional charge in case of bad weather or out of office hours.

FUEL: Available ex-lighter.

GANGWAY/DECK WATCHMEN: Agent arranges watchmen.

OPENING/CLOSING HATCHES: Stevedores or crew carry out this work.

CUSTOMS ALLOWANCES: Tobacco: 2 packets per day. Spirits: 1 bottle when more than 1 month voyage; 2 bottles when more than 6 months voyage.

CONSULS: None.

REPAIRS: Dockyards available for all repairs.

DRY DOCKS: 1 – 475×19.5 ft.; 1 – 352×15.75 ft. 5 large-size slips; 1 rigging wharf.

REPATRIATION: No facilities exist. If necessity occurs, Yokohama Immigration Office will attend.

AIRPORT: 40 km. to Tokyo International Airport.

TIME: GMT plus 9 hours. No alterations during year.

HOLIDAYS: Cargo work usually daytime. On Saturday afternoon and Sunday, National holidays, Municipal Inauguration Anniversary, and December 31, January 1, 2 and 3 no cargo work.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.

TELEPHONES: Facilities now underway.

GENERAL: Port situated in city confines, a portion of port is used by JMSDF and also by the U.S. Navy according to Japan-U.S. Security Treaty.

AUTHORITY: Yokosuka City.

AGENT: Sub-agent of Dodwell & Co., Tokyo. Sagami Unyu Kabushiki Kaisha, Taura Minato-Machi, Yokosuka-sui, Kanagawa-ken. Cables: Sagami. Tel. Yokosuka (0468) 61-3111. Telex 3852-5280.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Jordan

AQABA: 29.31 N. 35.01 E.

DOCUMENTS:

1 copy Freighted Manifest, stating all details.
6 copies Unfreighted Manifest.
2 copies of Unfreighted Manifest not showing shippers nor consignees but weights and measurements.
1 set of non-negotiable Bills of Lading.

All Manifests should bear the following clause: "This is to certify that the above vessel has not called and is also not scheduled to call at any Israeli ports nor is owned by any Israeli Company, also it is not included in the Black List." All the above documents are to be airmailed to the Agent's Head Office in Amman and not Aqaba.

Documents required by the authorities for free pratique:

7 copies Crew List.
7 copies Passenger List.
1 copy Stores List.
1 copy Crew Declaration List.
1 copy Vaccination List.

The following forms to be filled:

2 copies of Maritime Declaration Form.
1 Customs Declaration Form.
2 copies Vessel's Specification Form.
1 copy Pilotage Form.

The following documents to be produced for checking:

(a) Log Book.
(b) Ship's Registry Certificate.
(c) Derating Certificate.

PILOTAGE: Compulsory Pilotage in that area of Aqaba Bay North of an imaginary line 270° from Al-Breij Point. Ships in harbour requiring a Pilot should by day hoist "G" flag below a ball or shape, one hour before ship is ready to move; and "B" flag by night with a red over white. The sound signal is four long blasts. Advance notice of the ship's requirement of pilot service should be given to the Agent who will advise the Harbour Master or his representative. It should be noted that vessels may proceed to sea from the anchorage without taking a Pilot, but for ships leaving the berths alongside, pilotage is compulsory, and the signals described above should be made.

ANCHORAGE: About 0.5 miles from shore in depths of 15 to 30 fathoms. Ships awaiting discharge can easily anchor in deep water anchorage which can accommodate 25 ships or more.

MAX. SIZE: Up to 20,000 d.w.t. Max. draft 32 ft. Phosphate loading berth: up to 50 ft. draft.

TUGS: The tugs available at Aqaba are only for towing barges and handling ship's line during berthing but no salvage tugs are available.

HEALTH: A ship arriving from sea should, in addition to the "G" flag for Pilot, hoist its signal letters and "Q" flag to request free pratique if it is healthy. If there are passengers to land, "I" flag should be hoisted. The port doctor boards the vessel together with a representative of the Port Dept., Customs Dept., Passport Dept., and Police. If the vessel has to anchor first, boarding the vessel takes place at anchorage. If the vessel berths alongside, then the aforementioned representatives board the vessel. Health certificates of crew and passengers are required.

RADIO: Aqaba Radio station call sign JYO. Watchkeeping hours GMT 0500 to 1700. Station has transmitting frequencies presently only 500 and 477, however, 2182, 2612.5, 4326.5, 6479, 8723 are reserved.

Station can receive on all M/F and H/F frequencies. Station listens continuous, 500 kc/s. at present; will listen 6200 to 6300 A1 H to H plus 10.

VHF: Aqaba Port Control at Harbour Master's office listen from 0700 to 2400 hrs. local time on VHF Channel 16, working Channels 10 and 12 for service messages. Pilots listen VHF Channel 16.

BERTHING:

General Cargo Berth: Three medium-size ships or two large ships can berth alongside. The depth is 10 m. (32 ft.) at low tide.

Phosphate Loading Berth: The berth is 210 m. long and 32 ft. depth. It is situated South of the General Cargo Berth and is especially built to load phosphate. The berth is designed to accommodate ships of up to 20,000 d.w.t. In addition, pipes have been laid to supply petroleum to a nearby tank farm for the occasional import of some petroleum products. There are two main berthing dolphins with a loading tower in between, and mooring dolphins at each end. The loading tower is connected with a conveyor belt feeding the tower from two silos with a 20,000-ton capacity each. There is a short retractable boom and telescopic trunk which can be travelled forward up to a distance of 9 m. from the berthing face to plumb the centre of the hold of a ship. The loading capacity is 500 t.p.h. The guaranteed loading rate by the Phosphate Company is 2,000 tons per weather working day of 24 hours. Vessels should arrive at the berth with as large an amount of water ballast as possible, both to facilitate berthing (as there is no tug) and to reduce the height from water-line to hatch coaming. This height should not exceed 30 ft.

Bulk Export Berth "B": Is 180 m. long with 15.5 m. (50 ft.) depth of water at low water spring tides and is designed for berthing and loading 100,000 d.w.t. bulk carriers. The travelling ship-loader has a capacity of 1,500 tons of phosphate per hour and provision is made in the design for the installation in the future of a second similar shiploader to give a total loading capacity of 3,000 t.p.h. Phosphate for loading into ship is weighed on a continuous recording belt weigher (accuracy +0.5% between 25% and 150% of rated capacity) and is loaded through a telescopic pivoting feed chute. Clearance above high water level is 18 m.

Lighters Wharf: The Lighters Wharf has a length of 215 m. and a width of 10 m. and a depth of about 9 ft. About 10 lighters can be discharged alongside.

STEVEDORES: Stevedoring Company's working hours are from 0800–1600 hrs. Work has to start at 0700 hrs. and end at 1600 hrs.; therefore, there are two compulsory overtime hours in the morning, from 0600 to 0800 hrs. and 1 hour in the afternoon, i.e. from 1600 to 1700 hrs.

Ships Working Hours: Ships can work round the clock, depending on Captains' option and the number of ships available in port. Opening hatch of a ship is allowed up to 2200 hrs. and subject to Port Authority agreement. Friday is the official weekly holiday, however, work is carried on, on the ships.

TANKERS: Berth in daylight hours only.

MEDICAL: The Health Section of Aqaba Port Department gives all medical services required and responds to any urgent call by radio before arrival. A government hospital is available and is satisfactorily staffed by doctors. A doctor may be called on board at any time day or night, to attend to sick crew or passengers by arrangement with the Agent.

FRESH WATER: Can be supplied to ships berthed alongside.

FUEL: Bunkering is inadvisable. In case of necessity, fuel oil can be transported from the refinery in Zerka by tank lorries with a capacity of 12 tons each. Three day's notice must be given in order to arrange transport.

GANGWAY/DECK WATCHMEN: Customs provide a guard who has to be given full board and lodging. Ships are also supplied by local watchmen through Agents.

HOLIDAYS: Arbor Day (January 15th); Arab Summit Conference Day (January 17th); *Thil-Hijja 10, Eid El Adha (January 14th); Arab League Day (March 22nd); *Moharram 1, Islamic New Year (March 3rd); Independence Day (National Day May 25th); *Rabi' El Awal 12, Prophet's Birthday (April 13th); H.M.'s Accession to the Throne (August 11th); Birthday of Crown Prince Hassan (September 5th); *Rajab 27, Al-M'raj Al Sharif (May 24th); Birthday of H.M. the King (November 14th); Arab Renaissance Day (November 22nd); *Shawal 1, Eid El Fitr (November 26th).

*Dates fluctuate due months being lunar months.

CONSULS: No consul or vice-consul available at Aqaba. All Consular Offices in Amman, the Capital.

TIME: GMT plus 2 hours.

REPAIRS: A shipyard has been established to build fishing boats and trawlers, barges, tugboats and undertake minor repairs. Welding can also be carried out.

DRY DOCKS: No dry docks are available at Aqaba.

AIRPORT: From Aqaba Air communication: Alia, (The Royal Jordanian Airlines) to Amman 4 flights weekly. Distance to Amman International Airport, 355 kms.

GENERAL: Masters are warned that during the Winter months strong Southerly gales can develop within two hours followed by swell. In such case it may be necessary to unberth the vessel, and it should be noted that there is no tug available for this operation. Vessels in the anchorage in such weather conditions should not hesitate to weigh anchor if there is a possibility of dragging, and proceed out of the bay until the weather moderates.

DEVELOPMENTS: 4 general cargo berths under construction. It is estimated that the construction will take about 2 years, total length of the 4 new berths is 720 m.

AUTHORITY: Aqaba Port Department, Ministry of Transport, Ports, Railways and Airports in Amman.

AGENT: *Head Office:* Amin Kawar & Sons, POB 222, Phone 22324 (6 lines). Telex: 1212. Amman – Jordan. Cables: Orenco Amman.

Port Office: Amin Kawar & Sons, POB 22. Phone: 83. Telex: 0220 Aqaba – Jordan. (All correspondence to be addressed to Head Office at Amman).

Kenya

MOMBASA: 04.04. S. 39.40 E. (See Plan)

DOCUMENTS:
Health Certificates: Forms obtainable from Pilot.
6 Crew Lists.
10 Passenger Lists.
Dangerous Cargo Lists.
Ship's Register.

PILOTAGE: ETA through ships' Agents, 48 hours' notice. VHF Channel 12 (Mombasa Radio VHF Ch. 16). Pilot boat 72 ft. ex-Admiralty launch, white. No signals for Pilot – call on VHF 12 (Mombasa Pilots) or by signal lamp to lighthouse. Pilot boat position one mile outside turning buoy on Ras Serani leads (301°) except for deep-load tankers (over 35 ft.) when pilot boat position one mile from turning buoy on Mackenzie leads (327°). No special bad weather regulations. Pilot ladder 6 ft. from water – must have manropes – light at night.

ANCHORAGES: No safe outer anchorage.

RESTRICTIONS: No tidal restrictions. Entry for dangerous cargo restricted to daylight. Entry for tankers over 650 ft. restricted to daylight.

MAX. SIZE: Length 820 ft. Draft 40 ft.

HEALTH: Radio Port Health Officer, Mombasa, giving last port of departure, ETA Mombasa, condition of crew, any sickness on board, passengers. Must have Q Flag until doctor visits vessel or until Pilot passes information to lower flag.

RADIO: Mombasa Radio Coast Station M/F, H/F, W/T & R/T and VHF R/T Services:

Station 5ZF (W/T) 500–524 kc/s.; traffic list 0100, 0500, 0900, 1300, 1700, 2100; Continuous watch; listening freqs. 500 kc/s.

Station 5ZF2 (W/T) 8710.4 kc/s.; traffic list 2018; schedules 2018–2030, OBS only 0000–0030, 0600–0630, 1200–1230, 1800–1830; listening freq. 8354–8374 kc/s.

Station 5ZF3 (W/T) 13065 kc/s.; traffic list 0448, 0830, 1518; schedules 0448–0530, 0830–0900, 1518–1545; listening freq. 12531–12561 kc/s.

Station 52F4 (W/T) 17175.2 kc/s.; traffic list 1248; 1248–1315; listening freq. 16708–16748 kc/s.

Station (R/T) 2595, 2181 kc/s.; traffic list 0603, 1203; schedules 0600–0630, 1200–1230; continuous listening watch outside Skeds 2182 kc/s.; listening freq. 2182 kc/s.

Station (R/T) 4409.4 kc/s.; traffic list 0533, 1303; schedules 0530–0600, 1300–1330; listening freq. 4104.4 kc/s.

(R/T) 8805.6 kc/s.; traffic list 0633, 1233; schedules 0630–0700 1230–1300; listening watch on 8255.6 kc/s 0330–1530 listening freq. 8255.6 kc/s.

Mombasa Radio also provides continuous R/T service on VHF for the benefit of ships in and around Mombasa within radius of 30 miles. Channel 16 for calling and Channels 26 and 27 for working. All times in GMT.

TUGS: Tugs join vessel inside harbour between Ferry and Kilindini reef. Tug lines no additional charge.

BERTHING: All berths fendered. Nos. 89 and 10 and Shimanzi Oil Terminal berths, no berthing on ebb tide, with range of 6 ft. or more. Kipevu Oil Terminal berthing on first of ebb with tankers over 650 ft.

CARGO HANDLING: No. 9 berth has been arranged for bulk export of soda ash. No berths for roll-on/roll-off traffic but a site is being considered. No container berth is available, but certain facilities at berths No. 16 and 17 available for containerised cargo in 1976.

Mbaraki cement berth for bulk export of cement clinker and automated loading of cement in bags is now in operation.

Shimanzi oil terminal now handles all imports of bulk vegetable oil as well as all other oil products except crude oil.

Bulk cargoes are at present handled by grabs, railway wagons, and lorries.

STEVEDORES: ETA preferably 48 hours in advance in order to arrange gangs. Advisable notify Habour Master ETA and also give quantity of cargo to be loaded and/or discharged and other matters of importance.

MEDICAL: In emergencies necessary to receive advance notice. Hospital facilities available. Inoculations required – smallpox (compulsory), yellow fever (endemic zones in Africa and South America), cholera (all ships from Asia).

TANKERS: Discharge and load white oils at Shimanzi. Discharge and load Heavy oils at Kipevu.

Shimanzi Oil Terminal: T-head jetty with 200 ft. long berthing head. Depth alongside 32 ft. LWOST. Bunkers and fresh water available. Slop reception facilities for up to 6,000 tons.

Kipevu Oil Terminal: T-head jetty with 225 ft. long berthing head. Tankers up to 65,000 d.w.t. berth at dolphins alongside jetty head; depth alongside 44 ft. LWOST. Max. length 820 ft. Max. draft 40 ft.

DENSITY: 1025.

FRESH WATER: Available at all berths in stream ex-tug at Harbour Master's discretion or barge of 140 tons capacity. 30 t.p.h. on quay.

FUEL: *Main Quay Berths:* Marine fuel oil, viscosity 1500 seconds. Marine diesel fuel. Gas oil cannot be delivered by pipe-line at these berths but delivery can be made up to only 10 tons by bulk lorries at extra delivery cost. Minimum 48 hours' notice required. Quantities of 10 to 30 tons can be made by rail tank wagon if 48 hours advance notice given. Thin fuel oil viscosity below 1500 secs. can be delivered at all berths through Fisher blender. Only 1 Fisher blender available and can deliver fuel to only 1 vessel at a time.

Shimanzi Oil Terminal: All grades, i.e. fuel oil, marine diesel, gas oil and thin fuel oil (through Fisher blender).

Cased Oil Jetty: Only marine diesel and gas oil can be delivered at this jetty.

Kipevu Oil Terminal: Only fuel oil of viscosity between 1500 secs. and 3500 secs available. Fuel oil viscosity below 1500 not available. At least three days clear notice required by EA Oil Refineries for arranging bunker delivery. Not possible to deliver any marine diesel or gas oil either ex pipe-line or rail tank-wagons/bulk lorries at this berth.

GANGWAY/DECK WATCHMEN: Watchmen available for gangway and deck and recommended.

OPENING/CLOSING HATCHES: Normally done by stevedores except Macgregor type hatches.

CERTIFICATES: Normal port requirements for safety cargo equipment.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes for each crew member for 8 days. Wine and/or Spirit, 8 small bottles of beer for each crew member for 4 days.

CARGO GEAR: All cargo gear supplied by stevedores.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries are represented in Mombasa: Germany, British High Commission, India, Belgium, Denmark, France, Italy, Norway, Sweden, Netherlands, Greece.

REPAIRS: Normal running repairs.

DRY DOCKS: Vessels up to 2,000 tons, length 320 ft., beam 50 ft.

REPATRIATION: Possible. Facilities available.

AIRPORT: About 7 miles from port. Served by regular airlines. Mombasa/Nairobi 4 flights a day. Mombasa/Dar-es-Salaam 4 flights a day. From Nairobi regular lines all over world.

TIME: GMT plus 3 hours.

HOLIDAYS: Weekdays: 3 shifts – 0700–1500 hrs. 1500–2300 and 2300/0600 hrs. Saturday: 2 shifts – 0700–1230 and 1230–1800 hrs. Sundays: 1 shift – 0700–1500 hrs. New Year's Day; Good Friday; Easter Monday; Labour Day (1st May.); Madaraka Day (1st June); First Monday in August; Kenyatta Day (20th October); Independence Day (12th December); Christmas Day; Boxing Day (26th December).

Also for persons belonging to Islamic Faith: Idd ul Azha and Idd ul Fitr. 1st May (Labour Day) and Christmas Day are normally only holidays on which port closed except for necessary pilotage of ships in and out and for dealing with mails, passengers and their baggage, livestock and perishables. On other public holidays restricted working at Mombasa may be carried out at overtime rates. Overtime rates also apply on Saturdays after 1500 hrs. and on Sundays, and to third shift between 2300–0600 hrs.

POLICE/AMBULANCE/FIRE: In Port Area – Police 567 444; Ambulance 33; Fire 333.

TELEPHONES: Telephones supplied on board. Charges include cost of local calls. Telephone essential per port regulations.

SERVICES: All solvents for tank cleaning available. Repairs to Gyro compass, radar and most other electronic aids to navigation. Compass adjusting by arrangement with port.

SHORE LEAVE: All crew members allowed ashore and to travel except those from Socialist countries who must stay on Mombasa island. This does not include Tanga and Dar-es-Salaam.

PORT REGULATIONS: White tankers and vessels carrying explosives enter port daylight only. No vessels carrying explosives or dangerous cargo allowed to berth at Main Quay.

DELAYS: Normally one or two days for loading and discharging and for bunkering. Usually no waiting days.

SHIP'S OFFICER'S REPORT: The Boarding Customs require crew declarations on their special form duly signed by each individual member of crew. The excess private property, or the items not required during the ship's stay in port, are to be collected and placed in a locker or room and sealed by the Customs. This seal has to be kept intact even in the case of the vessel sailing from Tanzania to Kenya or vice versa. On arrival at the next port, the previous Custom's seal is replaced by the local authorities. No new crew declaration is needed if once filed at first port. However, it is recommended that an extra copy of the crew declaration is kept on board as a record in case it is requested by the local authorities.

AUTHORITY: East African Harbours.

AGENT: East African Commercial and Shipping Company, Kilindini Road, PO Box 95103. Tel. 26251/2. Telex 21151. Cables "Kenship, Mombasa".

Khmer Republic (Cambodia)

KOMPONGSOM 10.38 N. 103.29 E.

PORT LIMITS: The seaward boundaries are fixed by the buoys "KS" to the South and "A" to the East (for cargo ships) and 2 miles N.W. of Rocher Carre (for tankers).

DOCUMENTS:

Entry form to be completed on arrival.
23 Manifests of Cargo for Discharge.
2 Manifests of Cargo in Transit.
10 Crew Lists.
7 Passenger Lists.
7 Lists of Provisions.
7 Lists of Crew Personal Effects.
7 Lists of Arms and Ammunition.
7 Lists of Drugs and Narcotics.
Ship's Register.
Passenger Safety Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
Load Line Certificate.
Derat Exemption Certificate.

PILOTAGE: Contact "Pilot Kompongsom" giving ETA 24 hours before arrival. Pilotage is compulsory for all vessels of more than 150 nrt. Pilot launch is a white motor boat carrying international pilot signals. Cargo Vessels: Pilot boards at buoy KS. Tankers: Pilot boards 2 miles N.W. of Rocher Carre. Pilot station equipped with VHF simplex channel only, Channel 16.

ANCHORAGE: Southern Anchorage: Centred on buoy KS at the entrance of the deep-water channel in depths of 10 to 12 m.

Northern Anchorage: to the West of buoy A, in depths of 10 to 11 m.

Tanker Anchorage: two miles N.W. of Rocher Carre in depths of 15 to 18 m.

RESTRICTIONS: Entrance prohibited to Portuguese and South African vessels. Berthing daylight only, and unberthing day and night but delays may occur in bad weather during S.W. monsoon.

MAX. SIZE: Cargo vessels: draft 7.60 m. plus height of tide. Limited by entrance channel. Tankers: length 220 m., and draft 11.50 m.

HEALTH: Authorities board all vessels on arrival at the quay or in the outer harbour. Quarantine flag to be flown by all vessels even if coming from a Cambodian port. In case of suspected disease on board, contact "Sante Kompongsom" by radio before arrival.

RADIO: Kompongsom Radio; call sign XUK, operating 24 hours daily, medium wave: receiving on 500 kHz, transmitting on 500 and 458 kHz. short wave: receiving on 8364 and 4185 kHz. transmitting on 8480, 8680, and 4342 kHz.

TUGS: Available to assist berthing and unberthing. Join vessel in immediate vicinity of the berth. Vessel's lines used. Three tugs available, largest 1,500 h.p.

BERTHING: Commercial Dock: West side, 2 berths for vessels up to 9.50 m. draft. East side, 2 berths for vessels up to 7.50 m. draft.

New basin, for vessels up to 6.50 m. draft.

Tankers: Oil Refinery Terminal situated at Pointe du Depart. Two sea-line buoy berths in depths of 13 m. No slop disposal facilities. Hoses are lifted and connected by ship's crew.

STEVEDORES: Working times from 0700–1130 hrs, from 1400–1700 hrs., from 1900–2200 hrs. according to authorisation of Military.

MEDICAL: Advance notice required of serious cases to arrange transportation to Phnom Penh. Local doctors and hospital available for non-surgical cases. Crew require cholera and yellow fever certificates.

DENSITY: 1022 in February; 1012 in July.

FRESH WATER: Available at Commercial Dock at rate of 10 cu.m. per hour. Very small quantities may be supplied by tug.

FUEL: Only available supply by tanker-lorries in case of emergency.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

DEVELOPMENTS: New wharves being built and access channels deepened.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Each crew member allowed one carton cigarettes and one bottle alcohol for five days. Master not included in this restriction.

IDENTIFICATION CARDS: Seamans passports or seamans books are taken by immigration in exchange for a shore pass to be surrendered when vessel departs.

CONSULS: France, tel. 2742. All other consuls at Phnom Penh.

REPAIRS: Small repairs can be undertaken on board.

REPATRIATION: Can be arranged.

AIRPORT: Ream Airport, 18 km. from Kompongsom, domestic flights only. Pochentong Airport at Phnom Penh 226 km. from Kompongsom, with full international services.

TIME: GMT plus 7 hours all the year round.

HOLIDAYS: Work can usually be arranged on all days except at Cambodian New Year, 13th, 14th and 15th April, and for two days near the end of September which is the Buddhist Festival of the Dead.

POLICE/AMBULANCE/FIRE: National Police tel. 2630; Police Aid 17; Fire 18; Ambulance 19.

SHORE LEAVE: Allowed. Permission of Immigration Dept. is required to travel outside of Kompongsom port area.

Curfew: In force from 2200–0600 hrs.

AUTHORITY: Direction du Port Autonome de Kompongsom.

NOTES

Please also advise Shipping Guides (Services) Ltd.

Korea (North)

CHUNGJIN 41.43 N. 129.42 E.

DOCUMENTS:
8 Crew Lists.
2 Vaccination Certificates.
2 Lists showing currency, gold and valuables in possession of crew members.
The following information should be radioed to port authorities before arrival:
Number and nationality of crew.
Name of last port.
Ports called at during last month.

PILOTAGE: On reaching North Korean waters, vessels required to give a position report every 3 hours to KCSA Chungjin. Pilot and Port Authorities board in position 41.30 N. 130.05 E. where vessels should await Pilot. Water depth too deep to permit anchoring.

ANCHORAGE: No possibility of anchoring outside harbour limits.

CLEARANCE: On arrival in port, the radar, echo sounder, main and emergency transmitters and all optical equipment is sealed. An inspection team board the vessel to verify currency and valuables declarations. Seamen's Books required to be stamped with landing pass.

BERTHING: Berth No. 1 max. draft 24 ft. Berths 2 and 3 max. draft 27 ft. Berths No. 4 and 5 max. draft 28 ft.

CARGO GEAR: Vessels loaded and unloaded by ship's gear. At berths 4 and 5 there is a conveyor belt facility for coal loading.

SHORE LEAVE: Seamen not allowed to visit other vessels, or leave the harbour area.
Unauthorised money changing forbidden, and it is prohibited to take away Korean currency.
No bathing in harbour area.

NAMPO (Chinnampo): 38.43 N. 125.25 E. **(See Plan)**

Shipmaster's Report No. 1

DOCUMENTS:
8 Crew Lists.
2 Vaccination Lists.
2 Lists showing currency, gold and valuables in possession of crew. Bonded stores must be declared but not sealed.

ARRIVAL ADVICE: The following information should be radioed to KNSA Nampo before arrival:
(1) ETA Nampo Station, Lat. 38° 37′ 30″ N., Long. 124° 49′ 30″ E.
(2) Nationality.
(3) Gross Registered Tonnage.
(4) Net Registered Tonnage.
(5) Deadweight.
(6) Length overall.
(7) Height of Freeboard.
(8) Speed.
(9) Last Port of Call.
(10) Colour of ship's hull.
(11) Number of crew and passengers.
(12) Hatch Loading/Discharging cargo Plan.
(13) Draft.
(14) Ship's position together with ETA 24 hours before arrival within area connected positions 37° 00′ N. 124° 30′ E., 38° 08′ N., 123° 35′ E., and 39° 50′ N., 124° 07′ E. Also vessel should advise position and time passing above connected lines.

PILOTAGE/ANCHORAGE: Pilot and Port Authorities (Quarantine Officer and Immigration Officers) board at position 38° 37′ 30″ N. 124′ 49′ 30″ E. where vessels should anchor awaiting Pilot.
Night pilotage prohibited, according to port regulations.

CLEARANCE: After embarkation of Port Authorities at Nampo Station the Radar, Echo sounder, VHF, DF, Radio Room and all optical equipment is sealed. On arrival in Port, Customs Officers board the vessel and together with Immigration Officers search the whole ship.
Seamen's books required to be stamped with landing pass, also seamen's books are taken ashore by Immigration Authorities for formalities.

BERTHING: Coal berth can accommodate vessels up to 20,000 d.w.t. There are 2 conveyor belts for coal loading but 1 only can work at a time. conveyor belts are not movable, the vessel has to shift. Vessels loaded and unloaded mostly in the roads by ship's gear. There are 3 other berths but have no information.

RADIO: Nampo Radio. Call sign HML.

FRESH WATER: Only available by barge.

TIME: GMT plus 9 hours.

SHORE LEAVE: Seamen allowed to go ashore by boat or bus only. Seamen are not allowed to leave harbour area. In order to visit other vessels in port, application should be made to Immigration Authorities.

GENERAL: *Currency:* It is prohibited to take Korean currency out of the country.
Bathing: Prohibited.
Fishing: Prohibited.
Provisions: Limited quantities available at the Seamen's Club.

Shipmaster's Report No. 2

Information covering Nampo, North Korea, previously known as Chinnampo. See in connection with this B.A. Chart 1257 and 1656, China Sea Pilot III.

The following general information was produced by the navigating officers of a vessel in 1974.

NAVIGATIONAL INFORMATION: Pilot boarding point now 38° 37′ 5″ N., 124° 49′ 5″ E. Wreck at 37° 38′ 2″ N., 124° 48′ 2″ E., 3 masts above water at all states of tide. Radar echo good at 6 miles. Buoy – old position 37° 37′ 4″ N., 124° 51′ 4″ E., moved to 37° 37′ 2″ N., 124° 50′ 7″ E.
Light Sei To – flash every 23 sec. Visible for 8 miles
Light buoy at 37° 37′ 4″ N., 124° 53′ 6″ E., flashes 18 sec.
Light Shimai To flashes 18 sec.
Light San extinguished
Light Chiri extinguished
Light Hi To extinguished
Light at 38° 41′ 7″ N., 125° 18′ 1″ E., (Bachishin) flashes 30 sec.
Light at Nanryoki extinguished
Light at 38° 43′ 3″ N., 125° 24′ 6″ E., extinguished.

PILOTAGE, ANCHORAGES, INSPECTION AND CLEARANCE: The Pilot boarding point is at the same time the outer limit of Nampo Harbour and the clearing inwards point. To await Pilot and further instructions before proceeding into Nampo, vessels must wait here. Information can be obtained via coastal radio Nampo (details in Nautical Wireless Service Standing Instructions), VHF is not available.

The anchorage at the pilotage waiting point is good, and the bottom is a thin layer of grey mud with clay underneath it. With wind from the S.W., there is a slight swell. Depth of water between 25 m. and 26 m., vessels should anchor with a chain length of at least 100 m. on the capstan and calculate adequate room for swinging, since there is a very strong tidal flow at all states of the wind and weather, running up to 4 kn. according to our observations.

The Pilot comes on board with clearance authorities. As pilot cutter (also no VHF) a normal tug is used, which in Winter is also used as an ice-breaker. The tug does not display a Pilot's flag, only the national flag. On the engine skylight the protective shield of an anti-aircraft gun is mounted. The hull of the tug is black, superstructure white with large Korean characters on the front of the bridge. Pilotage only available during daylight hours.

At clearance inwards point (pilotage boarding point) all binoculars, including bridge binoculars, and photographic equipment is gathered together and sealed for the total time in port. It is only released after the Pilot leaves the vessel on departure from the port. Likewise all echo-sounding, radar, direction finding equipment is sealed. The use of such equipment and filming and photography in North Korean ports is completely forbidden.

From the clearance inwards point the journey to the anchorage in front of the town is usually at full speed for most of the way. The anchorage is selected by the Pilot. The Pilot gives a good impression and from our observations knows his job well. However, one can only expect very rudimentary English from him. The same applies to the clearance authorities who have only a very few words of English. Clearance proceeds slowly but is carried out very correctly.

GENERAL INFORMATION: When at anchor in front of the town, further official authorities come on board. These check the whole ship, and go through the deck and engine room areas accompanied by one chosen member of the crew. Whilst the ship is being examined, all other crew members must remain in their cabins. The crew member accompanying the authorities must have his seaman's book with him as identification. When the authorities leave the ship finally they take the log away, and bring it back after a few days. Going ashore is permitted, but normally only in the port area. There is a seaman's hostel there. Travel further inland is possible, but only by giving 24 hours prior notice to Immigration via the ship's Agent. Also from time to time it is possible for crew members to fly out, but this must be arranged via the state ship's Agent. Visits to other ships is also possible, but only by giving 24 hours prior notice to Immigration. Radios and cassette recorders may not be taken on land or even on deck. Their use is only permitted within the ship and cabins. Fresh water and fresh food are available. In the roads water is delivered by water boats. Removal of rubbish is also possible by due notice through the Agent, and is even possible at the anchorage. Boat manoeuvring can likewise take place, but it must be reported, and may only take place in the vicinity of one's own ship.

For clearance inwards, the following documents are required:

7 crew lists.
1 list of items in possession of crew divided into gold, valuables, money, signature.
1 vaccination list.
1 maritime declaration of health.
1 passenger list, even if none on board.
1 narcotics list.
1 list of tobacco and personal goods.

The authorities bring a list of provisions with them and fill it out after declaration on board. Stores, such as alcohol and cigarettes are not sealed.

The health authorities place greatest score by cleanliness of toilets, refrigerators, food stores, kitchens, pantries, hospital and first-aid station.

Generally, it may be stated that the ship's broker and Agent speak and understand good English, but from the authorities normally one can expect no knowledge of Western languages.

The port roads offer anchorages for at least 15 sea-going vessels and enough room for swinging. However, in each case at least 170 m. chain should be allowed so that the vessel lies securely. The tidal current, in accordance with our observations, runs at a good 4 kn. The anchorage bottom is good and comprises grey mud. The

depths of water shown in the charts are, in accordance with our observations, roughly correct.

To the West of the port on the town shore there is a large shipyard with a mobile gantry crane over a slipway under construction. The slipway is about 150 m. long. Normally, the crane is at night directly on the bank (high water mark) is illuminated and thus constitutes a good bearing, particularly at night, since otherwise no long-range port lights are available.

The position of the crane is about 34°, 43′ 2″ N., 125° 24′ 1″ E. This area where the shipyard is located is designated as "Iron works" in chart 1656 map of Chinnampo Ko. The waterside there no longer has an inlet, but has been straightened out, and building work is still in process. See plan section of "Guide".

Likewise building works are in progress along the whole shore line between the shipyard and Nampo Ki. The shore line is also straightened here, and to all appearances has been developed as anchorage and repair yard for the Korean Navy. The 2 red/black buoys to the South of the iron works in the chart are no longer there. In this area there is only a small fixed buoy for guard boats and fishing craft.

In the middle of Shienshin island there is a 9-storey white hotel, which is a good landmark by day.

The tidal pole in front of Nampo Ki is no longer available. On the Southern end Nampo Ki is a bunker with a small house on top. The lower part of the house is pink and the upper part white. The West pier of Hibatsu To has 5 mobile port cranes, with lifting capacity up to 5 tons. At the Southern end of the pier are 2 new large warehouses. A floating crane is available. American type, and with a capacity of a good 160 tons. On the Western pier is likewise a small warehouse and 2 mobile port cranes (up to 5 tons). At the Southern end of the Western pier, are two berths for deep sea freighters with a good 9 m. water depth N.W. alongside. At the Southern part of the Western pier there is a good 8 m. of water along a length of some 210 m. At berth 1 (West pier, Southern berth), vessels up to 32 ft. draft can go alongside in normal water conditions. The depth of water in the inner part of the port could not be exactly determined, but judging by the vessels there must be about 5 m.

The old coal pier has a berth with at least 10 m. depth of water. East of this pier is also a further coal pier, equipped also with conveyor belts and about 10 m. depth of water alongside.

For berthing and unberthing there are one large and three small tugs available. The large tug acts as pilot craft and for the authorities to visit for clearance. It has been previously described.

From our observations, in the inner roads loading and unloading rarely takes place. There are only a few lighters available. As the port is overloaded, a long waiting time must always be allowed for (at least 14 days).

Medical care for crew members here is somewhat difficult, since one tries with all means to avoid having to have the crew member transferred beyond the confines of the port. In this connection, the doctor comes only once on board and a decision is taken as to whether or not a visit to hospital is necessary. For such a hospital visit one has further to go through the Agent to the authorities to obtain permission to go beyond the port area.

Below are some soundings of the roads. The vessel's draft = 8.35 m. Times in GMT. Wind in degrees and knots. First bearing is Nampo Ki, second bearing is the pier light, fixed red, in front of the east pier:

Weather	*Bearing*	*Time*	*Measured depth, taking into consideration vessel's draft*
			m.
15° 8 kn.	344°, 38°	2330	21.15
100° 8 kn.	355°, 42°	0130	19.93
360° 5 kn.	355°, 39°	0715	15.97
340° 5 kn.	343°, 37°	0900	18.41
070° 9 kn.	340.5°, 38.5°	2330	21.15
060° 5 kn.	343°, 39.5°	0100	21.46
Circulating 5 kn.	324°, 41°	0430	16.88
270° 13 kn.	339°, 37°	0000	21.46
300° 20 kn.	357°, 40.5°	0300	19.93
290° 10 kn.	345°, 40°	0840	18.43
Circulating 5 kn.	360°, 45°	0640	16.58

The pier structures have shuttering walls at the bottom, and the upper part is composed of equal-shaped stone blocks. At the mooring points fenders are composed of car tyres strung together on wires. The pier itself is in a satisfactory condition. Rail connection is available, and lorries may run along it. Water connections are also available. As the two cranes on pier berth No. 1 have very large beams, they are often positioned between two hatches and then work the two hatches alternately.

Loading and unloading is made difficult since it is not possible to obtain precise information as to the number of gangs, the time they will turn up for work, whether they will work with their own equipment or with cranes or with the mobile cranes available. It continually happens that suddenly port workers will appear or disappear, although shortly beforehand the Agent will inform to the contrary.

Telephone connections with Europe are possible. Connections can be obtained at the Seaman's Club in the port after 1600 hrs. On average it takes an hour to get through. It is advisable always to try to get a line to Moscow, and then ask for the required connection oneself in English from the Moscow operator. This noticeably hastens the connection. Comprehension is at times very bad, calculation of charges is dreadful, and one must be prepared to pay three or four times the price as would appertain for a similar call in Europe.

The local currency is the Won. 1 US dollar = approx. 2.15 Won. In the Seaman's Club all customary Western currencies can be changed into Wons.

Loading rigging can be positioned from the ship. If for example this has to be done at night, it must be discussed in advance with the Agent as to whether this has to be done by the ship or the port personnel. If the rigging is done by the port personnel, it must be checked carefully.

Clearance outwards occurs in the harbour roads and not at the pier. It takes a good 3 to 4 hours. Here also, all crew members must be in their cabins for checking purposes, and if the authorities require it, personnel must be available to guide them around the ship. On leaving the port, yet another list must be presented of currency which each crew member has spent in Korea.

They are only interested in foreign currency which has been exchanged for Wons in the Seaman's Club, since Wons may not be exported.

On the journey out from the port, the Pilot is accompanied by an assistant and member of the coastguard. The latter, shortly after coming on board, removes all seals from apparatus sealed when coming into port. The Pilot leaves the vessel at a position 38° 35′ 5″ N. and 124° 55′ 5″ E.

Herewith some soundings, taking into consideration draft of vessel. First bearing – pier light East side Hibatsu To – fixed red. Second bearing chimney at 38° 44′ 1″ N. and 125° 25′ 9″ E. (shown on the chart as Chy.)

GMT	*Weather*	*Bearing*	*Line sounding*
			m.
0030	Calm	338°	21.78
	1022 mb	43°	
0130	Calm	338°	
	1022	42°	24.79
0430	Changeable	335.5°	21.03
	1022	40°	
0530	250° 14 kn.		
	1022	312°	
		38°	24.18

NOTES

Please also advise Shipping Guides (Services) Ltd.

Korea (Republic of South)

GENERAL:

Foreign flags: Ministry of Transportation issued following instructions regarding entry and exit of foreign flag vessels in South Korea waters.

Item 1: Director, local Marine Bureau shall not grant permission on entry of foreign flag vessels under ownership of North Korea, North Vietnam and Red China.

Item 2: Director, local Marine Bureau shall not grant permission on entry of foreign flag vessel bound for North Korea or falling short of 90 days of departure from ports of North Korea.

Item 3: No restriction shall be applied on entry of foreign flag vessels unless same appertained to above clauses in accordance with internationally accepted practices.

CHINHAI: (Jinhae)

SHIPMASTER'S REPORT

LOCATION: 35° 09′ N., 128° 40′ E. (Town); 35° 07′ N., 128° 42′ E. (Fˌer).

DOCUMENTS:

8 Cargo Manifests.
8 Crew Lists.
4 Stores Lists.
3 Lists of Crew's Personal Effects. Tobacco/Spirits.
1 Vaccination List.
1 Health Declaration.
2 Currency Lists.

All documents are Standard Form. Although currency lists are required, there are no restrictions on importing or exporting either Korean or other currencies.

PILOTAGE: Pilotage not compulsory but recommended. Pilots are ordered through Agents and board vessel about 10 cables West of Kadok Do Island. VHF not available. No pilotage during night hours. Pilot boat is a wooden launch exhibiting International pilotage signals.

ANCHORAGE: Recommended 7 cables in Northwesterly direction off Tongdu Mal Lt. Ho. (Kadok Do.). Depth 25 m. Good anchorage is sand and mud. Quarantine anchorage is located about 1 mile N.N.W. from Chori Som Island.

RESTRICTIONS: Curfew effective from 2400 hrs. until 0400 hrs. daily.

HEALTH: Radio pratique not available. Pratique granted after inspection.

RADIO: Pusan Radio, call-sign "HLP".

TUGS: Required for mooring and unmooring. 2 tugs available of 600 and 1,000 h.p.

BERTHING: Chinhai is a principal naval base. Vessels drawing up to 17 ft. can be accommodated alongside inner harbour.

A buoyed channel with a depth of 36 ft. MHW leads from East of Madang So, to the only berth available for deep-sea vessels about 1.5 miles N.E. The berth, about 660 ft. in length, belongs to the Chinhai Chemical Co. and can accommodate vessels with a maximum draft of 34 ft.

Depth-sounding alongside showed at least 43 ft. 3 in. at HW. (officially 34 ft.). Distance from HW level to deck of pier 2.10 m. Bottom thick mud, and density 1025.

Vessels not exceeding 34 ft. saltwater draft berth 2 hours prior HW., and discharging commences immediately.

The berth is equipped with 1 grab only, and with conveyor-belt to nearby factory. The berth is used for discharging phosphate and potash, and very few general cargoes are handled. Discharge rate for phosphate is a maximum of 8,000 tons per 24 hours, with average of 6,200 tons.

STEVEDORES: Work is continuous throughout 24 hours including Sundays, and without mealbreaks.

MEDICAL: Attention available.

FRESH WATER: Available ex-barge from Masan, Min. 200 tons at US $3.00 per ton.

FUEL: Available ex-barge from Masan.

CONSULS: Nearest at Pusan.

REPAIRS: Minor repairs only.

GANGWAY/DECK WATCHMEN: Available and recommended.

REPATRIATION: Possible from Pusan.

CUSTOMS ALLOWANCES: No restrictions. Stores remain unsealed.

TIME: GMT plus 9 hours. No alterations.

AUTHORITY: Masan District Marine Bureau.

DAIPORI (Daepo): 38.10 N. 128.36 E.

Vessels bound for Daipori to load iron ore must first call at Mukho for quarantine and customs clearance.

Pilotage from Mukho to Daipori, distance of 50 miles, is not compulsory, but recommended.

INCHON: 37.29 N. 126.38 E.

DOCUMENTS: *Purser's Report:*

Arrival:

8 Crew Lists.
4 Cargo Manifests.
4 Stores Lists (Bond and shop).
4 Crew Customs Declaration.
4 Narcotics List.
4 Arms and Ammunitions List.
4 Ports of Call Lists (last 90 days).
1 Vaccination List.
2 Money Lists.
4 Passenger Lists (Marked Nil).
Derat Certificate or exemption.

All the above lists are typed on ship's plain paper.

Coasting on Korean Coast: At each port after the first, one requires the same papers but only two copies of each, with the exception of the Crew List, of which 5 copies are required.

Vessels with hazardous cargo must complete application to carry hazardous cargo and an application for anchorage of hazardous cargo vessel.

PILOTAGE: There are two Pilot stations for entering Inchon:

Ando – At the Ando Light some 38 miles off Inchon, position 36° 58′ N. and 126° 10′ E. located in entrance to Channel approaching Inchon from the Yellow Sea. 48 hrs. advance notice to Agent required for vessels requesting to meet Pilot at Ando. Customary boarding point for deep-draft vessels.

Palmido – Pilotage from Palmido to Inchon or Inchon to Palmido is compulsory. This Pilot station is at Palmido Island and Light, some 8 miles off Inchon, position 37° 21′ N. and 126° 31′ E.

ANCHORAGE: *Anchorage A.* Commercial anchorages available for 9 vessels. The position of each anchorage is as follows:

Number	*Position*	*Draft acceptable*	
A–1	37°29′56″ N. 126°36′05″ E.	42 ft.	
A–2	37°29′32″ N. 126°36′02″ E.	31 ft.	
A–3	37°29′15″ N. 126°35′44″ E.	39 ft.	
A–4	37°28′56″ N. 126°35′25″ E.	33 ft.	
A–5	37°28′33″ N. 126°35′20″ E.	29 ft.	
A–6	37°28′11″ N. 126°36′08″ E.	42 ft.	
A–7	37°27′57″ N. 126°35′30″ E.	28 ft.	(Coaster only)
A–8	37°27′48″ N. 126°35′04″ E.	42 ft.	
A–0	37°27′23″ N. 126°35′40″ E.	26 ft.	(Coaster only)

Only two anchorages, as specified below, are allocated for vessels carrying logs to be discharged rafting in stream:

A–2E	37°29′28″ N. 126°36′08″ E.	28 ft.
A–3E	37°29′07″ N. 126°36′02″ E.	32 ft.

A sudden congestion of log vessels could cause undue delay in waiting berth.

Anchorage B. Available for twelve vessels. This anchorage is used mostly for military cargoes, partly used as quarantine anchorage and/or for commercial and Army vessels awaiting berth.

Number	*Position*	*Draft*
B–1	37°27′22″ N. 126°34′59″ E.	35 ft.
B–2	37°26′54″ N. 126°34′45″ E.	39 ft.
B–3	37°26′24″ N. 126°34′35″ E.	37 ft.
B–4	37°25′55″ N. 126°34′24″ E.	37 ft.
B–5	37°25′27″ N. 126°34′13″ E.	37 ft.
B–6	37°24′58″ N. 126°33′58″ E.	40 ft.
B–7	37°28′00″ N. 126°35′25″ E.	34 ft.
B–8	37°26′30″ N. 126°35′11″ E.	35 ft.
B–9	37°26′01″ N. 126°35′02″ E.	36 ft.
B–10	37°25′32″ N. 126°34′51″ E.	40 ft.
B–11	37°25′08″ N. 126°34′36″ E.	42 ft.
B–12	37°24′28″ N. 126°33′50″ E.	44 ft.

Anchorage C. Available for eight vessels. This anchorage is used either for quarantine, vessels awaiting berth, or for vessels (military) discharging/loading dangerous cargoes.

Number	*Position*	*Draft*
C–1	37°24′29″ N. 126°34′26″ E.	26 ft.
C–2	37°24′07″ N. 126°34′17″ E.	30 ft.
C–3	37°23′07″ N. 126°34′08″ E.	35 ft.
C–4	37°21′21″ N. 126°33′55″ E.	42 ft.
C–5	37°24′37″ N. 126°34′52″ E.	42 ft.
C–6	37°24′10″ N. 126°24′45″ E.	30 ft.
C–7	37°23′47″ N. 126°34′36″ E.	42 ft.
C–8	37°23′25″ N. 126°24′21″ E.	42 ft.

RADIO: Address of Radio Station and call sign, Inchon Radio (HLC).

RESTRICTIONS: A peculiarity of Inchon port is the wide tidal range, i.e. max. 30 ft. difference between the low and high tides. Because of the extreme tidal range in Inchon Harbour and the strong tidal currents which result, the importance of maintaining strict surveillance of the vessel's mooring lines is emphasised. In this regard, the ship's officers and crew must be diligent in the performance of their duties. All vessels to discharge or load commercial cargoes should invariably obtain prior permission for berthing/anchoring from the Inchon District Marine Bureau at least 24 hrs. before arrival, then proceed to a nominated anchorage in the stream under direction of a compulsory Pilot.

HEALTH: The Quarantine Anchorage is located outside the harbour limit, at anchorages No. B–4, B–5, B–6, B–10, B–11, B–12, or C–1 to C–8, the position and depth of which are noted above. A vessel which sailed from an "Affected Zone" and not passed 10 days thereafter is compelled to receive 24 hrs. quarantine before entering the discharging anchorage. Quarantine is available only for the period from sunrise to sunset.

TUGS: Tankers berthing at Kyung In Energy Co. Terminal normally require three tugs for berthing and two for unberthing. All tugs operated by Korean Navy.

BERTHING: The port consists of the "Outer Harbour" and "Inner Harbour" which are separated by two islands called Wolmido and Sowolmido, which are connected by a bank. The Outer Harbour, comprising downstream of the Han River, is used as Stream Anchorages for commercial ocean steamers.

A new tidal basin constructed in the area of the present inner harbour. The dock will include entire area of the present Inner Harbour which would provide a total 1,400,000 sq.m. of water area; 3,820 m. of berthing pier including 1,160 m. of (Container Pier and max. 12 m. or 39 ft.) depth. This new dock is directly connected with the terminal of the Seoul-Inchon Highway. After completion the new dock would accommodate a total of 240,000 tons of vessels alongside the piers simultaneously, as follows:

50,000 tonners 1 ship
20,000 tonners 3 ships
10,000 tonners 6 ships
8,000 tonners 8 ships
5,000 tonners 1 ship

TANKERS: *Kyung In Energy Co. Terminal*

Designed for 50,000 d.w.t. over 50 ft. depth at LW. The marine terminal is situated at 37° 30′ 12″ N. 126° 36′ 19″ E. The face of the dolphin fendering system is on a bearing of approximately 347° true.

The vessel will be berthed alongside the main and secondary berthing dolphins with the vessel's hull against the fenders, which are an integral part of the dolphins. All the dolphins are equipped with electric capstans and quick-release mooring hooks. A navigation light and fog horn is located on the Southern Exterior Mooring Dolphin (Exterior Mooring Dolphin No. 1). A navigation light is also located on Exterior Mooring Dolphin No. 2 on the N. side of the terminal facilities. When a vessel of the 50,000 d.w.t. class is moored to the terminal, the bow and stern lines will perform the function of the breast lines. Therefore, the spring lines must be led out through the chocks on board which will provide sufficient leads ahead and astern to restrict the movement of the vessel along the face of the dolphins. In this regard, due consideration must be given to the rise and fall of the tide.

Loading Arms: There are three "Continental-Emsco" loading arms situated on the loading platform. The one to the extreme North and the middle one of the three are for the discharge of crude oil. Both are fitted with 16-in. swivel connections having 150 pound flanges. The loading arm to the extreme South is for the loading of naphtha and is fitted with a 12-in. 150-pound flange. The loading arms are designed for a working pressure of 100 p.s.i.

During the connecting and disconnecting of the loading arms to the vessel, the loading arms will be manipulated and positioned by shore personnel. During the period of time when the loading arms are connected to the vessel's manifold, they will be in the "float" position and will be self-adjusting.

General Information:

Under no circumstances should any member of the ship's crew activate or operate the controls for the loading arms. Authorised shore personnel will perform this function.

The "Continental-Emsco" loading arms will tolerate only a min. amount of transverse movement by the vessel in either direction. In other words, the movement of the vessel along the face of the dolphins is restricted. For this reason, it is mandatory that the vessel be kept in position, and that the mooring lines be properly tended. It is the responsibility of the vessel to maintain sufficient deck crew on duty to properly tend the mooring lines, and to ensure that the vessel maintains proper position relative to the loading arms.

Discharging Crude Oil:

The distance from the loading platform to the tanks is approximately 2.2 kms. (1.4 miles). A 30-in. block valve is situated near the location where the trestle joins the island causeway. Block valves are also installed in the pipe-line system near the inlet to each of the crude oil storage tanks.

There are three crude oil storage tanks on Yul Do Island. Each has a capacity of 200,000 barrels. The tanks are 48 ft. in height with an overflow at 46 ft. There are no check valves in the crude oil pipe-line system. Thus, the vessel must take precautions against back-filling due to head pressure on the system.

It may be necessary to discontinue the discharge of crude oil when changing from one tank to another ashore. The vessel will be given adequate notice for the stoppage of the ship's cargo pumps.

Ballast:

It is unlawful to discharge dirty or oily ballast water into the waters of Inchon Harbour. Severe penalties may be invoked against the vessel by the Republic of Korea in the event of pollution of harbour waters.

The centre loading arm provides a dual function. It is used for discharging ballast from the vessel as well as for the discharge of crude. The ballast flows through a 12-in. pipe-line to the ballast storage tank on Yul Do Island. This tank has a capacity of 30,000 barrels, and is situated about 1.1 kms. (0.68 miles) from the loading platform.

Loading Naphtha:

Naphtha is stored in two mainland storage tanks each of which has a capacity of 125,000 barrels. Three pumps provide the flow for shipping naphtha. Each pump has a capacity of 1,600 g.p.m. (2285 BHP). The pumps are on independent circuits. Thus, the loading rate of the naphtha can be governed by the number of pumps used.

The pipe-line from the pumps to the loading platform is 18 in. and is reduced to 12 in. on the loading platform. A block valve is located in the 18-in. pipe-line near the point where the island causeway joins the trestle. Another block valve is provided in the 12-in. pipe-line on the loading platform.

The pumps which are used for shipping naphtha can be stopped from the Marine Terminal Loading Platform, but they must be started from the mainland. Under normal conditions the vessel's deck officer on watch should give the terminal personnel 10 minutes notice prior to requesting that the loading rate be reduced, and the same notification prior to the completion of loading. As previously stated, the pumps can be stopped from the loading platform in case of an emergency.

The approximate distance from the mainland naphtha storage tanks to the loading platform is 5.4 kms. (3.35 miles).

Regulations:

1. Sufficient number of crew members are to be on duty at all times to properly tend the mooring lines and ensure that the position of the vessel is maintained alongside of the dolphins.
2. Except in the case of an emergency, the deck officer on duty shall give the terminal personnel at least 10 minutes notice prior to changing the loading rate of the naphtha, and at least 10 minutes notice prior to the completion of loading cargo.
3. Under no circumstances is the vessel's main propulsion engine to be disabled, or are any repairs to be undertaken while the vessel is moored to the marine terminal.
4. The vessel's fire-fighting equipment is to be kept ready for immediate use. A sufficient number of hoses shall be led out forward and aft to provide full deck coverage.
5. Lights must be provided by the vessel to illuminate the water area in the vicinity of the bow, stern and off-shore side.
6. Smoking will be permitted in such *Interior* spaces as may be designated by the vessel's Master. However, smoking will not be permitted on any open deck areas.
7. The loading of ship's stores and supplies will not be permitted during the time ballast is being discharged, or naphtha is being received by the vessel.
8. Ullage hole screens are to be used at all times while bulk oil transfer operations are in progress.
9. Galley ranges, unless electric, are not to be used while the vessel is loading naphtha.
10. Except for the period of time actually required for passengers to embark or disembark from a launch, no boats, launches or vessels will be permitted to moor alongside a vessel which is berthed at the marine terminal.
11. Safety practices which are common to marine terminals on a world-wide basis will apply.

Honam Buoys: Lat. 37° 29′ 00″ N. and Long. 126° 36′ 03″ E., draft acceptable 30 ft., at East side of A–3 anchorage. This berth is the private facility of the Honam Oil Refinery Co. (joint company with Caltex) for discharge of their own petroleum products. Consisting of 4 mooring Buoys and sub-marine pipe-lines.

Union Oil Terminal, 42 ft. depth alongside. Berthing/unberthing in daytime slack water only.

MEDICAL: Launch is provided in emergency call to evacuate sick men. Modernised hospital is available. Provincial and Christian hospital.

STEVEDORES: There are 12 stevedoring companies with:
162 wooden barges (16,200 tons) – total capacity 34,200 tons.
60 steel barges (18,000 tons) – total capacity 34,200 tons.

DENSITY: Varies between 1022 and 1024.

FRESH WATER: Can be supplied by lighter, max. quantity 250 tons in 10 hrs. Earliest advance notice essential.

FUEL: Available by barge only.

CUSTOMS ALLOWANCES: One carton cigarettes or one lb. of tobacco, and one bottle wine or spirits allowed, each man.

IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.

REPATRIATION: Facilities for crew changes or repatriation.

GANGWAY/DECK WATCHMEN: Ship security guard is required. Stream charge 30% additional.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CONSULS: None.

REPAIRS: Deck and engine repairs possible. Floating cranes up to 60 tons capacity.

AIRPORT: 20 miles from port. Regular flights to Japan.

POLICE/FIRE/AMBULANCE: Police Officer (2) 0568; Fire Depot (2) 119; Medical Centre (2) 2535.

TELEPHONES: Portable communication facility is available.

TIME: Korean Standard Time. 9 hrs. ahead of GMT. No alterations during year.

HOLIDAYS: 1st January, 1st March,, 5th April, 6th June, 17th July, 15th August, 3rd October, 9th October, 24th October, 25th December.

GENERAL: Tide condition is critical, swift currents (high tide: 9 to 10 m.) special attention is required.

ACCOMMODATION LADDER: Essential for Port Officials on entry. Also for tanker berth no access allowed through plant. Rig on port side.

SHORE LEAVE: Launch service required, also local curfew ashore 2400 to 0400 hrs., on launches and craft 1900 to 0600 hrs.

DELAYS: Can be caused by bad weather.

SHIPMASTER'S REPORT

Approaches: Inchon, the port for Seoul, the capital of South Korea, is situated in Lat. 37° 28′ 20″ N., Long. 126° 37′ 09″ E., and is approached from the South through the Yellow Sea. From Kyoknyolbi Do (Clifford Is.) LH. a course should be set to pass one mile North of An Do LH., in the vicinity of which the pilot boat will be waiting. Pilotage is not compulsory from this point but is

recommended and the Pilot should be ordered at least 48 hrs. before arrival through the Agent, in Inchon.

From An Do vessels proceed via the Dong Soodo (East Channel) which is very winding and narrow in places. All lighthouses on this part of the Korean coast appear to show lights of very low power, the range of visibility appears to be about one quarter of that shown on charts and in the Adm. Light List.

Pilotage is about 38 miles to the Inchon anchorage for deep-sea vessels, about three hours steaming. The Pilot was good even in thick fog, and all Pilots seem to speak reasonable English. The Pilot launch is fitted with VHF.

The anchorage is extensive, with room for about 30 ocean-going vessels, holding ground is good and no trouble was experienced in currents of 5 knots, although even stronger currents are experienced at Spring tides.

The port: Can be divided into three sections according to location and function; the inner dock, outer harbour and Northern shoreline.

The Inner Harbour basin is presently operated for the accommodation of cargo ships up to 50,000 d.w.t. The outer harbour, of new construction, is largely for coastal and fishing vessels of less than 500 tons, and is located just outside and to the S.W. of the inner basin.

The Northern shoreline, North of the closed basin has unloading facilities at many private plants. These are lighter berths.

With the completion, in May 1974, of the new lock system and second tidal basin, the berthing facilities in the port have changed the cargo handling capacity from 1,420,000 tons to 6,270,000 tons per year by providing 3,820 m. length of quay and container berths.

Within the inner harbour is the first tidal basin (the older lock system dating from 1923). This basin is accessible through the new lock system.

Lock Particulars:

	For 50,000 d.w.t. vessels	*For 10,000 d.w.t. vessels*
Lock chamber	1 base	1 base
Total length	381 m.	288.25 m.
Usable length to		
Inner gate	280 m.	183 m.
Outer gate	310 m.	208 m.
Width	36 m.	22.5 m.
Height	18.5 m. from sill	18.5 m. from sill
Height	19.0 m. from bottom	19.0 m. from bottom
Number of gates	3 sets	3 sets
Length of gates	38 m.	24.5 m
Width of gates	8.3 m.	6.4 m.
Height of gate	18.5 m.	18.5 m.
Weight per gate	1,050 tons	590 tons
Time required for opening–closing	5 min.	3 min.

The Inner Harbour has berths for 27 vessels as summarised below:

Pier	*Length* m.	*Berthing capacity* d.w.t.	*Cargo type*
Pier No. 1	454	4,500 (3) vessels	Dry cargo
Pier No. 2	1,425	2,000 (4) ,,	Dry cargo and bulk cargo
		20,000 (1) vessel	,, ,, ,, ,,
		8,000 (5) vessels	,, ,, ,, ,,
Pier No. 3	1,250	8,000 (4) ,,	Steel products
		10,000 (2) ,,	,, ,,
		20,000 (1) vessel	Heavy cargo
Pier No. 4	1,160	10,000 (1) vessel	Dry cargo and containers
		20,000 (1) ,,	,, ,, ,, ,,
		30,000 (1) ,,	,, ,, ,, ,,
		40,000 (1) ,,	,, ,, ,, ,,
		50,000 (1) ,,	,, ,, ,, ,,
Pier No. 7	786	50,000 (2) vessels	Bulk grain

Equipment in use (August 1974): Tug boats, 2 of 2,000 h.p.; 3 of 3,600 h.p.; Floating cranes, 1 of 75 tons capacity; 1 of 30 tons capacity; Container crane, 1 of 30 tons capacity. Bulk Grain: Pier 7 elevator with conveyor facilities; capacity 800 t.p.h.

Additional equipment planned: Tug boats, 4 of 7,000 h.p. Floating cranes, 1 of 100 tons capacity; 1 of 70 tons capacity. Container cranes, 4 of 35 tons capacity.

Further expansion is planned for the Northern side of the inner harbour. When completed there will be an additional 800 m. of quay at Pier 6 and 780 m. at Pier 8. This will add a total of 10 new berths for vessels from 5,000 to 50,000 d.w.t.

The Port of Inchon is administrated, managed and operated by the Government, represented by the Inchon District Marine Bureau (IDMB) in the Ministry of Transportation.

Decisions on administration and operation of the port, particularly to daily activities, are made by the Director, District Marine Bureau of the above Ministry.

Port activities, such as cargo in transit sheds, or in storage and port facilities of Government property, are in the custody of the Association of Port Management. This Association is formed from members of the various port users associations and was formed in 1972, under the control of the Minister in charge of Port Operations.

Port service companies and Stevedoring companies are still privately owned.

Repatriation and relief of crew members was made without any apparent difficulty. Flights to and from the U.K. being routed through Tokyo.

SHIPMASTER'S REPORT: *December, 1975:*

The Ando pilot vessel is equipped with VHF Channel 16. If berthing in the tidal basin it is necessary to use vessel's sewage tank or sanitary tanks provided from ashore. Immigration require 2 copies of crew list forwarded before arrival to Agents, also require ports of call list for previous 3 months. If any crew member is caught smuggling in South Korean ports the vessel is liable to be detained indefinitely.

AUTHORITY: Inchon Marine Bureau.

KUNSAN (including Changhang): 35.55 N. 126.45 E.

The Port of Kunsan is situated on the Southern mouth of the Kum River which flows into the Yellow Sea, and North Changhang.

DOCUMENTS:

6 copies Report (Ent/Departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
3 copies Passenger Luggage List.
2 copies Store List.
9 copies Manifest (Dis./Loading) only.

NOTICES: All vessels bound for Korean ports should give an ETA to the local Agents 27 hours prior arrival. This is essential to enable the Agents to notify the Port Authorities and arrange Pilot if necessary.

RESTRICTIONS: Vessels should enter during daylight hours only. Many small Korean fishing and cargo boats in this area display dim navigation lights or none at all at night. Pilot is not compulsory but all vessels calling at this port recommended employ a Pilot in view of the hazardous channel and tidal difficulties. Controlling depth 8 ft. at Bar. Keel clearance of 2 ft. required.

PILOTAGE: The Pilot station is situated at the Southern side of Piun Do (Hiyo To) Island the correct position of which is at 35° 56′ N. and 126° 27′ E.

The boarding point near Piun Do is about 14 miles from Kunsan. Pilot to be ordered at least 24 hours in advance. Pilots cannot board in rough weather. Due to constantly changing bottom conditions, vessel should not attempt to enter without Pilot.

ANCHORAGE: Outer anchorage about 5.5. miles West of Kunsan for vessels drawing up to 28 ft.

Inner anchorage off Kunsan suitable for vessels of 21 ft. draft.

RADIO: Kunsan Radio, call sign HLN operating on 500 and 484 kHz.

MAX. SIZE: Draft 18 ft. to 27 ft. dependent on height of tide.

TUGS: 5 tugs with respective capacity of 300 h.p. (1) 150 h.p. (2) and 80 h.p. (2) are available. 1 floating crane with capacity of 30 tons owned and managed by the Korea Dredging Corp. is available.

BERTHING: The port is controlled by Kunsan District Marine Bureau and all vessels come under jurisdiction of Kunsan Custom House. The anchorages in stream inner harbour can accommodate 1 or 2 vessels less than 1,000 gross tons, and outer anchorage (Yubudo Anchorage) accommodates 1 ocean going vessel drawing about 28 ft. There are 5 pontoon piers (3 for Kunsan and 2 for Changhang) each of which can accommodate an ocean-going vessel with maximum draft of 27 ft.

STEVEDORES: There is 1 stevedoring company with 14 wooden barges, 3 steel barges and 3 tug boats. Discharging capacities: average records per day of 24 hours: coal 1,500 tons; grain and wheat 1,600 tons; fertilizer 1,300–1,400 tons; cement 1,000–1,100 tons; lauan log 500,000 B/F. Daytime only.

MEDICAL: Crew members should be in possession of health certificate showing vaccinations for smallpox and typhoid. In case health certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.

CURFEW: In Korea the curfew is still effective from 2400 to 0400 hrs. every day.

TIME: Korean Standard Time, GMT plus 9 hours.

HOLIDAYS: Public Holidays – New Year (January 1-3); Independence Movement Day (March 1); Labour Day (March 10); Arbor Day (April 5); Memorial Day (June 6); Constitution Day (July 17); Liberation Day (August 15); Nation's Foundation Day (October 3); National Alphabet Day (October 9); United Nations Day (October 24); Christmas Day (December 25). (Can be worked if requested.)

Local Holidays. Work cannot be carried out on Lunar New Year's Day and the Moon Festival, about 15th August.

SHORE LEAVE: Crew shore passes will be issued by Port Immigration Office.

AUTHORITY: Kunsan Maritime Bureau.

MASAN: 35.11 N. 128.33 E.

DOCUMENTS:

6 copies Report (Ent/Departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
2 copies Store List.
9 copies Manifest (Dis./Loading only).

PILOTAGE: Not compulsory, but inadvisable to enter without Pilot. Pilots available at Pusan, to be ordered by Agent at least 24 hours in advance. Pilot station at Kaduk Do. A berthing/unberthing pilot available at Masan.

NOTICES: All vessels bound for Korean ports should give ETA to the local Agents 27 hours prior arrival. This is essential to enable the Agents to notify the Port Authorities and arrange a Pilot if necessary.

MAX. SIZE: The maximum draft admissible for entrance is 26 ft.

TUGS: 1 tug boat of 1,000 h.p., owned and managed by Masan District Marine Bureau available. Also 6 private tugs.

ANCHORAGE: Mooring capacity at anchorages: A-1, A-2, A-3 Depth 30 ft.; A-4, A-5, A-6 Depth 24 ft.; A-7, A-8 depth 23 ft. Quarantine Station A Depth 36 ft.

BERTHING:

	Depth (m)	Length (m)	Max. Size	No. of Berths
Pier No. 1	8.0	445	8,000	2
Pier No. 2	5.0	385	500	2
Pier No. 3	11.0	210	20,000	1
	11.0	210	20,000	1*
Pier No. 4	11.0	240	20,000	1*
Electric Power Plant Pier	6.5	115	3,000	1
Central Lighters Wharf	1—2	1,022	—	—

*Under construction.

STEVEDORES: Korea Express Co., 8 barges (1,000 tons), 1 tug (145 h.p.); Hyopshin Stev. Co., 6 barges (1,000 tons), 1 tug (180 h.p.).

Discharging capacity – average records per day (24 hours).

Coal	in bulk	1,000 tons
Cement	in bags	1,000 tons
Grain & Wheat	in bulk	1,000 tons
Fertiliser	in bags	1,000 tons
Steel Scrap	in bulk	750 tons

MEDICAL: Crew members should be in possession of health certificate showing vaccinations for smallpox and typhoid. If the health certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.

CURFEW: In Korea the curfew is still effective from 2400 to 0400 hrs. every day.

TIME: Korean Standard Time. GMT plus 9 hours.

HOLIDAYS: Public Holidays:

New Year (January 1–3); Independence Movement Day (March 1); Labour Day (March 10); Arbor Day (April 5); Memorial Day (June 6); Constitution Day (July 17); Liberation Day (August 15); Nation's Foundation Day (October 3); National Alphabet Day (October 9); United Nations' Day (October 24); Christmas Day (December 25).

SHORE LEAVE: Crew shore passes will be issued by Port Immigration Office. Extension of shore passes should be made every 72 hours.

AUTHORITY: This port is controlled by Masan District Marine Bureau, under jurisdiction of Masan Custom House.

MOKPO: 34.37 N. 126.23 E.

DOCUMENTS:

6 copies Report (Ent./Departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
3 copies Passenger Luggage List..
2 copies Stores List.
9 copies Manifest (Dis./Loading only).

PILOTAGE: Pilots stationed at Kasado Island, 34° 27′ N. 125° 02′ E. 30 miles from Mokpo. 24 hours notice to Agent required to arrange Pilot. Although not compulsory, vessels strongly recommended not to enter without Pilot.

NOTICES: All vessels bound for Korean ports should give an ETA to the local Agents 27 hours prior to arrival. This is essential to enable the Agents to notify the Port Authorities and arrange a Pilot if necessary.

RESTRICTIONS: Mokpo is located at the South-Western end of the Korean peninsula. The port is at the mouth of the Yungsan River which flows through the Yungsan peninsula. Kasako Island protects this port from heavy winds and swell. The Yungsan River provides 5 anchorages where 5 vessels of Liberty type can berth at a time. The port is 30 miles from the pilot station off Ksasdo Island, in position 34° 27′ 20″ N. and 125° 02′ 05″ E.

Tide Information: max. tide level at high water 4.5 m.; min. tide level at high water 2.8 m.; average tide level at high water 3.5; Max. tide level at low water 0.5 m.; Min. tide level at low water 1.3 m.; Average tide level at low water 0.7 m.

ANCHORAGE: Five anchorages in depths from 11 m. to 20 m. Anchorage Nos. 2, 3, and 4 are better than No. 1 and 5 for discharging cargo because No. 1 is sometimes very dangerous due to strong tidal currents.

TUGS: Three tugs available, up to 150 h.p.

RADIO: Mokpo Radio. Call sign HLM operating on 500 and 484 kc/s.

BERTHING: Sam Hak Do Pier, length 168 m. and width 18 m., where only one 8,000 ton ocean-going vessel can operate in 13 m. depth.

STEVEDORES: There are 3 stevedores companies with 28 wooden barges (1,680 tons), 7 steel barges (1,200 tons) and 3 tug-boats.

MEDICAL: Crew members should be in possession of Health Certificate showing vaccinations for smallpox and typhoid. In case the Health Certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.

FRESH WATER: Available at rate of 150 tons per day. 24 hrs. notice required.

CURFEW: In Korea, the curfew is still effective from 2400 to 0400 hrs. every day.

TIME: Korean Standard Time, GMT plus 9 hrs.

HOLIDAYS: Public Holidays; New Year (January 1st-3rd); Independence Movement Day (March 1st); Labour Day (March 10th); Arbor Day (April 5th); Memorial Day (June 6th); Constitution Day (July 17th); Liberation Day (August 15th); Nation's Foundation Day (October 3rd); National Alphabet Day (October 9th); United Nations Day (October 24th); Christmas (December 25th). Work can be arranged on all above holidays. Local Holidays; No work can be done on Lunar New Year or on the Moon Festival about August 15th.

SHORE LEAVE: Crew shore passes will be issued by Port Immigration Office. Extension of shore passes should be made every 72 hrs.

AUTHORITY: Mokpo District Marine Bureau.

MUKHO: 37.33 N. 129.27 E.

DOCUMENTS:

6 copies Report (ent/departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
3 Passenger Luggage Lists.
2 copies Store List.
9 copies Manifest (dis./loading only).

PILOTAGE: Compulsory. Pilotage area from quarantine station to inside boundary line of harbour limits.

RESTRICTIONS: Vessels bound for this port should anchor at the out-harbour awaiting Quarantine Inspectors, and are required to radio the Harbour Master (6MF2/500 kc/s) the following, free of charge, at least 12 hours prior to the ship's arrival at the Quarantine Station, viz.: 1. Name and nationality of vessel; 2. Exact ETA at out-harbour (Quarantine or Pilot Station); 3. Maximum draft on arrival; 4. Description and quantity of cargo and the number of passengers, and so on.

ANCHORAGE: In Outer Harbour with max. draft 40 ft., 20,000 to 30,000 G/tonners, possible anchor near Quarantine Station, however, cargo work not possible due to no cargo gear and bad weather except under special circumstances.

TUGS: Two tugs available of 320 h.p. and 650 h.p.

BERTHING: Central Pier depth 18 ft. 05 in.; Coal Pier Conveyor A depth 21 ft. 00 in.; Conveyor B depth 21 ft. 09 in.; Stream berth depth, 21 ft. 00 in.; Ssangyong Pier depth 26 ft. 10 in.; Ssangyong Pier depth 31 ft. 05 in.

Generally speaking, the loading berth at Coal Pier, Central Pier and Ssangyong Pier, is determined by ship's arrival order. However priority is often given to local vessels carrying domestic coal when domestic coal transportation is urgently required which could cause a rather prolonged wait. Therefore, all vessels bound for this port for coal/graphite/cement are recommended to contact Agents well in advance to ascertain the port conditions.

STEVEDORES: One stevedoring company: Korea Express Company Limited.

MEDICAL: Crew members should be in possession of health certificate showing vaccination for smallpox and typhoid. In case health certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.

FUEL: Nearest supply point is Ulsan, 140 miles away.

CURFEW: In Korea the curfew is still effective from 2400 to 0400 hrs. every day.

TIME: Korean Standard Time – GMT plus 9 hours.

HOLIDAYS: Public holidays:

New Year (January 1–3); Independence Movement Day (March 1); Labour Day (March 10); Arbor Day (April 5); Memorial Day (June 6); Constitution Day (July 17); Liberation Day (August 15); Nation's Foundation Day (October 3); National Alphabet Day (October 9); United Nations Day (October 24); Christmas Day (December 25) Work can be done.

Local Holidays: No work can be done on Lunar New Year's Day and on the Moon Festival about August 15th.

SHORE LEAVE: Crew shore passes will be issued by Port Immigration office. Extension of shore passes should be made every 72 hours.

AUTHORITY: District Marine Bureau.

POHANG: 36.01 N. 129.24 E. **(See Plan)**

DOCUMENTS: See 'Pusan''.

PILOTAGE: Compulsory, two licensed pilots available.

ANCHORAGE: In roadstead, open to N.E. in depth 36–40 ft. Good holding ground for cargo operations.

TUGS: Two tugs available of 250 h.p.

BERTHING: New pier for discharging iron ore cargoes. One berth for bulk carriers up to 50,000 d.w.t. and one berth for smaller vessels up to 5,000 d.w.t. Total length of pier 2,340 m. Operated by Pohang Composite Iron and Steel Works.

FRESH WATER: Small amounts up to 50 tons, may be barged from Ulsan, 56 miles away. See also ''Shipmaster's Report''.

SHIPMASTER'S REPORT: *Pilot:* Usually boards the vessel after anchoring in position 36.03 N., 129.26 E.

Anchorage Position for Quarantine Clearance: Same as for Pilot.

Berthing; Entry and departure are only permissible during daylight hours, vessels are not allowed to berth at night.

Fresh Water; Available at all times ex-wharf without limit on quantity taken.

SHIPMASTER'S REPORT: May 1975.

Approaches: There are no British Admiralty Charts covering this port. The coastal approach to Yongil Man can be made on Chart BA 3666, thereafter an American Chart No. 95166 (formerly HO 3257) is suitable for making the approach to the quarantine anchorage.

There are no offlying dangers, and depths shelve gradually from the entrance to the head of the bay.

A good lookout should be maintained for fishing nets which are very profuse.

Quarantine: Port Health officials board at the quarantine anchorage

– Position 36° 02′ N., 129° 26′ E., in a depth of 19 m. No radio pratique available.

If vessel arrives at night, officials board at daybreak next morning. No port movements during the hours of darkness.

Notice of Readiness: Accepted at time of free pratique granted.

Pilotage: Pilot boards with port health at anchorage. Pilot stated that our vessel 72,072 d.w.t. was too big for the port, which was designed for max. size 50,000 d.w.t. However, no difficulties experienced, berthing in calm weather conditions. Berthing and sailing in daylight hours only.

Entrance Channel: Entrance to harbour is made via dredged channel, commencing between two buoys, (No. 1 & 2), about 200 ft. apart, situated about 1 mile off Southern breakwater head.

Axis of approach channel, from midway between the buoys to midway between the breakwater heads, is a straight line 259° True.

Dredged depth in the channel is stated to be not less than 13 m. However, according to the echo sounder, depth beneath keel was never less than 11 ft. until vessel entered the harbour basin, when further depth recording was impossible due to 'noise' from propeller wash caused by astern movements, obscuring echo sounder signal propagation. As the vessel's draft was 36 ft. 08 in. min. depth of water was therefore 47 ft. 08 in. = 14.5 m. approx. This was verified on the outward passage. The 13 m. min. probably refers to the basin within the harbour entrance.

Tide: The rise and fall of tide is only about 1 ft.

Tugs: There are only 2 tugs available, both very weak. Pilot kept complaining that the tugs were inadequate for a vessel of this size, which was a fair assessment.

Berth: See sketch (Plan) for depth alongside POSCO mineral quay. Min. depth at berth stated to be 12 m.= 39 ft. 04.5 in. Max. permissible draft 11.2 m. = 36 ft. 09 in. Density was 1026.

Loaded vessels berth head in, starboard side alongside. Can prepare accommodation ladder starboard side before arrival.

The face of the quay is protected by permanent heavy-duty rubber fendering.

Moorings: A min. of 3 headlines, 1 breastline, and 2 backsprings, each end, is recommended. Although the port is well sheltered from the prevailing W. – N.W. winds, it is wide open to the N.E. from which strong gales can suddenly develop.

Discharge: 2 modern transporter grabs discharge into a conveyor belt system. Discharge rate overall about 1,100 t.p.h., on a 24 hour basis. Holds were well swept clean on completion.

A meticulous draft survey was held upon arrival and after completion, to verify Bill of Lading.

Fresh Water: Plentiful supply from pipe line on the quay. Apply to Agent for services of waterman.

Customs: The bond is not sealed, but a Custom's Officer is stationed on board at the gangway throughout.

Curfew: A curfew is in operation in South Korea, from 2400 hrs. to 0400 hrs.

Shore Leave: The crew are not allowed to pass through the steelworks, going ashore. A liberty boat must be hired, which plies between the end of the quay and Pohang town pier, about a half hour run.

Last boat returning to ship at night leaves the town at 2200 hrs. First boat in the morning leaves at 0600 hrs. Shore passes issued on arrival.

Documents: The following arrival papers are required:—

Quarantine Declaration and Vaccination List.
14 Crew Lists.
3 Stores Lists.
3 Crew's Effects Declarations.
10 Cargo Manifests in Metric Tons.

N.B. The cargo manifests can be made up on board by typing on plain paper, but quantities must be stated in *metric tons.*

Agent: Pohang Shipping Agency Co. (Teladdress "Pohangship Pohang"), are sub-agents for Young Jin Shipping Co. Ltd; Seoul, (Teladdress "Three Young Seoul"). The Agent was very helpful and attentive.

Repatriation: Possible. A complete Chinese crew change (25 men) was carried out during vessel's stay, plus one officer to the U.K.

Communications: There is no Telex system in Pohang. Cables are passed by telephone to General Agents in Seoul, for onward transmission. There is no problem arranging telephone communication with the U.K., but it is not possible to reverse the charges. (call collect). Average waiting time about 1 hour.

Repair Facilities: Most engine and hull repairs can be carried out. There are 4 repair firms available, but it is advisable to take the Agent's advice as 3 of these firms are very small, with limited manpower. Materials not immediately available, can be brought by road from Pusan, about 3 hours journey. Lloyd's Hull & Engine Surveyors based in Pusan.

Future Port Developments: Work is at present in progress on the construction of a new bulk-handling facility, seaward of the present installation. The approach channel to the new facility will have a min. depth of 16 m., and the berths will be capable of taking vessels of up to 100,000 d.w.t., at drafts of up to 14 m. Scheduled for completion in 1977.

SHIPMASTER'S REPORT: July 1975

Port Limits: By a line drawn from 36° 04′ 10″ N., 129° 25′ E., to 35° 59′ 50″ N., 129° 27′ 30″ E., Korean Chart No. 135 Pohang Harbour and Approaches refers.

Documents: See "Pusan" (Busan).

Pilotage: Pilots board either at the Quarantine anchorage or off the channel entrance as required. Pilotage within the harbour breakwaters is compulsory. No VHF available but Pilots are equipped with transceivers for port operations.

Anchorages: In roadstead, open to the N.E. in depths of 15 to 20 m. – Numerous mooring buoys and marker buoys for reclamation are in the vicinity. Vessels should anchor to seaward until a Pilot boards.

Restrictions: Vessels may arrive and sail from the roadstead at any time, but in daylight only if using the inner harbour.

Max. Size: No restriction in the roadstead, 12 m. in the inner harbour.

Pratique: It is advisable to give advance notice of pratique. Pratique is granted to vessels anchored in a circular quarantine anchorage, radius 500 m., the centre of which is located in 36° 03′ 20″ N., 129° 25′ 25″ E.

Radio: All messages to Pohang should be routed through Busan Radio HLP.

Tugs: A number of tugs are available, the 2 largest being 2,500 h.p. each. Tugs join the vessel at the breakwater entrance.

Approaches: Vessels using B.A. Chart 3666 should find flashing seabuoy in the entrance to Yon Iru Bay located in position 36° 05′ 50″ N., 129° 30′ 35″ E., and from there steer a course 227° True (6.8 miles) to the inner harbour fairway entrance, which is marked by two buoys marked 1 and 2 and QK FL. G. and FL. R. 3 seconds, respectively each visible 5 miles. An anchorage should be found close seaward of the entrance buoys whilst awaiting a Pilot.

Berthing: A number of inner harbour berths are available at depths ranging between 8 and 12 m. datum.

The entrance fairway has a min. depth of 12.4 m. Harbour developments are still in progress.

Stevedores: Arranged through Agents. Advance notice desirable.

Medical: Available.

Fresh Water: Limited quantities available by barge, if advance notice given.

Fuel: None.

Consuls: None.

Repairs: Only repairs of a minor nature can be undertaken.

Drydock: None.

Surveyors: Lloyds available from Busan.

Gangway/Deck Watchmen: Not required.

Opening/Closing Hatch: By Crew.

Customs Allowance: See "Busan".

Repatriation: Not available.

Airport: Busan (Suyeng).

Shore Leave: Permitted, but even if vessel berthed alongside, launch service must be used.

Identification: Shore Passes.

Curfew: 2400–0400 hrs.

Developments: Considerable reclamation and harbour developments in progress.

General: Last call of vessel was July 1975. B.A. Chart No. 3666 does not show the new port of Pohang at all but can be used for approach work. Korean Chart No. 135 should be obtained if possible.

AUTHORITY: Pohang District Marine Bureau.

PUSAN: 35.07 N. 129.02 E.

DOCUMENTS:

9 Cargo Manifests.
3 Transit Cargo Manifests.
8 Crew Lists.
8 Passenger Lists.
4 Passenger Baggage Lists.
4 Mail Lists (forms supplied by Agent).
5 Parcels Lists (forms supplied by Agent).
2 Arms-Narcotics Lists.
2 Tobacco Lists.
2 Currency Lists.
4 Stores Lists.
4 Crew Personal Effects Lists.

Immigration: All Seamen's Books examined and shore passes made out. These passes to be carried at all times when ashore. Strict curfew from 0000 hrs. to 0400 hrs.

CERTIFICATES:

Derat. Certificate or Exemption.

Inoculation and Vaccination Certificates for all crew members.

PILOTAGE: Professional Pilot service is available at Pusan and contact can be made by telephone No. 6-1346 or 6-1743. Necessary for arriving vessel to notify Pilots of arrival 24 hrs. in advance. VHF unavailable. Formal address is: 73 2-Ka, Choong-Gu Taigyo-Ro, Pusan, Korea. Blast signal from vessel used to call Pilots. Pilot station position 35° 05′ 5″ N. 129° 05′ E.

Pilotage is compulsory and available day and night. Pilot boards off the entrance to the outer harbour. Pilot boat is white launch with pilot signals. Tugs cannot be employed unless Pilot is on board.

HEALTH: Pratique granted to vessels anchored in a circular quarantine anchorage located in outer harbour. Quarantine inspection can be arranged by day or night if sufficient advance notice given although regular hours are sunrise to sunset. Valid smallpox and cholera certificates required. Inoculations against typhoid and typhus may be required depending on prevalent conditions.

ANCHORAGES:

Designation	*Depth*	*Capacity*
S-anchorage	8-9 m.	6 vessels of 300-2,000 t.
E-anchorage	11-12 m.	6 vessels of 8,000-12,000 t.
N-anchorage	7-10 m.	18 vessels of 500-6,000 t.

RESTRICTIONS: Vessel having called at Communist ports within 6 months of contemplated entry of Pusan needs to obtain permission of authorities.

MAX. SIZE: No restrictions on length or breadth of a vessel. Draft should be less than 10 m. when vessel is alongside a pier, or 12 m. when anchored at an anchorage.
RADIO: Pusan Harbour Radio Station: call sign, HLP. Frequency, 500, 434 kc/s. operation round the clock.

Cable Harbour Master 12 hrs. in advance, advising ETA, last port and max. draft. If name of Agent is included, the Harbour Office will inform Agents.

VHF is now available.Calling Channel 16. Working Channel 14. Call sign "Harbour Control". Range about 12 miles.

A radar has been sited at the Harbour Office to help vessels approaching in poor visibility.
TUGS: Tugs join an arriving vessel at immediate interior to breakwater, Pusan Harbour, Ship's own lines are used.
BERTHING: Normally in daylight only.

	Length	*Beam*	*Draft*
Pier No. 1	407 m.	115 m.	28 ft.
Pier No. 2	407 m.	116 m.	28 ft.
Quay way No. 2	645 m.	—	27 ft.
Pier No. 4	556 m.	145 m.	29 ft.

STEVEDORES: On basis using full gangs per day, the capacity is : 1,000 L/tons on general cargo; 1,200 L/tons on grains; 1,500 L/tons on anthracite or coal.
TANKERS: A T-head oil pier extends about 700 ft. on the S.E. side of the North harbour. Least depth at pier head is 32 ft. Used by tankers servicing Korea Oil Corporation.
DEVELOPMENTS: Dredging of the approach channel to piers to about 36 ft. Dredging Northern section of harbour to 29 ft.
MEDICAL: Service is available at short notice.
FRESH WATER: Available. Rate of water supply, 80 L/t.p.h. Supplied at pier, or by barge.
FUEL: Availability on Bunker "A", Bunker "C", LRFO, LO and diesel oil.
FIRE PRECAUTIONS: Port has separate anchorage for tankers. Port requests for compliance with regulation not to contaminate waters with inflammable substances, e.g. petroleum products. Tankers are prohibited to clean tanks in port.
GANGWAY/DECK WATCHMEN: This service is available.
OPENING/CLOSING HATCHES: Usually carried out by stevedores.
CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and one bottle wine or spirits allowed, each man.
IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.
CONSULS:

Consul, Republic of China (Formosa)	Tel. 4-0276
Consul, Japan	,, 22-0135

REPAIRS: All repairs can be effected.
DRY DOCKS:

Name of facility	*Capacity*	*Location*
Korea Ship Building Eng. Corp. No.1	5,000	Pusan
Korea Ship Building Eng. Corp. No.2	10,000	Pusan
Korea Ship Building Eng. Corp. No.3	100,000	Pusan
Dae Sun Ship Building Corp.	4,000	Pusan

REPATRIATION: No facilities.
AIRPORT: Airport is at Suyeng about 12 km. from Pusan. Japan-bound plane takes off once a day.
TIME: Korean Standard Time. 9 hrs. ahead of GMT. No alterations during year.
HOLIDAYS: 1st-3rd January; 1st March; 10th March; 5th April; 6th June; 17th July; 15th August; 3rd October; 9th October; 24th October; 25th December.

On above holidays vessels can be discharged and loaded with permission to work granted by the Customs Authority on request.

Local holidays when no work may be performed are: New Year's Day in Lunar Calendar, and the Moon Festival (15th August) in Lunar Calendar.
POLICE/AMBULANCE/FIRE: Police, 22-0863/2497; Ambulance, Pusan Quarantine Station, 6-1371, 4-5736.
TELEPHONES: "Port Telephone Service" operates for purpose of serving communication on board-shore.
SERVICES: Adjustment of compass, available.
SHORE LEAVE: Allowed.
DELAYS: Port congestion is experienced occasionally.
AUTHORITY: Pusan District Marine Bureau.

ULSAN: 35.27N.129.23E. (See Plan)

DOCUMENTS:
3 copies of Manifested Parcels on board.
3 copies of the Store List.
3 copies of List of Narcotics on board.
3 copies of List of Arms and Ammunition on board.
3 copies of List of Vessel's Foreign Currency.
3 copies of List of Crew's Foreign Currency.
3 copies of List of Vessel's Tobacco, Cigarettes, Spirits, etc.
13 copies of the Crew List.
3 copies of List of Crew's Personal Effects, Tobacco, Cigarettes, Spirits, etc.
Crew's Vaccination Certificates.
Deratisation Exemption Certificates.
Clearance from Last Port.
10 copies of List of Landing Passengers, if any.
10 copies of List of Passengers in Transit, if any.
3 copies of List of Passengers' Baggage.

PILOTAGE: The seaward approaches to the Imodco Terminal mooring site are free of underwater obstructions and existing landmarks and navigation aids are adequate. Depth of water not less than 65 ft. in approaches. The Imodco Terminal can be approached with the summit of Pongdae San bearing 333° true. When in position the following navigation fix will obtain at the mooring site:

Pongdae San (summit)	bearing	333° true	distance	2,915 yd.
Pongjin Hang Light (end of breakwater)	"	053° true	"	4,770 yd.
Chuck To (centre cut)	"	255° true	"	3,800 yd.

A good radar echo will be obtained from the tanks ashore at approximately 20 miles, the Imodco buoys at a distance of 8 miles, and the small buoys, marking the floating hose heading off the Imodco buoy, at 1.5 miles.

Lights ashore, lights on the Imodco buoys and on the small buoys appear to be unreliable.

After clearing Customs a Harbour Pilot will board the vessel to direct it to the buoy and conduct the mooring operations if required. There is no night mooring. However, unmooring is carried out during darkness as well as in daylight.
ANCHORAGE: Anchor the vessel about 1 mile South-east of the buoy, if the weather permits. In this location it is less difficult to find vessel, when in fog. Do not anchor less than 1 mile from buoy, and under no circumstances can the anchors ever be used on approaching the buoy terminal, chain cables and pipe-lines are located at this site and anchoring is strictly prohibited.
HEALTH: Entry prediction to be supplied to quarantine authorities by vessel's Agent 24 hrs. before arrival. Master required to complete Health Declaration when officer boards on arrival. Free pratique is automatic when coming from another Korean port.
RADIO: There is no marine radio telephone at Ulsan to communicate with on radio telephone frequency. A small transreceiver on shore can communicate with attendant launch.
BERTH DESCRIPTION: 2 berths at single buoy moorings.
No. 1 Imodco Buoy

Position: Lat. 35° 27′ 15″ North, Long. 129° 23′ 30″ East.

Description: A 12.5 m. red and white vertically striped buoy.

Lights: On buoy; alternate flashing red and white every 12 sec., visibility 5 miles or more. Duration of each flash 4 sec.

On hose; there are 3 red flashing marker lights equally spaced along 675 ft. hose, visible for 2 miles.

All of the above lights are activated by photoelectric cells.

Radar Reflector: On buoy's mast.

Foghorn: A 2-sec. blast, period 20 sec., range 1 mile. Must be turned on at the buoy.

Soundings: 11 fathoms in buoy area.

No. 2 Imodco Buoy

Position: Latitude 35° 26′ 44″ North, Long. 129° 23′ 20.5″ East.

Description: A 12.5m. red coloured buoy.

Lights: On buoy; has a range of at least 5 miles, on hose; as for No. 1 Imodco buoy.

Foghorn: A battery powered foghorn with a range in excess of 0.5 mile.
DRY CARGO BERTHS:

Commercial harbour mainly serves export of chemicals, fertilisers and by-products of the refineries. The harbour lies about 4 miles in from the sea and there are 4 berths available with depths up to 33 ft.

Quarantine/Pilot station situated in position 35° 27′ 26″ N., 129° 24′ 30″ E.

Entrance at night is not permitted. Only 1 tug is available. Water is available. No VHF. Max. tide in harbour is 1 ft.
BERTHING: 2 launches are in attendance during mooring and unmooring operations. 1 launch will keep the hoses clear and the other handles the mooring rope. Both bow anchors are to be hove well up in the hawse pipes and properly secured before reaching the buoy. Anchors are never to be used while on the buoy, they can foul buoy cables and pipe-line on the bottom if released.

*No. 1 Buoy.*The vessel will be moored with 4 to 5 ropes off the bow. No rope used from the well decks. 1 rope will be run single to the buoy to heave the vessel in proper position, all other lines will be used double by sending one end out through the port or starboard bow chock and hove back through the opposite side of the bow chock, sufficient slack is brought on board so that a complete set of turns can be securely placed on the bollard. A good messenger rope about 3.5 in. to 4 in. circumference, at least 400 ft. in length, will be required to heave the lines around the mooring arm on the mooring and back on the vessel. The first line used single will be doubled up last.

No. 2 Buoy. The vessel will be moored with 2 nylon lines, 250 ft. in length, floating off the buoy. 2 of the ship's mooring ropes will be run to the buoy to heave the vessel in proper position. At about 40 yd. distance from the buoy a good messenger rope will be required to pick up the floating ropes one by one. When the floating ropes are made fast on board, 1 of the 2 ship's ropes sent to the buoy will be doubled up.
HOSES: *No. 1 Buoy.* There are 2 sets of 12 in. hoses and 1 set of 8 in. hose. The 2×12 in. hoses are for crude oil and the 8 in. hose for gas oil. The hoses are 675 ft. in length from the buoy manifold and are floating in plastic doughnut shaped floats. The hose connections are always made to the port manifold, and are lifted one at a time to the ship's manifold. Each hose, when full of cargo and equipment, is over 1.5 tons in weight.

No. 2 Buoy. There are 2 strings of 16 in. hoses, each 945 ft. in length. The final 70 ft. of hose is reduced to 12 in. to permit lifting by the tanker's lifting gear. The hose connections are made to the starboard manifold of the vessel.

BUNKERS AND WATER: Available by barge only.
BALLASTING: After the vessel has been somewhat more than half discharged, the vessel should be ballasted to a safe margin, to draw not less than 12 to 13 ft. forward. This will avoid the vessel yawing widely on the buoy with strong winds and assist in avoiding contact with the buoy and hoses. Vessel will moor about 120 ft. from buoy.
CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and one bottle wine or spirits allowed, each man.
IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.
REPATRIATION: Nearest facilities for crew change or repatriation are at Pusan.
TIME: Korean Standard Time, 9 hrs. ahead of GMT. No alterations during year.
HOLIDAYS: 1st January; 1st March; 5th April; 6th June; 17th July; 15th August; 3rd October; 9th October; 24th October; 25th December.
SHORE LEAVE: Allowed up to midnight.
GENERAL: Vessels arriving at Ulsan should radio to Agent at Pusan 4 days in advance information on size of vessel's manifold connections, as the adapters, if required, will have to be made by the Korea Oil Corp. This applies mainly to vessels arriving at Ulsan for the first time or in case there has been any alteration to the manifold since the last arrival.

While on the buoy the vessel will be required to provide sleeping quarters and linen for about 8 to 10 men; this includes the discharging Master and his apprentice. The standby men include launch-men and riggers; these men connect and disconnect hoses and are mainly kept on board for emergency.

The discharging Master will remain with the vessel during its entire operation on the buoy. Under certain conditions, should it become necessary, they may ask the vessel for meals; however, food for standby men is generally furnished from ashore.

The ship's engines must remain ready for immediate use.

CHIEF OFFICERS REPORT: *August 1975*
Vessels Particulars:
Length Overall — 162.18 m. Breadth — 22.8 m.
Summer Draft — 10.382 m. Summer d.w.t. 21,705 m./tons.
Dry Cargo Berths
Anchorage: Local Agents generally wireless the quarantine anchorage position which is approx. 1.5′ W.N.W. from the position shown on BA Chart No. 898. Care should be taken while anchoring as there are innumerable fishing floats, nets, etc. North of 35° 28′ N., and West of 129° 23.7′ E.
Restrictions: No pilotage between sunset and sunrise. Curfew from 0000-0400 hrs.
Pilotage & Berthing: The standard of pilotage was generally good. Pilot arranged by Agents and embarks at quarantine anchorage after vessel is cleared by authorities. 1 anchor is used while going alongside. 1 tug of unknown h.p. and 2 mooring boats assist while berthing. 4 berths are available:-
No. 1 Pier — Length 300 m. Depth variable (see plan)
No. 2 Pier — Length unknown. Depth supposed to be 36 ft.
No. 3 Pier — Length 165 m. Depth 29 ft.
No. 4 Pier — No details known.
Local authorities themselves do not have any idea as to the actual depths alongside. It is advisable to sound the bottom twice daily especially at No. 1 Pier as the depths were found to vary almost every 10 ft. Cargo is loaded/discharged by vessels cargo gear. Rate of loading Bagged Urea is approx. 400 m/tons per gang per day. Working hours are normally between 0700 hrs. and 1900 hrs. every day, Saturdays and Sundays included. Only on National Holidays no cargo is worked. Discharge of Bulk Sulphur and Gas/Product Carriers is around the clock. A vessel carrying 28,000 tons of Bulk Sulphur was discharged in 5 days. There is 1 crane and conveyor belt on No. 1 Pier only for handling Sulphur. It was observed that sometimes small coasters were loaded/discharged by mobile cranes.
Stevedores: Ulsan Port has a rule that a gang engaged for one particular hatch will only work that hatch from start to finish and will not work any other hatch, not even the other end of the hatch if the hatch has more than 1 set of derricks. Gangs have to be ordered before noon for the next day.
Medical — Local hospital used, patients normally taken there by watchmen.
Density — Apparently varies. Once 1016 was obtained while 10 days earlier 1020 was obtained.
Fresh Water — Available from barge whose capacity appears to be 150 tons. At least 24 hours notice necessary, Charges approx. 150 Won/Ton. (1 U.S. $ = 480 Won approx.)
Fuel — Not available.
Repairs — Facility available but rates exorbitant.
Dry Docks — Hyundai Shipyard located at Ulsan. Builds VLCC's but we have no information regarding details.
Watchmen — Essential on foreign vessels. Arranged by Agents.
Hatches — As per charter party but suggest use own crew as labour are only experienced with wooden hatchboards.
Repatriation — Usually done through Seoul which is about 5 hours away by bus. We changed Radio Officers and experienced no difficulty.
Telephones — Placed on board, but only for local calls via exchange.
Services — Only 1 shipchandler who handles everything including providing watchmen, laundrymen, etc.
Identity Cards — Shore pass issued for Ulsan valid for 3 days. To be renewed every fourth day. Usually done by watchmen who collect all passes and go to Immigration Office.
Surveyors — Lloyds can be arranged from Busan.
General — Ulsan is a very busy port with a large amount of local and Japanese coastal traffic. Local Agents keep trying to shift bigger vessels ahead and astern to try and squeeze in small coasters. It is advisable to strictly adhere to the charter party rules at all times in this port to prevent delays and expense on vessels account.
AUTHORITY: Korea Oil Corporation, Ulsan.

YOSU: 34.44 N. 127.45 E. (See Plan)

(a) SINGLE BUOY MOORING, HONAM OIL REFINERY
(b) PRODUCT WHARF, HONAM OIL REFINERY
(c) DRY CARGO, YOSU HARBOUR
(d) DEVELOPMENTS

DOCUMENTS:
Last Port Clearance.
Register.
12 copies of Crew List.
12 copies of Passenger Manifest.
3 copies of Store List.
3 copies of Bonded Store List.
3 copies of Arms and Ammunition List.
3 copies of Livestock List.
1 copy of Vaccination List showing dates of last smallpox and yellow fever vaccination, etc.

PILOTAGE: There are 2 pilot stations. Pilot station for vessels of less than 30,000 g.r.t. is located at Lat. 34° 44′ N., Long. 127° 49′ E., and for more than 30,000 g.r.t., such as crude tankers, is located at Lat. 34° 39′ N., Long. 127° 58′ E.

Vessels calling at Yosu must cable the exact time of arrival at the pilot station to ship's Agent and Harbour Pilot's office. VHF Radio for calling Pilot is Channel 16 and switch to Channel 13 to talk.
QUARANTINE AND MEDICAL: ETA to be supplied to quarantine authorities by vessel's Agent 24 hours before arrival. Master required to complete Health Declaration when officer boards on arrival. Free pratique is automatic when coming from another Korean port.

There are medical facilities in Yosu town. Inoculations and vaccinations can be arranged by the quarantine doctor.

The Quarantine Stations are located at Lat. 34° 42.5′ N., Long. 127° 52.7′ E., for deep drafted vessel and Lat. 34° 45.2′ N., Long. 127° 46.3′ E., for less drafted vessel. The Quarantine inspection can be made at other than the above location depending on the situations. The inspection takes place during daylight.
RADIO: See "Radio" in section "A".
TUGS: Available, up to 1,200 h.p.
DENSITY: 1025.
FRESH WATER: Fresh water is available for delivery to ships.
FUEL: Bunkers available by barge subject to advance notice being given.
REPAIRS: There are minor repair facilities in Yosu.
CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and one bottle wine or spirits allowed, each man.
REPATRIATION: Crew changes or repatriation can be arranged.
TIME: Korean Standard Time, GMT plus 9 hours. No alterations during year.
HOLIDAYS: 1st January, 1st March, 5th April, 6th June, 17th July, 15th August, 3rd October, 9th October, 24th October, 25th December.
IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.
SHORE LEAVE: Shore leave for ship's personnel is arranged by ship's Agent and the local authorities.

(A) SINGLE BUOY MOORING, HONAM OIL REFINERY

GENERAL DESCRIPTION: The 10 m. diameter IMODCO Single Buoy Mooring Terminal is located at the approximate position of Lat. 34° 51′ N., Long. 127° 47.3′ E. The terminal is modified to provide a safe mooring for tankers up to 200,000 d.w.t. under the environmental condition of about 40 knots maximum wind speed.
MAX. SIZE: The safe depth of Samg i channel which is located 4 miles South of the Terminal is 19 m. at about LLW.

The tidal rise in this area is 2 to 3.5 m. at high tide. Therefore, the terminal accepts tankers having draft up to 19 m.
NAVIGATIONAL AIDS: Vessels calling Honam Oil Terminal should have charts No. 242 and 209 published by the Republic of Korea Hydrographic office. Within the area, there is no port radar service.
NOTICE OF READINESS: Notice of Readiness will be tendered and accepted at the time when the vessel is in all respects ready for cargo operations and in accordance with charter party agreed.
BERTHING: Mooring operations are done jointly by ship's crew on the forecastle and mooring gang from Yosu on mooring boat.

The vessel shall prepare 2 strong messenger lines of more than 50 m. each and pass them to the mooring boat. The mooring gang will tie the vessel's messenger lines to 18 in. Buoy ropes' messenger lines. Upon signal from mooring gang, vessel will heave in both mooring ropes up to chafing gear of the ropes on deck and make fast to the vessel's bollards by the 8 turn method.

Normally starboard rope is heaved in first and or both port and starboard ropes are heaved in simultaneously.

It is compulsory to moor with 18 in. Buoy ropes. For the use of these ropes Honam Oil charges a nominal fee for each call at the SBM.
CONNECTING HOSES: The vessel must install two 16 in. ASA type flanges to her starboard manifolds, rig starboard derrick doubled and capable of lifting up to 10 tons of weight prior to berthing and

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have standing by a derrick operator and responsible ship's officer at her manifolds upon berthing.

Connecting/disconnecting cargo hoses will be done by shore team. The team leader will co-ordinate with ship's cargo officer for cargo hose handlings.

DISCHARGING: Discharging should be commenced by the signal of Terminal respresentative. The Terminal receiving facilities have a working pressure of 225 p.s.i. with safety factor of 7:1, but the pumping pressure must be raised gradually and then the pressure should be raised up to 225 p.s.i. at ship's manifolds. The vessels are required to find out discharging rate at least every 4 hours.

SHIP'S READINESS: During discharging the international code flag "B" shall be displayed from a topmast signal halyard during daylight hours. During hours of darkness, a red light shall be displayed, visible at a distance of at least 1 mile and show an unbroken light all around the horizon. The vessel's engines must be ready while discharging at a moment's notice and the Master is responsible for having sufficient officers on duty both on bridge and in engine room to take action immediately upon instructions from Honam Oil representative.

In order to avoid riding up on the buoy and the cargo hoses, astern movements of the vessel are required. For turbine vessels when for various reasons, the Chief Engineer officer is unable to completely stop his engines, the r.p.m. must be kept at a minimum by using the turning gear. The propeller must also propel the vessel astern only. Vessels which are not able to conform with these regulations should advise Honam Oil representative in writing. In addition to the lights usually displayed, vessels discharging cargo during darkness, will illuminate the area around the ship and especially the IMODCO Buoy to the satisfaction of the terminal representative in order that any oil on the surface of the sea may be readily detected and appropriate action taken. Vessels should provide suitable floodlights for working on deck during night operation.

BALLAST: There are no facilities for reception of dirty ballast. It is the ship Master's responsibility to see that no oil or oily ballast is spilled or pumped overboard from his ship. Drip-pans must be used at all times and all scuppers must be plugged. The waters in or adjacent to the terminal must not be polluted and only oil-free bilge water may be discharged at the terminal. If, during inspection or during progress of discharging, it is revealed that the vessel's tanks are not oil-tight, she will be refused further discharging facilities.

SAFETY: Sufficient officers and crew personnel must always be on board to attend to the vessel and to cargo. Power must be available at all times on deck winches and windlass while the vessel is in the moorings.

The presence of unauthorised craft alongside is extremely hazardous, and Masters are requested to require all unauthorised craft to clear the vessel's side prior to commencement of cargo discharging. Master should shut down all cargo operations during severe electrical storms and under any circumstances which imperil the cargo operation.

While bunkering barge is alongside the crude tanker, it is required that ship's Master shall check mooring lines, fenders or engines of bunkering barge.

RADIO: In Korea there are 4 coastal radio stations, Pusan, Inchon, Mokpo and Yosu as listed in International communication publications. Vessels calling Yosu would call Pusan, Mokpo, and Yosu.

For the vessels visiting Honam Oil Refinery, it is recommended to call Mokpo coastal station, call sign HLM and address to: Honam Oil Yosu Refinery Telex number K762 or K764, via: Mokpo Radio. The Mokpo Radio keeps telex operation network with telex room of Honam Oil Yosu Refinery and messages can be handled within half an hour during the service hours of Honam Oil Yosu Refinery Telex room (weekdays: 0830–1930, Saturday: 0830–1500, Sunday/Holiday: off-service). Also vessels within VHF voice radio range of about 100 km to Yosu, call Ch-16 (Simplex), Switch to Ch-26 (Duplex) and then ask for vessel Agent, Harbour Pilot or Honam Oil Yosu Refinery. Honam Oil Yosu Refinery provides the telephone service every day from 0830 to 2300 hrs. local time with telephone number 3141-9. (Terminal representative located on extension 279 for office hours, 370 for out of office hours).

The communications from tanker to shore when moored at the IMODCO Buoy will be made by ferry boat and refinery matters are made by transceiver handled by refinery personnel on board.

AUTHORITY: Honam Oil, Yosu Refinery.

(B) PRODUCTS WHARF, HONAM OIL REFINERY

BERTHING: The 4 products berths are located in approximate position 34° 51′ 38″ North, 127° 44′ East, in East-West direction and designed to accommodate 4 tankers simultaneously viz. No. 1 and No. 4 berths for about 5,000 d.w.t. tankers, No. 2 for 3,000 d.w.t., and No. 3 for 20,000 ton tankers. No. 3 berth is under modification and installation of Chicksan loading arm. The Honam Oil Product Wharf is designed to moor and unmoor tankers on a 24-hour basis, depending on the condition prevailing at the time and the Master's judgement. The wharf is well and sufficiently illuminated for night work.

Minimum mooring line requirements are:

Forward: 3 headlines	Aft: 3 stern lines
1 spring line	1 spring line
1 breast line	1 breast line

In strong wind 1 more head and 1 more stern iine are required.

The direction of the tidal stream in the vicinity of the products wharf is nearly rectilinear and parallel to the berths, the flood running in a 172° direction and the ebb in an 084° direction. The maximum velocity is 2.5 knots. The duration of the ebb stream is about 6.75 hours, and the flood stream 5.5 hours.

The tidal range is about 4 m. Therefore, ship's crew must adjust vessel's ropes with tidal height so as to avoid damage to the ropes.

MAX. SIZE: There is shallow water of about 10 m. depth at LLW en route approaching the channel to the wharf. With this depth of water, the Terminal limits vessel's draft to less than 32 ft.

CONNECTING HOSES: It is the policy of the Honam Oil Refinery Co., Ltd. that the ship's crew shall be responsible for the connecting and disconnecting of the cargo hoses at the ships manifold. The wharf crew will operate the cargo hose winches.

LOADING: The refinery can furnish loading at 5,000 b.p.h. or more. The Chief Officer should, however, state the loading rate he requires which should be maximum consistent with safety at all times. A qualified deck officer should, however, be on deck during the entire loading operation. The international code flag "B" shall be displayed from the signal yard-arm during daylight hours. A red light shown during hours of darkness. Lines for loading and deballasting for each berth are as follows:

No. 1 Berth		*No. 2 Berth*	
BFO	8 in.	BFO	6 in.
Solvent	6 in.	Solvent	6 in.
BFO	8 in.	BFO	6 in.
LRFO	8 in.	LRFO	6 in.
Diesel	4 in.	Diesel	4 in.
Ballast	8 in.	Ballast	6 in.
BFO	4 in.	BFO	4 in.
Reg-gas	8 in.	Reg-gas	8 in.
Kero	4 in.	Kero	4 in.
Diesel	8 in.	Diesel	6 in.
Naphtha	8 in.	Naphtha	6 in.
Kero	8 in.	Kero	6 in.
JP-4	8 in.	JP-4	6 in.
Pre-gas	8 in.	Pre-gas	6 in.
No. 3 Berth		*No. 4 Berth*	
Kero	8 in.	Kero	6 in.
JP-4	8 in.	JP-4	6 in.
Naphtha	8 in.	Naphtha	6 in.
Pre-gas	8 in.	Pre-gas	6 in.
Solvent	8 in.	Solvent	6 in.
LRFO	8 in.	LRFO	6 in.
Diesel	4 in.	Diesel	4 in.
BFO	4 in.	BFO	4 in.
Reg-gas	8 in.	Reg-gas	6 in.
BFO	8 in.	BFO	6 in.
Ballast	8 in.	Ballast	6 in.
BFO	8 in.	BFO	6 in.
Diesel	8 in.	Diesel	6 in.
BFO	8 in.	LPG	6 in.

FRESH WATER: Every berth has fresh water supply line. Vessels requiring fresh water will request required amount of water to wharf operator. After completion of supply, ships have to sign the form issued.

REPAIRS: There are no repair facilities and also repairs are not allowed on the product wharf. In the event of emergency cases, Honam Oil will assist in carrying out repairs under the supervision of refinery's safety personnel to expedite from the wharf and a quick turn around.

RADIO: See "Radio" in section "A".

AUTHORITY: Honam Oil Refinery.

(C) DRY CARGO PORT

PIERS: 3 piers are located in Yosu town at about Lat. 34° 44.3′ N., Long. 127° 45.3′ E. and consist of No. 1, No. 2 and No. 3 Piers.

RESTRICTIONS: No. 1 Pier is used for only small vessels. No. 2 Pier for the vessels of less than 20 ft. draft and max. draft of No. 3 Pier is 26 ft. At anchor draft up to 35 ft.

CARGO-HANDLING FACILITIES: Crane barge of 30 tons capacity is available.

RADIO: See "Radio" in section "A".

AUTHORITY: Local Marine Bureau, Yosu.

(D) DEVELOPMENTS:

1. Wharf, 7th Fertilizer Plant: Located between Single Buoy Mooring and Products Wharf, Honam Oil Refinery. Completion will be in 1977. Vessel size to be berthed, 50,000 d.w.t.

2. Pier, Dae Sung Methanol Plant: Located close to the products wharf of Honam Oil Refinery and will be in operation after April, 1976. Maximum vessel size and draft will be about 4,400 d.w.t. and 5.5 m., respectively.

Kuwait

KHOR-EL-MUFATTA: 28.39.17 N. 48.23.26 E.

DOCUMENTS: The only document required for this port is copy of the Cargo Manifest.
PILOTAGE: No pilotage available.
ANCHORAGE: Vessels anchor to seaward side of black and white conical shaped buoy which is situated 2 miles to the East of the Khor. Mufatta is some 55 miles by sea from the port of Kuwait. The flashing lights marked on the charts at the entrance to the Khor have been discontinued.
HEALTH: Before arrival vessels required pass following items to Agent (about three or four days prior to ETA). Name of vessel, Nationality, ETA, Last Port of Call, tonnage, quarantinable disease on board (if any) infectious disease (if any), sick persons, death, and any requirements.
ETA should be notified again 24 hours before arrival.
RADIO: No separate radio service for this port and all communication to Agent to be made through Kuwait Radio 9 KK.
TUGS: None.
BERTHING: Ship discharged in open roadstead.
STEVEDORES: Sent from Kuwait. At least 48 hours notice required.
MEDICAL: Facilities available only at Kuwait.
DENSITY: Salt water.
FRESH WATER: Not available.
FUEL: Can be arranged at Mina Abdulla. Mina-al-Ahmadi.
FIRE PRECAUTIONS: No equipment for fire-fighting.
GANGWAY/DECK WATCHMEN: Can be arranged through Agent.
CERTIFICATES: All usual documents such as Ship's Manifest, Bill of Health, Crew List, Clearance from last port, Store List, Bonded Store List, etc.
CUSTOMS ALLOWANCE: (Tobacco) No restrictions. (Wine and/or Spirits) Alcoholic beverage strictly prohibited to be held out of bond. Master allowed keep limited quantity in cabin.
CARGO GEAR: Ship's gear used for discharging.
IDENTIFICATION CARDS: Not needed.
REPAIRS: None.
REPATRIATION: Can be arranged via Kuwait.
Seamen arriving Kuwait Airport to join vessels at Partitioned Zone ports can obtain transit visa at airport, if Agents arrange to submit necessary guarantee to Immigration Authorities confirming that they are in transit and joining vessels calling at Kuwait and/or Partitioned Zone. In order to meet the crew at airport and arrange transit visa, cables confirming their arrivals and flight numbers are to be sent to Agents to reach them at least 24 hours before arrival of crew.
Marine Superintendent of Owners, or Owners' representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait government's diplomatic missions abroad.
AIRPORT: Kuwait Airport served by regular airlines.
TIME: GMT plus 3 hours.
HOLIDAYS: New Year's Day; Eid al Fitr; Accession to the Throne; Eid al Haj; 1st Muharram; Prophet's Birthday; Rajab.
TELEPHONE: Cannot be arranged on board.
PROVISIONS: Foodstuffs, beverages, tobaccos, etc., available from ships chandlers in Kuwait in limited kinds and quantities. Prices more expensive than town of Kuwait due to long transportation. Ship's Agent should be advised by cable well in advance.
SPECIAL SERVICES: Swedish Welfare for Seamen, Lloyds Surveyor, Butterworth tank cleaning machines and equipment, and under-water cleaning.
SHORE LEAVE: Not limitations.
AGENT: See "Shuwaikh".

MINA ABDULLA: 29.02 N. 48.11E. (See Plan)

LOCATION: Mina Abdulla bounded on South by parallel of Lat. 28° 55′ N. on the East by Long. 48° 18′ E. and on North by a line joining following points:

(1) 29° 01′ 45″ N.	48° 09′ 25″ E.
(2) 29° 01′ 45″ N.	48° 10′ 06″ E.
(3) 29° 02′ N.	48° 10′ 18″ E.
(4) 29° 02′ N.	48° 18′ 00″ E.

FLAG: Every merchant ship when entering or leaving port between sunrise and sunset shall fly her national flag and national flag of Kuwait and, when entering port, shall fly her signal letters. All vessels required to fly Kuwait flag on foremast during daylight hours. Flags may be obtained from Agent.
APPROACHES: Two oil-loading berths supplied by three pipe-lines are situated here. A number of large tanks define tank farm area. A refinery stands to S.W.of tank farm. The flare is conspicuous. Other conspicuous objects in area are the radio tower, Mosque Minaret and the four leading beacons for two berths. These are lit for night berthing by three white lights on each beacon in the form of triangles, the beacon lights for Berth No. 1 are occulting every 5 seconds, the lights of No. 2 Berth are fixed.
When a vessel is ready to enter at the same time as another vessel is ready to leave the port, the outgoing vessel shall have priority over the incoming vessel, subject always to the provisions of the International Regulations for Preventing Collisions at Sea and to the requirements of safe navigation.
DOCUMENTS: Before leaving Kuwait the Master shall be responsible for obtaining a Port Clearance Certificate. The documents necessary for vessels to enter and leave Mina Abdulla are:

Enter
Ship's Manifest.
Bill of Health.
Crew List.
Clearance from Last Port.
Light Dues Certificate.
Clear
Register.
Load Line Certificate.
Radio Certificate.
Safety Certificate.
Last Port Clearance.

Masters and Agents of vessels shall, when called upon by a Customs Officer or Marine Officer, produce any documents relative to the landing or shipment of their vessel's cargo in the port. The Master or his representative is required to hand to the Company a written Notice of Readiness to load.
Discharging certificates of oil cargo loaded from Kuwait and Partitioned Zone ports are to be sent to vessels' local Agents immediately duly attested by the Customs Authorities and Arab Consulate covering full quantity as per Bill of Lading.
If a vessel, which has not submitted the certificate for the previous voyage, calls for the second time, she will be allowed to load and sail only after paying a cash deposit of KD 2,000.
In order to avoid delay in berthing, loading and outward clearance for vessels, all owners must give instructions to Agents at discharging ports to forward relevant cargo discharge certificates to Agents at loading ports without delay.
PILOTAGE: Mooring Master normally meets vessels within 1.5 miles of terminal sea berths and will act as Pilot and as Company's Representative and remain on board during vessel's stay in port. Vessels requested to have Pilot ladder of an approved pattern, safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. When it is necessary for a vessel to anchor before being berthed she should do so in the recommended anchorage area. Two 45 ft. tugs painted blue with white superstructure assist berthing by running mooring lines to stern buoys. The Pilot boat has a blue hull and white superstructure and is radar equipped. The name "Independent" is on each bow and stern.
Vessels with a Mooring Master on board shall display International Code Flag "H" in a prominent position whilst manoeuvring under his advice, and shall, if so instructed by Mooring Master, display a flag indicating berth to which vessel is proceeding.
ANCHORAGES: Vessels requiring anchor for any reason in port limits should do so within area enclosed between positions:

29° 02′ N.	48° 14.3′ E.
29° 02′ N.	48° 15.1′ E.
29° 01.2′ N.	48° 15.1′ E.
29° 01.2′ N.	48° 14.1′ E.

or within reasonable proximity to the East if congestion arises in anchorage area.
All vessels and craft within the port shall be navigated with care and caution, at a speed, and in a manner which shall not endanger the safety of other vessels or craft. In particular, special care and caution is to be observed in passing vessels or craft of the following category: weight-lifting or deeply-laden craft, vessels which are mooring or moored at terminal buoys, vessels or craft in tow and vessels or craft engaged on diving, dredging, grabbing, pile-driving or construction work, survey operations or the removal of obstructions.
All vessels within the port shall anchor, or moor and unmoor, when and where required by the Marine Officer, and shall be moved from place to place as required and by such means or appliances as may be ordered by the Marine Officer.
Vessels or craft shall not anchor near any submarine lines within the port limits, unless engaged on work which, in the opinion of the Marine Officer, necessitates their doing so.
MAX. SIZE: Vessels of unlimited length can be accommodated. Approximately 90,000 d.w.t. tankers fully loaded up to a maximum draft of 46 ft. on arrival, calling for bunkers only, can be accommodated. Vessels in the 200,000 d.w.t. class can be accommodated arriving in ballast condition for loading part cargoes up to a max. sailing draft of 51 ft. or for normal bunkering requirements when remaining in ballast.
HEALTH: Quarantine regulations administered by Kuwait Government's Quarantine Medical Officer. Pratique granted at anchorage or berth.
Vessels calling at Mina Abdulla are requested to send following information to "Health Minahmadi Port":
(1) Name of vessel.
(2) Last port of call.
(3) Health condition of crew.
(4) Validity of Smallpox and Cholera Certificates.
(5) Request for Free Pratique.
No craft, other than one having on board the Mooring Master or Port Health Officer, may approach any vessel entering the port and no other person may board any such vessel until free pratique has been granted.
Adequate covers shall be placed over all overside discharges.
Masters shall be responsible for ensuring that no unhealthy or offensive matter is deposited from their vessels on port premises. Any such matter so deposited that is, or becomes offensive, or, in the opinion of the Port Health Officer, injurious to health, may be removed, confiscated or destroyed and the place of deposit cleaned or disinfected on the direction of the Marine Officer at the expense of the Master responsible.

Any vessel, having on board offensive goods, or goods which, in the opinion of the Port Health Officer, are injurious to health, may be ordered to leave the port by the Marine Officer.

No ashes, refuse or other objectionable matter shall be thrown overboard from any vessel either on to any premises or into any waters of the port.

RADIO: Master shall inform Marine Aminoil at least 72, 48 and 24 hours notice of time of arrival via Kuwait Government Coastal Radio Station, call sign "9KK".

MOORING: Mooring Masters may decline to moor any vessel if in his opinion it is not equipped with satisfactory mooring facilities, lines and gear, etc.

Vessels shall provide such tackle as may be required for loading or discharging cargo.

Vessels berthed at sea terminals shall provide not less than six good quality mooring ropes and/or wire hawsers aft, each not less than 120 fathoms in length. An eye shall be spliced in ends of ropes to secure lines to pelican hooks on buoys. Two insurance wires are provided in each berth. Ships must have both anchors ready for immediate use each with minimum of chain as follows:

Below: d.w.t. 10,000, 8 shackles. Between: d.w.t. 10,000–20,000, 9 shackles; 20,000–30,000, 10 shackles. Above: d.w.t. 30,000, 11 shackles; 40,000, 12 shackles. Above 60,000, 13 shackles; and above 80,000, 16 shackles. The term shackles is to be interpreted as a length of 15 fathoms. Masters shall be responsible for seeing that a strict watch is kept on their vessel's moorings to prevent ranging.

BERTHING: Master shall, before berthing, advise Marine Officer of any special damage or disability to the vessel. No. 1 Berth Lat. 29° 01′ 16″ N., Long. 48° 11′ 52″ E. approximately, situated about 2 miles offshore in 43 ft. water LWOST over sand and coral with fair holding ground. A spar-buoy painted yellow with black bands marks end of submerged steel pipe-lines. A common bunker line to the berths, off-branches approximately 1,000 ft. South of Berth No. 1 and runs in to meet the direct line from shore to this berth. Ends of attached loading hoses marked by can-buoys on either side of the Spar. Four mooring buoys in Berth No. 1 and five in Berth No. 2 painted red and silver located in an arc, 1–2 cables approximately E.S.E. through South of S.S.W. from spar-buoys for vessel's stern moorings. Ship's anchors only are used forward No. 2 Berth (situated approximately half a cable South and nine cables East of Berth No. 1); Lat. 29° 01′ 0″ N., Long. 48° 12′ 51″ E. approximately. Depth of water in Berth No. 2 is 56 ft. LWOST over mud and clay which is excellent holding ground.

LOADING: Terminal has facilities to load at max. rate of 1,500 t.p.h. in Berth No. 1 and 2,800 t.p.h. in Berth No. 2, but this loading rate can be achieved only when vessel is furnished with appropriate equipment.

Caution: The incoming oil stream is pumped from shore and it is extremely dangerous to close a ship's valve against the incoming oil stream. Such a procedure creates an excessive pressure, which may damage submarine lines, ship's pipe-lines or the terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by shore crew as advised by Mooring Master who will remain on board while ship is mooring, loading or discharging and unmooring. Vessels will provide winch drivers and remove such manifold blanking flanges and fit reducing pieces as required.

Deck hose connections from submarine lines as follows:

Cargo: 10 in. ID, working pressure 150 p.s.i., fitted with 150# ASA steel flanges. Bunker flanges 8 in. ID, working pressure 150 p.s.i., fitted with 150# ASA steel flanges.

Loading and discharging of petroleum vessels shall not be undertaken without permission of Marine Officer.

Loading and discharging of petroleum vessels shall not commence until:

(1) Master or Chief Officer has certified to Marine Officer that all necessary valves are open and that vessel is in proper condition to receive or discharge cargo.

(2) Master or Chief Officer has certified to Marine Officer that all ship's sea valves are closed or blankflanged except those required for water circulation purposes, and that these regulations are being and will be observed.

(3) Ship's tanks have been inspected by an authorised inspector and passed as suitable for loading.

Throughout period of loading and discharging operations, following conditions shall be observed:

(1) A responsible ship's officer shall be on watch on board at a point near tanks which are receiving oil during process of loading. The company's staff have received instructions to stop loading immediately whenever this rule is disregarded.

(2) A capable member of ship's crew shall be stationed by ship's tank valves which are receiving oil during loading.

(3) All pipe-lines and hoses shall, while rigged for loading or discharging petroleum, be directly and continuously earthed and kept constantly under supervision.

(4) No petroleum shall be allowed to escape or overflow.

(5) The following signals will be observed, as well as the radio communications, between ship and shore:

Signal Flag by Day		*Light Signal by Night*
1 Red Flag	*Starting* Slow Speed	1 Red Light
2 Red Flags	Full Speed	2 Red Lights
	Stopping	
1 Red Flag	Slow Speed	1 Red Light
All Flags Down	Stop	No Lights

(6) When normal ship-to-shore communication fails, the emergency signal to stop the oil flow will be a continuous blast on the ship's whistle until the oil ceases to flow. Steam or air should never be shut off from whistle during loading. When practical, means should be provided for blowing the whistle from the after section of the cat walk. Whenever an Emergency Whistle Signal is used, all loading operations in the berths will be shut down until normal communication is restored. For this reason it is requested that ships in the area refrain from using ship's whistle for other than essential purposes.

Load Lines: Masters are warned that their load lines are subject to scrutiny by the port officer from Mina-al-Ahmadi on completion of loading or bunkering. It is in their own interest therefore, to observe the regulations, as vessels are liable to be delayed and have to pump ashore or be fined if overloaded, and Port Clearance withheld.

BALLAST: As soon as practicable after arrival, all vessel's tanks will be inspected for evidence of oil in ballast. During discharge of ballast, similar inspections will continue. If evidence of oil appears at any of these inspections, the ship must return at once to a point not less than 100 miles from the coastline and there completely discharge all oily or dirty ballast.

Masters will be required to sign a declaration certifying that any water ballast intended for discharge from vessel is clean and free from oil. Arrangements are being made by the Company for dirty ballast disposal facilities to be supplied in the future, if and when required, by vessels in this port.

POLLUTION: Cases of discharging dirty ballast or oil spillages will be investigated and vessels are liable to fines and/or detention. Vessels shall not discharge into the water of the port any part of the content of their cargo, slop, or ballast tanks or bilges which is liable to pollute these waters. Masters shall ensure that pipe-line and equipment are clean before using them for discharging anything into the water of the port. Scuppers shall be plugged effectively and no leakage or spillage of petroleum on board shall be allowed to leak or be swept overboard.

The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. The following are two amended paragraphs of this law:

Paragraph 1, Art. 4. "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than one thousand and five hundred and not more than six thousand Dinars. In the event of his committing a similar crime within a period of one year from the date of his conviction, such a person shall be punished by a fine of not less than three thousand and not more than six thousand Kuwaiti Dinars, and in the event of his committing yet another crime within a year from this last conviction he shall be punished by a fine of six thousand Kuwaiti Dinars."

Paragraph 3, Art. 6.. "The person responsible for pollution may suspend the detention order against the ship on payment, as a cash guarantee, of six thousand Kuwaiti Dinars to the official entrusted with the execution of such order."

TIDE: The maximum tidal range is 10 ft. 6 in. and velocity of tide is from 0.5 to 2 knots.

DENSITY: 1025.

MEDICAL: Patients will in normal course of events be treated by Quarantine Medical Officer on board. Neither medical nor hospital facilities are provided by the Company. However, in cases of emergency those requiring urgent hospitalisation may be taken by vessel's Agent.

FUEL: Fuel oil bunkers can be loaded in either berth at a max. rate of 500 t.p.h, thus raising the max. loading rate of either berth by 500 t.p.h. for fuel oil cargoes only.

FRESH WATER: Cannot be supplied at Mina Abdulla. In case of utmost need Agent may hire a barge with a capacity of 100 tons of fresh water from Kuwait, and send to Mina Abdulla.

CUSTOMS: Import of firearms and ammunition is forbidden. Under Kuwait Law No. 46, it is an offence to sell or trade liquor within the State of Kuwait. Any person convicted for selling, purchasing, giving away, accepting or acquiring in any manner, liquor or any intoxicating drinks for the purpose of trading and marketing shall be punished by a max. 3 years imprisonment and a max. fine of KD 300 or by only one of the two aforesaid penalties. Alcoholic beverage is strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

CONSULS: See "Shuwaikh". The American Consulate is situated just outside Kuwait town, some 30 miles from the terminal.

REPAIRS: No facilities.

REPATRIATION: Seamen arriving Kuwait Airport to join vessels at Kuwait ports can obtain transit visa at airport, if Agents arrange to submit necessary guarantee to Immigration Authorities confirming that they are in transit and joining vessels calling at Kuwait. In order to meet the crew at airport and arrange transit visa, cables confirming their arrivals and flight numbers are to be sent to Agents to reach them at least 24 hours before arrival of crew. Marine Superintendent of Owners, or Owner's Representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions abroad.

AIRPORT: Kuwait.

TIME: GMT plus 3 hours.

PROVISIONS: Aminoil does not provide any chandlering facilities. Masters of vessels calling at Mina Abdulla must arrange for supplies through ship's Agent. Foodstuffs, beverages, tobaccos, etc., are available from ship chandlers in Kuwait in limited kinds and quantities. Prices a little more expensive than in Kuwait due to long transportation. Ship's Agent should be advised by cable well in advance.

CERTIFICATES: See "Documents". There is no organisation for dealing with Deratisation Certificate at Mina Abdulla. Agents are responsible for presentation of oil-discharging certificate to Customs Authorities as guaranteed by them. All cargo discharge certificates duly attested by the Arab Consulate are to be sent to Agents directly.

SHORE LEAVE: At present, crews not allowed ashore at Mina Abdulla, and this rule will be strictly adhered to.

REGULATIONS: Main engines shall always be kept ready for immediate use. Steam pressure shall be maintained at min. necessary to operate auxiliaries and to manoeuvre in case of need. Deck steam is to be maintained at all times.

Engine repairs which may prevent working of main engines may only be undertaken with written permission of Marine Officer.

Master shall at all times retain on board sufficient crew to work vessels.

Vessels shall have both anchors ready for immediate use on arrival and departure.

Vessels berthed at sea terminals shall not carry out engine trials without permission of Marine Officer.

Vessels berthing during hours of darkness must if available provide a portable light of an approved gas-tight pattern capable of being placed on either quarter of vessel to illuminate vessel's mooring ropes sufficiently for mooring boat.

Vessels shall provide an efficient accommodation ladder and boat rope for port authorities and, during hours of darkness, shall install adequate approved lighting for same. Failure to comply with this may lead to inward clearance being delayed by authorities, thus incurring delays to vessel.

No swimming in vicinity of vessels or from vessels in berth is allowed.

AUTHORITY: American Independent Oil Company.

AGENTS: See "Shuwaikh".

MINA-AL-AHMADI: 29.04 N. 48.09 E.

OPERATORS: Kuwait Oil Company Ltd.

LOCATION: Port of Mina-al-Ahmadi is open roadstead situated on Western shores of the Gulf.

PORT LIMITS: From the shore at Lat. 29° 02′ 50″ N. Eastward to Long. 48° 09′ 42″ E. Thence in a S.E. direction to position Lat. 29° 02′ 45″ N., Long. 48° 09′ 47″ E. then in an Easterly direction towards Long. 48° 11′ 30″ E. and the Northerly limit 29° 10′ 00″ N. from the shore to 48° 11′ 30″ E.

FLAG: National flag of Kuwait is to be flown at foremast head during vessel's stay in port.

NAVIGATIONAL AIDS:

Current hydrographic information may be obtained by radio from the "Middle East Navigation Aids Service, Bahrain".

Lights and Fog Signals

A fog signal on the extreme South end of South Pier with characteristics of one 3-second blast every minute. Approx. position Lat. 29° 04′ 05″ N., Long. 48° 10′ 00″ E.

A fog signal situated on the North Pier with a characteristic of 2.5-second blast, 3-second silence, 2.5-second blast, 3-second silence, 2.5-second blast, 46.5-second silence, Approximate position 29° 07′ 24″ N., 48° 09′ 00″ E.

A fog signal situated on the Sea Island with a characteristic of 2×3 second blasts every 90 seconds. Approximate position 29° 06′ 48″ N., 48° 17′ 29″ E.

DOCUMENTS:

1. To obtain clearance inwards, following documents required by Agents:
   - (i) Ship's Register.
   - (ii) Safety Equipment Certificate.
   - (iii) Safety Radio Certificate.
   - (iv) Load Line Certificate.
   - (v) Last Port Clearance.
   - (vi) Two copies of Crew List showing names, nationalities and passport/seamen's book numbers.

Items (i) to (v) are returned to Master together with Port Clearance (valid 24 hours only) prior to sailing.

2. Customs boarding officers require following:
   - *(a)* One copy of Crew List.
   - *(b)* Log Books covering period from last visit.
   - *(c)* Completed Customs Declaration Form (supplied by boarding officer).
   - *(d)* List of Ports visited with arrival and departure dates since last visit (form also supplied by boarding officer).
   - *(e)* Completed Ballast Form (form also supplied by boarding officer).

3. Immigration officials require the following:
   - *(a)* Valid Passport or Seamen's Book – the latter is preferable for landing.
   - *(b)* Letter of Guarantee from Agents (iv above).
   - *(c)* Two copies of Crew Lists.

4. Early Departure Procedure. KOC Documents Section are now operating an Early Departure Procedure to cut down delays in documentation. Masters may opt to use this scheme, full details of which can be obtained from KOTC.

5. Discharge Certificates: Discharging certificates of oil cargo loaded from Kuwait and neutral zone ports are to be sent to vessels' local Agent immediately, duly attested by Customs authorities and Arab Consulate covering full quantity as per Bill of Lading.

If a vessel, which has not submitted the certificate for the previous voyage, calls for the second time, she will be allowed to load and sail only after paying a cash deposit of KD 2,000.

In order to avoid delay in berthing, loading and outward clearance for vessels, all owners must give instructions to Agent at discharging ports to forward relevant cargo discharge certificates to Agent at loading ports without delay.

PILOTAGE: Vessels should arrive with sufficient clean ballast for safe manoeuvring under prevailing weather conditions. Under certain conditions the Pilot, after consulting the Harbour Master, may require additional ballast to be run in before berthing.

All berthing, unberthing and manoeuvring of vessels within the port limits, restricted area and prohibited anchorage must be done under the supervision of a KOC Pilot.

It is the duty of the Master to inform the Pilot of any special conditions, difficulties, or peculiarities whatsoever pertaining to his vessel which might impose hazards in connections with the handling, mooring, unmooring, loading or discharging of the vessel.

ANCHORAGES: The suggested anchorages in the port of Mina-al-Ahmadi have been laid out to facilitate shipping in general. These anchorage areas are outside of the port limits and clear of the prohibited anchorage and restricted areas. Depths in the anchorages range from 10 to 15 fathoms, the seabed is of sand and soft coral with mud patches and affords good holding ground.

Incoming vessels are assigned berths by the Harbour Master in accordance with time of arrival, type of cargo required, size of vessel and loaded draft. Endeavour is made to berth vessels on arrival and Masters will be advised, prior to arrival, of the pier at which they will berth. If a berth is not available, vessels will be requested to anchor in one of the three anchorages as follows:

1. To the North-East of the Sea Island and outside of the restricted area.
2. To the East of the North Pier, outside of the port limits and to the North of the prohibited anchorage.
3. To the East of the South Pier, outside of the port limits and between the Southern limit of the prohibited anchorage and the Northern port limit of Shuaiba Port.

To the East of the port limits exists a prohibited anchorage and a restricted area which embraces the Sea Island and submarine-feeder pipe-lines.

Positions of these areas are:

Prohibited anchorage	29° 05′ 00″ N.	to	29° 05′ 00″ N.
	48° 11′ 30″ E.		48° 15′ 00″ E.
	29° 07′ 00″ N.		29° 07′ 00″ N.
	48° 11′ 30″ E.		48° 15′ 00″ E.
Restricted area	29° 05′ 00″ N.	to	29° 05′ 00″ E.
	48° 15′ 00″ E.		48° 20′ 00″ E.
	29° 09′ 00″ N.		29° 09′ 00″ N.
	48° 15′ 00″ E.		48° 20′ 00″ E.

HEALTH:

Vessels calling at Mina-al-Ahamdi are requested to radio the following information to "Health Minahmadi Port":

(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Smallpox and Cholera Certificates
(5) Request for Free Pratique

Free pratique will be considered at the discretion of the Quarantine Officer, and vessels must hoist the yellow flag unless they are informed by Agent or Harbour Control that free pratique has been granted.

Regulations.

- (i) All vessels must exhibit quarantine signals until quarantine formalities are completed or free pratique granted. By day, International Code Flag "Q"; by night, red light over white light. No person other than the Pilot is allowed to board any vessel either alongside pier or at anchorage until pratique has been granted.
- (ii) Valid smallpox Vaccination Certificates for all crew members and passengers are required. Valid Cholera Certificates will be required from travellers coming from infected areas with the exception of children under one year.
- (iii) Ratguards must be fitted to all moorings – this is being rigidly enforced.
- (iv) Maritime Declaration of Health Form (supplied by boarding quarantine officer) to be completed.
- (v) One copy of Crew List containing dates of vaccination and inoculation is required.
- (vi) International Certificates of Vaccination and Inoculation to be available for inspection if required.
- (vii) Details of air-conditioning available in vessel (form supplied by boarding officer).
- (viii) A valid Deratisation Certificate must be produced. Facilities are available locally for renewal.

RADIO:

1. *Station:* All radio communications to the Company should be

quoted in Greenwich Meantime and should be routed through Kuwait Coast Station 9KK, details of which are given below:

412G Al Kuwait (9KK) 29° 10′ 09″ N., 47° 45′ 42″ E.

Frequency			*Hours*
(9KK) 430*, 450, 500	A1, A2	2 kW.	0300–2100
(9KK2) 4,287	A1	0.75 kW.	On request
(9KK3) 6,370	A1	0.75 kW.	On request
(9KK4) 8,525	A1	0.75 kW.	0300–2100
(9KK5) 12,895	A1	0.75 kW.	0300–2100
2,182, 2,200, 2,750	A3	0.1 kW.	0300–2100

*On request.

Procedure: Transmits traffic lists on 450 kc/s. each even hour; 8,525 and 12,895 kc/s. each odd hour plus 35, listens for 30 mins. thereafter: 2,750 kc/s. each odd hour plus 05.

2. *ETA:* 96 hours before arrival Masters should transmit to Kuoco through Al Kuwait Radio (9KK) the following information required by Kuwait Oil Company.

1. ETA.
2. Cargo and Bunkers required.
3. Notice of any repairs which may immobilise vessel.
4. Any special requirements regarding cargo documents.
5. Max. loading rate and ballast discharge time, special loading instructions if any.

The ETA should be confirmed 24 hours before arrival. The Master should also provide Agent with following information prior to arrival:

1. ETA.
2. Last port of call.
3. Any sickness on board.
4. Number of crew members unprotected against smallpox.
5. Number of crew to see doctor or dentist.
6. All requirements – provisions, supplies, lubricating oils, repairs, stores, machinery for landing, crew repatriation, etc.

3. *Radio Beacon:* A low power radio beacon call sign "9KU" frequency 312.6 kc/s. is situated at Lat. 29° 04′ 13.4″ N., Long. 48° 08′ 27.5′ E. Code transmissions are repeated every 20 minutes commencing on the hour throughout the 24 hours as follows: 9KU repeated 3 times for a period of 20 seconds followed by a dash for 20 seconds alternately for a whole period of two minutes.

VHF: A short range VHF radio telephone Port Control system is in operation and continuous watch is maintained on International Channel 16. Port Working Channels are:

Channel	*Function*
11	General Port Working
12	Pilot and Tugs North/South Pier/Sea Island
13	Sea Island Loading
14	Pilot and Tugs North/South Pier/Sea Island
26	Public Correspondence
27	Public Correspondence

Vessels bound for Mina-al-Ahmadi should contact Port Control calling "Mina South Pier signal" on Channel 16 a few hours before arrival.

N.B As Channel 16 is reserved for Calling, Safety and Emergency, vessels should refrain from using this Channel unnecessarily.

NOTICE OF READINESS: *(a) Vessels Berthing Direct from Sea:* The vessel will be advised by VHF or signal lamp. "Berthing on arrival" and the "Notice of Readiness time" will be taken as the time the Pilot boards the vessel.

(b) Vessels Anchoring and Awaiting Berth: When a berth is not available, or in the absence of any communication from the shore the time of NOR is taken as the time the vessel anchors in the roads. Time of anchoring, together with position relative to South Pier Control, should be advised to the Harbour Master by VHF or through 9KK as soon as possible. All vessels at anchor are required to be ready to berth on receipt of one hour's notice from the shore; this notice will be given by VHF or lamp and vessels should ensure an efficient watch is maintained to receive this notice.

(c) Cancellation of NOR: If after receiving one hour's notice a vessel is not ready to berth when Pilot boards, at the expiry of that notice the original NOR will be cancelled and the Pilot withdrawn. The new NOR will be the time the vessel indicates to the shore that she has rectified the defect that originally prevented her from berthing. As vessels are normally berthed in strict order to NOR time a vessel could lose considerable time through not being ready, and Masters should ensure that delays of this nature do not occur.

TUGS: KOC maintain 6 diesel tugs for port use. 4×1,500 h.p. with a bollard pull of 24 tons, and 2×2,500 h.p. with a bollard pull of 30 tons. 4 tugs normally maintained on duty at all times. Hire charges for the services of Pilots, tugs and rope launches are covered by comprehensive port charges. Under normal operating conditions, no tug or other craft will come alongside the vessel before the Pilot boards; ship's personnel must not signal for tugs or other boats to come alongside.

MOORINGS: When at berth, vessels must be moored to entire satisfaction of Pilot. Vessels must be ready at all times to put out extra moorings as requested by pier personnel or dictated by weather changes.

Mina-al-Ahmadi is subject to sudden fierce squalls; winds of 70 knots have been recorded, therefore vessel's mooring lines must be checked frequently to prevent excessive movement of vessel in berth. Experience has shown that wholly synthetic moorings have too much elasticity and allow vessel to range or drift away from the berth during periods of adverse weather. Whilst these moorings are acceptable as head/stern ropes, it is felt that the ideal breast moorings should be of wire or a wire rope combination with the end being sent ashore fitted with a synthetic pennant or tail. This type of mooring provides the necessary elasticity while still being able to hold the vessel in position. All vessels moored with automatic tension winches must set the manual brakes on these winches.

BERTHING: Vessels can berth at any time of the day and night. Berths are allocated depending on shipping position and size of vessel and the berthing position is advised by VHF. All vessels must establish contact with Signal Station or Sea Island Control before anchoring to ascertain position indicating the NOR time. Vessels should remain at one hour notice for berthing at all times and maintain an efficient watch on VHF.

There are 2 piers, 6 buoy moorings (seaberths) and a Sea Island.

South Pier. The South Pier is connected to the shore by an approach trestle, this trestle leaves the shore in position 29° 04′ N., 48° 09′ E., and runs seaward in an 071° 26′ direction for a distance of 4,200 ft. (1,280 m.). The "T" head is formed by the oil pier running Northwards in a 341° 26′ direction for 2,805 ft. (655 m.) and the general cargo/oil pier running Southwards in a 174° 26′ direction for 1,076 ft. (328 m.). The pier is a steel piled structure with a wooden deck, 24 ft. above LWOST. The South Pier has 6 oil-loading berths, plus 2 berths which can be used for general cargo or L.P.G. loading; details of these berths are as follows:

Limiting Depths and Berth Lengths

Berth	*Depth at LWOST*	*Nominal Length*
1	48.0 ft.	660 ft.
2	47.0 ft.	675 ft.
3	47.0 ft.	705 ft.
4	50.5 ft.	765 ft.
5	41.5 ft.	765 ft.
6	43.5 ft.	705 ft.
9	44.0 ft.	615 ft.
10	49.0 ft.	1,050 ft.

All berths except Nos. 1 and 10 are equipped with 10 in. cargo lines and 8 in. bunker lines. No. 1 and 10 berths are equipped for loading LPG each comprising a 16 in. loading line and a 10 in. vapour return line and a 6 in. circulating line. No. 9 is only equipped for bunkers and dry cargo.

North Pier. The North Pier is situated 3.5 nautical miles North of the South Pier and connected to the shore by an approach trestle which runs seaward from 29° 07′ 04″ N., 48° 08′ 10″ E. in a direction of 071° for a distance of 4,754 ft. (1,449 m.); the head is formed by the oil pier which runs Northward in a direction of 341° for a distance of 2,304 ft. (702 m.). The pier is a steel piled structure with a wooden deck, 20 ft. above LWOST. The North Pier has 4 oil-loading berths details of which are:

Limiting Depths and Berth Lengths

Berth	*Depth at LWOST*	*Nominal Length*
11	59 ft.	1,008 ft.
12	58 ft.	1,296 ft.
15	57 ft.	792 ft.
16	57 ft.	740 ft.

Berths 11 and 12 each have 4×12 in. cargo hoses, 1×12 in. Chiksan arm for naphtha loading and 2×8 in. bunker hoses. Berths 15 and 16 each have a Chiksan loading unit consisting of 4×12 in. cargo arms and 2×8 in. bunker arms. To facilitate the connecting of hoses on Berths 11 and 12, North Pier vessels are requested to retain sufficient ballast so that their manifold height above zero ft. tide does not exceed 60 ft.

Sea Island Terminal. The loading platform of this new terminal is located in position 29° 06′ 48″ N., 48° 17′ 29″ E., approximately 7.4 miles East of the North and South Piers. This terminal is a steel piled structure in 94 ft. of water (LWOST). It consists primarily of a central loading platform with control tower, six mooring and four breasting dolphins, all interconnected by catwalks. The terminal, which lies in 330°–150° direction, is some 1,620 ft. in length. The height above datum of the loading platform is 44 ft.

Control Room on this terminal is about 90 ft. above water level.

Two vessels can berth at the same time but loading is possible one at a time, and the crude oil is fed by a 48″, and heavy fuel oil bunkers by a 20″, submarine pipe-line from shore. Navigational lighted buoys lettered A, B and C have been installed to mark the run of these pipe-lines. Other than heavy fuel oil no other bunkers available. Light fuel, marine diesel are not available at the Sea Island Terminal. Therefore vessels berthing at Sea Island requiring light fuel oil and marine diesel should inform Sea Island Control prior to berthing to avoid any possibility of delays. Sea Island berths each fitted with 4×16″ cargo lines and 2×12″ bunker lines.

Sea Berths: These berths are no longer in use and the buoys and moorings have been withdrawn.

Manifold Loading Connection Sizes. North Pier cargo flanges are 12 in. and bunker flanges 8 in. standard 150#ASA. South Pier cargo flanges are 10 in. and bunker flanges 8 in. standard 150#ASA. Sea Island Terminal cargo flanges are 16 in. and bunker flanges 12 in. standard 150#ASA.

Reducers. All vessels using the port of Mina-al-Ahmadi, should be equipped with reducing spools to fit these loading connections. These fittings should be in place prior to berthing to help expedite the vessel's turn-around time.

Slops. A 6 in. slop-line is available on all berths on North and South Piers for reception of slops. For first 3 hours use of this facility is free, for each additional hour or part thereof, a charge is made. Reception of slops is necessarily slow and a vessel may be considerably delayed in having to pump slops ashore. Vessels are therefore expected to arrive with clean ballast and Masters are asked to certify that all tanks and lines have been thoroughly washed unless "load on top" techniques are being operated.

CRUDE/PRODUCT LOADING RATES: The following table shows the crude products available at each berth and the nominal loading rates:

Cargo	*Available at berths*	*Nominal t.p.h.*	*Maximum potential*
Crude Oil	Sea Island 20 and 21	15,000	
Crude Oil	11, 12, 15 and 16	7,200	12,000
Crude Oil	2, 4 and 5	3,800	7,000
Crude Oil	3 and 6	3,200	5,000
Crude Oil	1 and 10	2,800	2,800
Heavy Fuel Oil	11, 12, 15 and 16	2,000	
Heavy Fuel Oil	4 5 and 6	2,700	
Heavy Fuel Oil	3	1,100	
Heavy Fuel Oil	1, 2, 9 and 10	500	
Light Fuel Oil	11, 12, 15 and 16	600	
Light Fuel Oil	3, 4, 5 and 6	1,100	
Light Fuel Oil	1, 2, 9 and 10	500	
Admiralty FO	3, 4, 5 and 6	1,200	
Diesel Oil	11, 12, 15 and 16	250	
Diesel Oil	1, 2, 3, 4, 5 and 6	500	
Diesel Oil	9 and 10	250	
Gas Oil	1, 3, 4, 5 and 6	1,500	
KLD	1, 2 and 4, 11 & 12	1,400	
PPO	1 and 2	300	
KNG	1, 2 and 4, 11 & 12	1,400	
Bulk LPG	1 and 10	1,000	

Note: All blended cargoes containing crude oil as one of the components can be loaded at any berth.

FUEL: Heavy, light and diesel fuel can be supplied on all berths except the Sea Island, where only heavy fuel is available. Approx. Specifications:

	API	*Viscosity*	*Sulphur content*
Heavy Fuel	15.2–15.8	2,900–3,400	4.0 or less
Light Fuel	19.0–20.0	600	3.5 or less
Diesel Fuel	35.5–36.5	36	1.5 or less

LUBRICATING OILS: The stock of marine products of BP, Shell and Gulf Oil are maintained at Mina-al-Ahmadi and requests indicating the quantities are to be made in advance. All drums are to be handled during deballasting or before loading. Vessels will not be allowed to load more than 9 drums after loading unless under special circumstances and depending on shipping congestion. No bulk luboil delivery service available in Kuwait.

DRY CARGOES: Dry cargo vessels will either discharge into lighters in the anchorage or alongside South Pier at Berths No. 9 or No. 10, subject availability of berths.

Cargo Cranes. Portal cranes of 5 tons capacity on Berths 9 and 10, also a stiff-leg derrick with a lift of 54 tons on Berth No. 10A. However, vessels are expected to have their own cargo equipment ready for use in case this gear is required.

Explosives. Cargo vessels carrying explosives are not allowed alongside piers.

Barges. Company barges available for use in discharging dangerous cargoes or other cargo in the anchorage.

Stevedores. Agents will arrange stevedores to work cargo whilst KOC will provide launch, barge and shore labour.

MEDICAL: Patients will normally be treated at State Quarantine Clinic, where doctors are on duty between 0800–1200 hrs. and 1500–2000 hrs. daily. In emergencies doctors are available any time. Patients requiring hospital treatment will be transported by Agents to either KOC hospital in Ahmadi or to State hospital in Kuwait. Dental treatment can be arranged by Agents.

FRESH WATER: Fresh water is not normally available except in emergency cases but in the Summer it will be difficult to obtain. However, vessels must send in their requirements well in advance to ascertain possibility of supply from Shuwaikh anchorage. This will be subject to draft restrictions, deviation, delay depending on availability of suitable barges and previous port commitments to other shipping and additional port charges.

DEEP WATER DEPARTURE CHANNEL: A comprehensive survey was carried out to determine the route of the departure channel for the larger and deep draft vessels leaving the port of Mina-al-Ahmadi in a loaded condition. This channel is some 28 miles in length; it extends from the Sea Island Terminal to Madaira Reef and is marked by 21 light buoys and 2 light beacons, one established on Taylor Rock and the other on Madaira Reef. In addition to the above aids, Madaira Reef Light Vessel has been re-positioned further to the East and renamed Ahmadi to act as a fairway mark. Water depth in the departure channel is from 91 ft. to 100 ft. and above. Two shallow patches, one is about 9 miles from Sea Island with a minimum 91 ft. and the second is 14 miles from Sea Island with 92 ft. minimum water. Vessels which by reason of their draft are confined to this deep water channel and consequently hampered in their freedom to manoeuvre, will exhibit the following signals:

(i) *By day.* A black cylinder 4 ft. long by 2 ft. in diameter exhibited where it can best be seen.

(ii) *By night.* Four red lights vertically disposed spaced 3 ft. apart with an all round visibility of 4 miles exhibited where they can best be seen.

The exhibition of these signals in no way absolves any vessel from taking all appropriate action to avoid collision as required by the International Rules and Regulations for Preventing Collisions at Sea, but if a deep draft vessel is in doubt that an approaching vessel is not giving her sufficient room to manoeuvre she should indicate such doubt by giving at least five short and rapid blasts on her whistle.

Vessels having less draft should, when able to do so, give way to vessels exhibiting and sounding these signals and indicate this intention by giving one short blast followed immediately by 1 long blast on the whistle. Normal sound signals for vessels in sight of another should then follow.

Anchoring and fishing are forbidden within the deep water departure channel.

The departure channel is marked by the following buoys and beacons:

Number/ letter	*Type*	*Position N/Lat.*	*E/Long.*	*Character*	*Port star-board/ middle ground*	*Vis. (0.85) (miles)*
1	Buoy 200/3L	28° 57′ 33″	48° 46′ 18″	QK.FL.W	S	6.2
2	,,	28° 56′ 23″	48° 46′ 04″	IQFl.R	P	4.0
3	,,	28° 57′ 23″	48° 41′ 52″	FL.W.10	S	7.4
4	,,	28° 56′ 41″	48° 41′ 12″	FL.R.10	P	4.6
5	,,	28° 58′ 23″	48° 39′ 00″	FL.W.5	S	7.2
6	,,	28° 57′ 38″	48° 37′ 49″	FL.R.5	P	4.4
7	,,	29° 00′ 54″	48° 32′ 59″	FL.W.10	S	7.4
8	,,	29° 00′ 09″	48° 32′ 31″	FL.R.10	P	4.6
9	,,	29° 00′ 38″	48° 31′ 07″	FL.W.5	S	7.2
10	,,	29° 00′ 27″	48° 31′ 53″	IQFl.R	P	4.0
11	,,	29° 01′ 20″	48° 28′ 52″	FL.W.10	S	7.4
12	,,	29° 00′ 22″	48° 31′ 27″	FL.R. 5	P	4.4
13	,,	29° 02′ 18″	48° 25′ 34″	FL.W. 5	S	7.2
14	,,	29° 00′ 13″	48° 30′ 51″	Gp. FL. (3) R. 10	P	4.3
15	,,	29° 05′ 27″	48° 21′ 25″	QK.FL.W.	S	6.2
16	,,	29° 01′ 40″	48° 26′ 38″	IQFl.R	P	4.0
18	,,	29° 01′ 46″	48° 25′ 44″	FL.R. 5	P	4.4
20	,,	29° 01′ 53″	48° 24′ 50″	Gp.FL.(3) R.10	P	4.3
22	,,	29° 03′ 18″	48° 22′ 53″	FL.R.5	P	4.4
24	,,	29° 05′ 05″	48° 20′ 26″	FL.R.15	P	4.75
26	,,	29° 05′ 50″	48° 19′ 15″	IQFl.R.	P	4.0
A	,,	29° 05′ 38″	48° 11′ 30″	QK.FL.R.	MG	3.6
B	,,	29° 05′ 59″	48° 13′ 15″	QK.FL.W	,,	6.2
C	,,	29° 06′ 21″	48° 15′ 00″	QK.FL. R.	,,	3.6
Taylor Rock	Beacon	29° 01′ 20″	48° 34′ 33″	IQFL.W	—	7.3
Madaira Reef	Beacon	28° 56′ 03″	48° 46′ 22″	FL.R. 5	—	11.2
Ahmadi	Light vessel	28° 56′ 00″	48° 53′ 00″	FL.12 sec.	40 Ft.	11.0

CUSTOMS:
Customs officials will board vessels to inspect log books to ascertain violation of Israeli Boycott Rules and seal the liquor bond during stay in berth. An accurate list of alcoholic drinks in *Bonded Store* only is to be presented to the officials sealing the bond and the seal is not to be broken until vessel leaves the port.

(i) Personal effects mainly required for personal use and not for re-sale or purpose of commercial gain are allowed free of duty. However, all other goods are subject to a 4% ad valorem duty (CIF value). Suppliers invoices and Certificate of Origin are required for clearance.

(ii) Importation and the sale of alcoholic beverages is strictly prohibited.

(iii) All goods for landing from tankers must be declared to boarding Customs Officer and necessary documentation completed.

(iv) Israeli goods, goods made by companies having interest or branches in Israel, Israeli vessels and vessels trading with Israel are boycotted and not allowed entry into Kuwait.

IMMIGRATION:

(i) Nationals of all friendly countries normally allowed to land. Israelis forbidden entry into Kuwait.

(ii) Transit visas should be obtained from Kuwait Embassies and Consulates abroad. However, in emergencies entry visas can be arranged at airport.

(iii) Transit passengers having valid connecting airline ticket to next port are allowed to land without visas up to 24 hours, extendable to 48 hours if required.

(iv) Seamen of all friendly countries normally allowed to land in transit to join vessels, without visas but on Agents guarantee. Advance information regarding names, nationalities, age, sex, etc. is required by Agents in order to facilitate reception and immigration clearance. *N.B.* Thursdays and Fridays are Company holidays.

(v) Seamen allowed to land for hospitalisation, repatriation, transfer, etc., on a written undertaking that all expenses are met by Agents on behalf of Owners.

(vi) Passports must be valid for Kuwait for citizens of all countries. Stateless persons are required to have a visa before arrival in Kuwait.

CONSULS: Most friendly countries maintain Embassies or Consulates in Kuwait Town.

TIME: Kuwait State bases local time on the 45th meridian (GMT plus 3 hours). This time is in force the whole year.

SERVICES: To avoid delay all vessels advised to cable Agent of all their requirements in advance, giving full details:

Repairs

(a) *Ship Repair.* All running repairs are undertaken through local contractors.

(b) *Radar/Radio and Electronic Equipment.* Maintenance service of this equipment is available through KOTC whose engineers/technicians are available for service on request.

Supplies. Supply of chemicals, paints, spare parts and provisions are available through local Agents.

Laundry. Laundry service is available on advance notice.

Oil Inspection. E. W. Saybolt & Co. maintain an independent inspection service.

Seamen Centre. This service is now centred only on South Pier,

open to visiting seamen from 0700–2200 hrs. daily. Film exchange facilities are available at the South Pier.

Classification Societies. Lloyds Register of Shipping has a Resident Surveyor in Kuwait and maintains an office with Kuwait Maritime & Mercantile Co., who attend marine and non-marine work. Other societies have non-exclusive surveyors and their services can be obtained through KOTC.

Divers. Divers services are available, including underwater hull cleaning service, through KOTC.

SHORE LEAVE: Ship's personnel and passengers not permitted ashore for any purpose whatsoever until pratique granted. All shore leave is contingent upon compliance with quarantine regulations and, under limited conditions and hours, shore leave may be granted. Masters should consult Agents to obtain the necessary passes.

REGULATIONS:

(a) Local laws. The laws of Kuwait are in force at the port of Mina-al-Ahmadi. Masters and crew members are advised for their own protection to abide by them. Comprehensive regulations governing the use of the port are promulgated in Law No. 21 of 1961. Masters of visiting vessels should acquaint themselves with this law.

(b) Pollution. The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. The following are two amended paragraphs of this law:

Paragraph 1, Art. 4. "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than one thousand and five hundred and not more than six thousand Dinars. In the event of his committing a similar crime within a period of one year from the date of his conviction, such a person shall be punished by a fine of not less than three thousand and not more than six thousand Kuwait Dinars, and in the event of his committing yet another crime within a year from this last conviction he shall be punished by a fine of six thousand Kuwait Dinars".

Paragraph 3, Art. 6. "The person responsible for pollution may suspend the detention order against the ship on payment, as a cash guarantee, of six thousand Kuwaiti Dinars to the official entrusted with the execution of such order."

(c) Certificates. All vessels must comply with International Safety Regulations and ensure that ship's certificates, i.e. Safety Radio, Safety Equipment and Load Line are valid. Facilities are available for renewal or extension providing proper notice is given. At least 48 hours should be allowed *excluding* Thursdays, Fridays or other local holidays.

(d) Load Line Regulations are strictly enforced, vessels overloaded will not be allowed to sail and subject to lengthy delay awaiting suitable facilities for pumping ashore. No facilities for pumping cargo ashore from Sea Island are available.

(e) A Cargo Discharge Certificate for cargo loaded from Kuwait each voyage is to be presented to the Customs and Ports in Kuwait through the Agents within 4 months from sailing and these certificates are to be signed and stamped by local Customs officials and authenticated by an Arab Embassy or Consulate in the country of discharge.

PORT TAX: New tax introduced by the State of Kuwait at the rate of 45.25 fils (KD. 0.4525) calculated on ship's g.r.t. and outward clearance is subject to payment of their dues before departure.

Declaration of g.r.t. and n.r.t. details essential to avoid overcharge.

Early Departure Procedure:

EDP Cargo Documentation System is offered to all ships. Those vessels not accepting this system of documentation are unberthed to anchorage to await documentation and therefore subject to delay in sailing until documents are ready and delivered on board by launch. Weather conditions may prolong such delays on occasions.

AGENT: For all tankers loading/discharging or sundry errands on a sole agency basis. Address: Kuwait Oil Tanker S.A.K. (Agency Branch), P.O. Box Fahaheel No. 7055, Kuwait. Telex: 4201, 4202. A/B MINATANK KWT. Tel. 911753/5; 911758/9; 911811. Cables: "Minatank Kuwait."

KOTC Agency is also connected with direct short range telephone VHF system and continuous watch is maintained on Channel 16. Working channels are and can be reached by calling"Minatank". Channel 16, calling only. Channel 26, Agency working. Channel 27, Agency Working.

MINA SAUD: 28.45 N. 48.24E. (See Plan)

LOCATION: Mina Saud located just South of Ras Az Zaur approximately 24 miles 244° from Madaira Light Vessel. Terminal connected to field and production centre at Wafra, 31 miles to N.W., by 16-in, and 10-in. oil pipe-lines, and 8-in. gas line.

The most conspicuous object at the terminal is the refinery flare, in position 28° 44′ 13″ N. 48° 23′ 19″ E. Other objects conspicuous to the navigator are: Northern Radio Mast, Lat. 28° 44′ 32″ N. Long. 48° 23′ 38″ E. surmounted by a fixed red light at night; Az Zaur Beacon 28° 44′ 28″ N. 48° 23′ 40″ E. a 30 ft. high frame exhibiting flash every 5 seconds.

OPERATORS: Mina Saud Marine Terminal operated by Getty Oil Company (hereinafter referred to as the Company) 7 days a week. Weather and other circumstances permitting, ships will be loaded, moored and unmoored at all hours of the day. Company representatives available at all times to discuss with Master any problems affecting vessel turnaround.

FLAG: All vessels required to fly Kuwait flag at foremast during daylight hours. Flags may be obtained from Agents.

APPROACHES: Vessels on passage direct to Mina Saud up Gulf should pass about 1 mile South of Madaira Reef light-vessel, thence make good a course of 242° to an anchorage off Mina Saud in 9 fathoms.

DOCUMENTS:

Ship's Manifest.
Bill of Health.
Crew List.
Clearance from Last Port.
Passengers Manifest, if any.
Store List.
Bonded Store List.

Agents are responsible for presentation of oil discharging certificate to Customs authorities as guaranteed by them. All cargo discharge certificates duly attested by Arab Consulate to be sent to the Agents directly.

Cargo documentation carried out by Terminal. Masters will greatly assist Terminal Staff by prompt provision of ship's tank ullages on completion of loading.

PILOTAGE: Vessels boarded by Mooring Master either on approach or at anchorage. Mooring Masters are Licensed Masters Foreign Going. They act in an advisory capacity to Master and have expert knowledge of local conditions.

Mooring Master will pilot the vessel into the berth, supervise the mooring and unmooring, and advise Master with respect to the connecting and disconnecting submarine hose. A ship's deck officer must be on the bridge at all times while ship is manoeuvring, and deck officer must direct ship's crew in all hose handling. During loading operations Mooring Master will act as Company's representative

ANCHORAGE: Centre of anchorage area recommended is in position 090° from Flare 4.3 miles, which has good holding ground with mud and sand bottom.

Prohibited anchorage area defined as follows: beginning at refinery flare 060° 3.5′ thence 180° 1.75′ thence 270° 3.0′ to refinery flare.

WEATHER: In Summer months of June, July and August light to moderate Northerly and North-westerly winds are general rule at Mina Saud. Occasional strong N.W. winds of Gale force. Strength and duration governed by strength of S.W. monsoon blowing outside Gulf.

During Autumn and early Winter months fine weather is generally experienced associated with moderate N.E. monsoon prevailing outside Gulf. Occasional 'Shamals' (N.W. winds) occur.

In late Winter period and Spring, strong S.E. winds with moderately heavy seas frequently experienced at Mina Saud. These are due to approach of low pressure systems from Atlantic and Mediterranean Sea spreading Eastwards across Levant and Iraq.

TIDES: Tide cycle is combination of diurnal and semi-diurnal tides giving a Higher High, Lower High, Higher Low and Lower Low waters during a 24 hour period.

Range of tide is average 9 feet at Springs and 5 feet at Neaps.

Commencement of ebb stream (direction 190°) after Higher High water may be taken as 2 hours before predicted time of Higher High water at Mina Saud published in Admiralty Tide Tables.

Main direction of flood and ebb streams 010° and 190° is extremely variable between Lower High Water and Higher Low Water period. Average direction during this period about 045°

Tides subject to meteorological conditions and may be affected in height by plus or minus 2 ft. Times of High and Low water may be considerably affected.

The Mooring Masters have access to information from the Marine Meteorological Station at Mina Saud.

MAX. SIZE: See "Berthing".

HEALTH: Vessels calling at Mina Saud are requested to include the following information.

(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Smallpox and Cholera Certificates.
(5) Request for Free Pratique or details or any cases or suspected cases of infectious diseases during the last four weeks.

Free pratique will be considered at the discretion of the Quarantine Officer and vessel must hoist the yellow flag unless informed by Agent or Harbour Control that free pratique has been granted.

RADIO: W/T messages routed via Kuwait Radio, call sign 9KK on 500 kHz. Kuwait radio transmits traffic lists on 450 kHz at 25 minutes past every even hour and on 8525 kHz and 12895 kHz at 35 minutes past every odd hour.

VHF Service maintained by Mina Saud Marine. Listening on Channel 16 (156.8 mHz). Operating hours: 0700 to 1200 and 1300 to 1600 local time.

Masters are requested to advise ETA 72 hours before arrival Mina Saud, and to confirm this when 24 hours distant from the Port.

It will assist if the following information is passed to "Gettymar Mina Saud" before vessel's arrival.

Bunker fuel requirements in metric tons or U.S. bbls. at 60° F.
Cargo requirements in long tons or U.S. bbls. at 60° F.
Confirmation that only clean ballast is to be discharged.
ETA should be confirmed 24 hours before arrival.

When berthed at Mina Saud Contact with the shore is maintained by VHF R/T portable units supplied by the Company.

TUGS: None.

READINESS: Notice of Readiness will be accepted by Company within terms of Charter Party or Contract when known, otherwise during ordinary business hours, which shall be between 0700 and 1800 local time except on Fridays and Public Holidays.

Laytime to commence 6 hours after time of acceptance or upon commencement of loading, whichever occurs first, except that when Notice of Readiness received before 1600 hrs. local time the 6 hours shall be continuous, but if received after 1600 hrs. then such 6 hours shall be daylight hours, daylight hours for such purpose being between 0600 and 1800 hrs. local time.

If after giving Notice of Readiness, vessel delayed in getting into berth or in loading, such delay shall not count as used laytime unless delay shall be due to default of Company. On completion of loading, laytime shall cease upon disconnecting cargo hoses.

Should Company Mooring Master be handed a Notice of Readiness out of business hours and before commencement of loading he will note it as "Received" at that time, for acceptance by the Company at earliest recommencement of business hours, or at time of commencement of loading, whichever shall be first.

If Notice of Readiness given after latest accepted nominated lifting date, laytime shall not commence before commencement of loading.

BALLAST: Vessels must have enough clean ballast to permit safe manoeuvring under any conditions. No shore tanks for disposal of dirty ballast.

Mooring Master will advise when ballast discharge may commence. Inspection of ship's tanks for suitability to receive cargo carried out by Mooring Master or by qualified petroleum inspectors if required.

GEAR: For handling 12 in. and 10 in. strings of hoses ship's derrick should have a minimum safe working load of at least 5 tons. Outreach overside should be at least 5 ft.

Two lengths of 3 in. or 3.5 in. circumference good quality manilla rope each of 50 fathoms in length should be available for use as guys to lead forward and aft for North and South flexible hoses.

Reducers should be available for connection of hoses to ship's manifold and to ship's bunker line connection.

Company provides snub lines of manilla and wire rope for hanging off hoses.

In the event that ship's derrick gear is inadequate for loads required, a work barge can be made available. Charge for this barge, including positioning and personnel, is equivalent of 150 U.S. Dollars per hour (approx.).

BERTHING: There are 2 loading berths with conventional sealine mooring which are connected by a 20 in. submarine line for cargo and a 12 in. submarine line for bunker fuel. Each berth has two 12 in. cargo hoses, and a 10 in. hose for bunkers.

The outer berth, 073°-2.6 miles from refinery flare, is equipped to take vessels of up to 120,000 d.w.t. or larger if part loaded and has a min. depth of 55 ft. the lowest low water. Max. draft allowed is 52 ft. at LLW. Except in exceptional circumstances when tidal loading is allowed. See Appendix below.

Appendix A. Mina Saud Tidal Loading Procedure December, 1975:

Assuming 1000 ft. ship has berthed. Starboard anchor between 150 ft. and 300 ft. South of starboard anchor marker and one ship's length (1000 ft.) inside, (Course make good 270°T). Starboard anchor ranged along bottom and port anchor let go when 11 – 12 shackles out on starboard. i.e. 900 ft. West of starboard (allowing for slack). Vessel would be in berth with between 8 – 10 shackles on each anchor.

When letting go at HW with ebb tide and heaving port anchor. V/L should manage to remain in at least 16.4 m. charted depth, heading about 340°T with stern in line with, or to seaward, of manifold marker buoy.

Every effort should be made to pick up port anchor without slacking too much on starboard anchor. Ideally, last shot of port cable is dragged home whilst starboard cable is fairly tight, so that when port anchor is aweigh vessel swings to starboard and presents her port side to the ebb, thus regaining a mid berth position. (Sometimes necessary to put engines ahead in order to clear manifold marker hose buoys).

Pilot should endeavour to have vessel heading North when starboard anchor is aweigh. Vessel should then steam North or slightly West of North in order to maintain a distance of approx. 1000 ft. from starboard anchor marker buoy. Vessel should start turn to starboard (bearing in mind ebb tide) when abeam of starboard anchor marker buoy, and endeavour to turn on radius of about 1000 ft. with starboard anchor marker buoy at centre. A course of 66°T should be made good until deep water is reached. If this procedure is followed, the min. depth should be not less than 16.4 m. (chart datum).

Note: 16.4 m. exists in berth and on exit channel. Close attention must be paid to vessel's position, as depths of less than 16 m. are in close proximity to exit channel.

Vessel should finish loading cargo or bunkers at least three hours before HW. Thus ensuring maximum height of tide for bottom clearance plus ebbing tide for easier control. (Ebb tide usually commences 2 hours before HW).

Divers should be utilised to check clearance at LW or some convenient time before ship is committed to a tidal loading. (In case of tidal anomaly).

16.4 m. must be reckoned governing depth. (53.8 ft.) and "Alaska Getty" must never be loaded to max. draft unless it is certain that she will sail with at least 1.8 m. of tide above chart datum.

For other vessels calculate thus:-16.4 + ht of tide then subtract 1 m., result will be max. allowable draft (only if weather conditions are ideal).

eg. Alaska Getty

16.4
+ 1.8 ht of tide
18.2
– 1.0 clearance
17.2 allowable draft (56 ft. 05 in.)

It must be borne in mind that mentioned clearances are the absolute minimum that can be tolerated in ideal conditions.

Seismic survey indicates feasibility of dredging or burying pipelines should it ever be necessary and also indicates good anchor holding power potential throughout area. *End of appendix.*

The inner berths, 073°-2.0 miles from refinery flare, has a min. depth of 44 ft. at lowest low water and can accommodate vessels up to 1,000 ft. in length. Max. draft allowed is 41 ft. at LLW.

MOORING: *(a)* Port is an open roadstead and ships must be prepared to use main engines, unmoor and leave at any time.

(b) Mooring and unmooring carried out during day or night, as required. Except mooring at Berth 1, during daylight only.

(c) Vessels moored to ebb tide stream at both inner and outer berths.

(d) At outer berth latest resilient type mooring method is employed.

Resilience in mooring achieved by weight of clump anchor and catenary of chain cable. A quick release hook connects ship's ropes to the buoy.

(e) Both port and starboard anchors should be lowered clear of hawse pipes and ready for instant letting-go from brakes.

Spar buoys established to mark starboard and port anchor dropping positions.

(f) Nine good quality natural or synthetic ropes should be flaked ready for running from the stern. After anchoring, as vessel proceeds astern in Berth, quarter lines are run by Company launch and secured to quick release hooks on quarter buoys.

(g) When securely moored in correct position for handling hoses, each anchor should have about 8 shackles out and it is advisable that tankers using these submarine berths be provided with not less than ten 15 fathom lengths of cable on each anchor.

(h) Masters are requested to ensure that power to deck machinery and sufficient seamen to operate it are immediately available at all times when in berth.

LOADING: Submarine line marked by permanent buoy at each berth, and marker buoys fitted to all hoses.

Recovery of flexible hoses is by fleeting with ship's tackle making use of beckets fitted to recovery chain.

"Ship's Stop" is invariable rule except in an emergency. Ship must give reasonable stand-by time to Mooring Master, 15 to 20 minutes, to alert Terminal staff on shore for closing gauges.

Loading rate at present averages 1,500 t.p.h. Max. 2,000 t.p.h.

MEDICAL: In emergency only. For normal cases, Agent arranges visit to Port Health Doctor.

FRESH WATER: Not available.

FUEL: Bunker fuel (Max. 1500 secs Redwood No. 1) at loading berths through 12 in. submarine line with single 10 in. flexible hose, at Berth 1, and 10 in. hose at Berth 2.

FIRE PRECAUTIONS: Masters are responsible for enforcing "No Smoking" regulations for their vessels and Mooring Master will stop loading if he considers them to be inadequate or if they are not being obeyed. Smoking in Company craft in the berths is forbidden.

CUSTOMS: Alcoholic beverages strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

It is important to remind Owners and Masters that all goods, either landed or embarked, must be cleared by Agent through local Kuwait Government Customs.

Import of firearms and ammunition forbidden.

CONSULS: See "Kuwait."

REPAIRS: No regular repair facilities available. However, fully qualified divers are available from Terminal. Underwater cutting gear and welding equipment available.

Services of divers and equipment are available at rates to be arranged for the job and agreed by Superintendent of Marine and Terminal Operations, Mina Saud.

Repairs to main engines must not be carried out in the berth without permission of Superintendent of Marine and Terminal Operations. Normally vessels requiring to immobilise engines will be anchored well clear of other ships.

REPATRIATION: Crew changes normally effected through Kuwait.

Seamen arriving at Kuwait Airport to join vessels at Partitioned Zone ports can obtain transit visa at the airport, if Agents arranged to submit the necessary guarantee to the Immigration Authorities confirming that they are in transit and joining vessels calling at Partitioned Zone. In order to meet the crew at airport and arrange transit visa, cables confirming their arrivals and flight numbers are to be sent to Agents to reach them at least 24 hours before the arrival of the crew.

Marine Superintendent of Owners, or Owner's representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions aboard.

TIME: GMT plus 3 hours. Permanent.

STORES: Provisions and stores are available from Kuwait. Requirements should be arranged with Agents through Kuwait Radio prior to arrival at Mina Saud.

SHORE LEAVE: Can be arranged through agent.
AUTHORITY: Getty Oil Company, Mina Saud.
AGENTS: See "Shuwaikh."
Communication is by road by personal visit of agency staff. Distance about 50 miles.

SHUAIBA: 29.02 N. 48.08 E.

All vessels should hoist the Kuwait flag.
PORT LIMITS: Shuaiba port limits defined as follows:
North: This separates port of Shuaiba and Mina-al-Ahmadi and is defined by the point of intersection of the coast line with Lat. 29° 02′ 50″ N. in an Easterly direction until it intersects Long. 48° 09′ 42″ E. Thence in a South-easterly direction to the intersection of Lat. 29° 02′ 45″ N. and Long. 48° 09′ 47″ E. Thence in an Easterly direction along Lat. 29° 02′ 45″ N. seawards to Long. 48° 15′ 07″ E.
East: Long. 48° 15′ 07″ E.
West: Coast line.
South: This separates port of Shuaiba and Miña-al-Abdullah and is defined by the point of intersection of the coast line with Lat. 29° 01′ 45″ N. Extends due East till Long. 48° 09′ 59″ E. and runs on 45° direction to Lat. 29° 02′ 00″ N. then due East on that line until Long. 48° 15′ 07″ E.
DOCUMENTS: 10 copies of Cargo Manifest (3 copies duly signed by Agent at loading port) and one copy each of hatch list and stowage plan. Also 2 copies of Crew List to be presented to Customs Office.
N.B. A copy of complete set of Inward Manifests and a copy of the Stowage Plan covering cargo for discharge at Shuaiba has to be passed to Authorities by Agents at least 24 hours before vessels expected time of arrival, otherwise berthing likely to be delayed.
PILOTAGE: Pilotage compulsory and request for Pilot should be made to Port Signals Station, or to look-out Signal Station when in use.
ANCHORAGE: Lat. 29° 02′ 02″ N., Long. 48° 12′ 15″ E. Depth is 18.5 m. with good holding ground.
MAX. SIZE: See "Berthing".
HEALTH: Vessels calling at Shuaiba are requested to send the following information to "Health Shuaiba Port".
(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Smallpox and Cholera Certificates
(5) Request for Free Pratique
Free pratique will be considered at the discretion of the Quarantine Officer, and vessels must hoist the yellow flag unless they are informed by Harbour Control that free pratique has been granted.
RADIO: Give ETA well in advance and confirm ETA 24 hours before arrival through Kuwait Coast Station 9KK. A shore station at Shuaiba has been established and operates on following frequencies: 156.80 mc/s. PS: Channel 16, int'l and safety channel. 156.65 mc/s. PS: Channel 13, port and operations Channel. 156.45 mc/s. PS: Channel 9, berthing operations Channel.
TUGS: 3 tugs available, each of 2,100 h.p.
BERTHING: Vessel has to give arrival time and fore and aft draft to Harbour Master. Normal official hours for berthing and departure on Saturdays through Wednesdays, count from 0700 to 1600 hrs,. on Thursdays from 0700 to 1200 hrs.
The port consists of 3 main parts as follows:
Small Craft and Barge Harbour: Situated at the South-west direction from the Main Quay; consists of 3 berths accommodating vessels of less than 4 m. draft:

(i) Berth No. 1	Length	100 m.
(ii) Berth No. 2	,,	200 m.
(iii) Berth No. 3	,,	175 m.

Main Cargo Quay Mole: Allows berthing of ships on both sides. The Eastern side consists of 2 berths Nos. 4 and 5 having a total length of 350 m. The Western side consists of 3 berths: Nos. 1, 2 and 3 having a total length of 500 m.

Berth No. 1	maximum allowable draft			9.1 m.
Berth No. 2	,,	,,	,,	10.3 m.
Berth No. 3	,,	,,	,,	10.3 m.
Berths No. 4 and 5	,,	,,	,,	6.7 m.

Usage of berths 4 and 5 is restricted to good weather conditions only.
Harbour Control Offices (Harbour Master's building) and signal station are situated at the beginning of the main quay. Meteorological Centre, Passport and Immigration Office, Customs Office and Health Office are also at the beginning of the main quay.
Oil Pier: Situated in deep water due East from the Main Quay. Oil Pier is connected with the main quay by a causeway carrying pipes of 1,000 m. length. At present it consists of an Eastern-side berth (No. 1) with a length of 300 m. allowing tankers of maximum 13.7 m. draft and a Western-side (No. 2) berth with length of 270 m. allowing tankers of max. 12.8 m. draft.
At a distance of 40 m. from the Northern end is a newly constructed dolphin to facilitate berthing of bigger tankers without any difficulty. An extension of the oil pier from the Southern side with two more berths and an additional dolphin South of them has been completed.
Oil loading connections are at the middle of each berth and comprise of: 2 × 20″, 3 × 16″, 2 × 12″ and 1 × 8″ lines. The bunker line is 8 inch and fresh water line is 4 inch.
SHORE FACILITIES: Main cargo quay mole: Berths 1, 2 and 3 are equipped with 5 travelling electric cranes of 3 and 5 tons capacity. Services of 10 ton mobile cranes are also available on the main quay. All berths are fitted with bunker lines for fuel and fresh water.
Allocation of Berths:

Berth No.	*Allocation*
1	Discharging
2	Loading
3	Optional – Discharge/Load
4	Optional – Discharge/Load
5	Optional – Discharge/Load

The allocation of an optional berth is at the sole discretion of the Harbour Master and Traffic Manager.
A vessel arriving at the port to load may berth at No. 1 and similarly a vessel wishing to discharge may berth at No. 2, but it must be clearly understood that any vessel so doing is only berthed at that berth on sufferance and will be required to vacate the berth if a vessel arrives which has a claim to it.
STEVEDORES: Stevedores aboard ship will be provided by ship's Agent. Labourers in barges and ashore will be provided by port of Shuaiba but under ship's responsibility for breakage, pilferage, etc. Vessels will be required to maintain a min. daily tonnage dependent on the type of cargo they are carrying. Ships failing to achieve the average daily rate laid down will be liable for a penalty charge, for every day or part thereof, they remain on the quay over the prescribed period.
Minimum Daily Rates. Cement, 1,700 tons; fertiliser, 1,700 tons; charcoal, 800 tons; general cargo, 400 tons.
Shore cranes are available for ships to enable them to achieve these rates and ships Agents, importers and exporters are expected to make use of them.
No cranes over 20 tons lifting capacity available. Regarding landing of heavy lifts on quay, permission has to be obtained from the Port Authorities each time in advance. On the quay pieces up to 300 tons have been discharged.
MEDICAL: Advance notice required if medical attendance needed on board.
DENSITY: 1025.
FRESH WATER: All berths fitted with fresh water connections. No water barge available. Vessels can obtain water according to requirement.
FUEL: The Kuwait National Petroleum Co. KSC, Kuwait, supply marine fuel and diesel oil at cargo wharf and oil jetty at Shuaiba. Specifications as under:

	FO 1500	*MDO*
Ash % wt. max.	0, 5	0, 01
Pour point degs. C (degs. F.) max.	10 (50)	2 (35)
Specific Gravity 60/60 degs. F max.	0.99	–
Sulphur % wt. max.	3.7	1.8

Bunker nomination is to be arranged through Kuwait National Petroleum Co. (U.K.) Ltd., 25 St. James Street, London S.W.1: cables: "Kunpetco", London S.W.1. Telex: 261998. At least 3 days notice required.
Facilities on main quay mole for bunker fuel, gas oil and marine diesel oil in berths 1 through 5. No barges.
DEVELOPMENTS: The Port of Shuaiba will be extended by adding another finger pier and a marginal berth. The first phase, starting from December, 1976, will consist of a marginal multi-purpose berth and three finger berths. The second phase will consist of six additional berths. Water depth for all berths will be 14 m.
The existing Oil Pier is now extended Southwards along its line of direction of 153°/333° to a total distance of 446 m.
The extension consist of a piled trestle of 108 m. in length which incorporates a mooring dolphin, a piled berthing structure of 282 m. in length providing one berth on its seaward side for tankers of max. 13.7 m. draft and one berth on its landward side for tankers of max. 12.8 m. draft and a piled trestle and mooring dolphin at the Southern end of 56 m. in length.
GANGWAY/DECK WATCHMEN: Not necessary in port area.
OPENING/CLOSING HATCHES: Opening and closing of hatches normally carried out by stevedores on liners, and by ship's crew on charter vessels.
CERTIFICATES: All usual documents such as:
Ship's Manifest.
Bill of Health.
Crew List.
Clearance from Last Port.
Passenger Manifest, if any.
Store List.
Bonded Store List.
Safety Radio Certificate.
Bill of Measurements, etc.
CUSTOMS ALLOWANCES: Tobacco. No restrictions. Wine and/or Spirit. Alcoholic beverage strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.
CARGO GEAR: Ship's gears and shore cranes used for discharging; slings and pallets can be hired from the port. Shore cranes capacity 3–5 tons.
IDENTIFICATION CARDS: Passport or seamen's book necessary.
CONSULS: See "Shuwaikh".
REPAIRS: Small repairs can be arranged if sufficient notice is given.
DRY DOCK: No dry dock available.
REPATRIATION: Can be arranged. Entry visa regulations have been enforced in Kuwait, and the following is roughly the procedure in respect of crew changes.
1. Seamen arriving at Kuwait Airport to join vessels at Kuwait and Partitioned Zone ports can obtain transit visa at Airport, if Agents arrange to submit necessary guarantee to Immigration Authorities confirming that they are in transit and joining vessels calling at

Kuwait and/or Partitioned Zone. Order meet crew at airport and arrange transit visa, cables confirming their arrivals and flight numbers are to be sent to Agents to reach them at least 24 hours before arrival of crew.

2. Marine Superintendent of owners, or owners' representative and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions abroad.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day, Eid Al Fitr, Accession to the Throne, Eid Al Haj, 1st Muharram, Prophet's Birthday, Rajab. Dates are subject to alteration.

TELEPHONES: Telephone sockets fitted on North side of Main Quay Mole for convenience of vessels requiring a telephone on board.

SPECIAL SERVICES: Swedish Welfare for Seamen; Lloyd's surveyor; Butterworth Tank Cleaning Machines and Equipment; and also underwater cleaning, compass adjusting, d/f calibration and adjusting services are available through the Port Authority.

SHORE LEAVE: Permitted.

PORT REGULATIONS: Masters are required to observe the following regulations:

Fire fighting appliances to be kept in readiness for immediate use.

Pumping or discharging in any way into the sea oil fuel tanks, bilges, dirty ballasts, etc., is prohibited.

Disposal of garbage over the side of the ship into the harbour is prohibited.

The presence of a Pilot on board a vessel shall not relieve the Master of his responsibility regarding the safety of the vessel. The harbour authority shall have right to claim against a vessel for any damage caused by that vessel to berths, shore installations, tugs, buoys, etc.

The Harbour Master or his deputy may order a vessel to leave the berth at short notice in the case of emergency, bad weather, etc.

Vessels carrying explosives or dangerous cargoes must declare quantities and categories of same when they report their ETA.

Crew members are prohibited from swimming within the harbour.

Lowering into the water of ship's life-boats, launches or life-rafts is prohibited without the written approval of the Harbour Master or his deputy.

Mooring of ship's life-boats, launches or life-rafts on navigational marks and buoys is prohibited.

Due regard shall be given to the safety of divers when they are working within the harbour area. Engines should be stopped when approaching their working area at a circle of 150 m. The launch attending divers displays the International flag letter "ABLE" during diving operations.

AGENT: For dry cargo vessels only: International Shipping Agency Limited, POB Safat No. 20637, KIC Building, 1st Floor, Safat Square, Kuwait. Tel. 441860 to 441862. Telex: 2208 (answerback "Isaship KWT") and 2396 (answerback "ISATUG KT"). Cables: "Shipagent, Kuwait").

SHUWAIKH (Kuwait Harbour): 29.21 N. 47.55 E.

DOCUMENTS: **(See Plan)**

Customs:

2 Copies of Crew List and passengers, with their nationalities.
1 copy of Store List.
1 copy of Crew Personal Property List.
Deck Log Book (if vessel calling first time, then all the log books which are available on board).
1 copy of Customs form (which will be given by Customs).

Immigration:

2 copies of Crew List with their nationality.
2 copies of Passenger List (if passengers on board), with their nationality.
All seamen's books or Passports.
A certificate signed by the Master, stating that there are no Stowaways on board.

Quarantine:

1 copy of Crew List.
1 Copy of Vaccination List.
All Vaccination Books.
1 set Quarantine Forms (which will be given by Quarantine Officer).

Port Clearance:

Ship's Registry.
Load Line.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Clearance.

Port Surveyor:

Valid Liferaft Certificate (with annual renewal and survey).

Cargo Dept.: The listed documents below, should be handed to the Cargo Department, at least 48 hours before the ship's arrival.

6 copies of the Cargo Manifest, 3 copies duly signed by the Agent at loading Port.
1 copy of the Cargo Stowage Plan.
1 copy of Cargo List, in detail.
2 copies of Dangerous Cargo List.

PILOTAGE: Pilotage service available and request for Pilot should be made to Port Signals Station, or to look-out Signal Station when in use. Ships proceeding through the dredged channel to Shuwaikh are boarded by the Pilot in the anchorage.

ANCHORAGE: 1. Ships bound for Kuwait, in order to discharge their cargo, should anchor in the anchorage area (BA Chart 1214). According to this Circular the approach waterway one mile in width from Ras Al Ardh to Anchorage and, vice-versa, is left free for Navigation.

2. Ships who have no cargo for Kuwait, and calling only for Fresh Water, Provisions, Crew changing, transhipments or any other reason, but discharging cargo, should anchor:—

North of Latitude 29° 25.0′ N, and
East of Longitude 48° 03.0′ E.

3. If mentioned anchorage area described in para (2), is congested, the ships could take temporary anchorage:—

North of Latitude 29° 24.0′ N, and
East of Longitude 48° 06.0′ E.

but change their position to the area described in para (2), immediately as opportunity occurs.

The ships already in anchorage should change their positions, according to the para (1) and, para (2) above.

The Shipping Agents are kindly requested to notify the Masters of their ships, the following:—

1. When a ship sailing from Shuwaikh Port and, proceeding to sea she should give her name and Port she is proceeding to, to the Signal Station.

2. Any ship sailing from the Outer Anchorage for any reason, should notify the Signal Station that she is sailing, and give the reason.

3. If ship leaving Shuwaikh Port, and wishes for any reason to remain in the Outer Anchorage, she can do so, but should anchor North of Latitude 29° 25.0′ N. and East of Longitude 48° 03.0′ E.

Vessels not complying with the above are liable to suffer penalties, according to the General Port Rules.

MAX. SIZE: Max. draft at berths nos. 1 to 8, 31 ft. 6 in. (32 ft. at Spring tides), and 27 ft. at dolphins. These drafts allow 2 ft. of water under the keel. Tidal range is about 2.8 m. (9 ft.). Berthing draft dependent upon tidal conditions at time of arrival, and vessels exceeding 27 ft. have to wait for tide.

HEALTH: Vessels calling at Kuwait Harbour must send the following information to "Health", Shuwaikh Port:

(1) Name of vessel
(2) Last port of call
(3) Health condition Crew members
(4) Validity of Smallpox and Cholera Certificates
(5) Request for Free Pratique

Free pratique will be granted at the discretion of the Quarantine Officer, and vessels must hoist the yellow flag unless they are informed by Agent or Harbour Control that free pratique is granted.

RADIO: Kuwait Radio call sign 9KK. ETA messages and draft (fore and aft) should be sent via Kuwait Radio simultaneously to Harbour Master Port of Kuwait, and to Agent, at least 24 hours prior arrival. The cables should be received by the port at least 12 hours prior to arrival. Should the vessel fail to give this notice, the port will only decide on her turn of berth the following morning. Thus an unnecessary delay of 24 hours might occur.

Vessels arriving at Kuwait Anchorage must not use radio telephone or VHF for calling other vessels and/or any other destination. The equipment should be used only for calling Kuwait Port Control. It is also forbidden to use radio equipment when vessel is alongside.

All ships calling at Shuwaikh port must notify the Harbour Master by VHF as soon as they enter the Kuwait territorial waters.

Communications must be made via Kuwait Coast Station (9KK), which is now situated at a new combined lookout signal station at Ras-Ajuza (Lat. 29° 23.40′ N., Long. 47° 59.78′ E.), which operates a 24-hour basis.

All ships arriving should establish contact with the signal station as soon as possible, either by VHF or visual signals. The service, operating on Channel 16 for calling, and on Channel 12 for working; restricted to messages relating to the movements and safety of ships. You may call Coastal Station through Kuwait Radio (RT 2182).

All ships arriving or leaving Shuwaikh port may only anchor in the specified outer anchorage, the centre of the area is Lat. 29° 25.6′ N., Long. 47° 59.4′ E.

Masters are advised that it is forbidden to anchor in Kuwait territorial waters, other than in cases of emergency when they should inform the signal station/Kuwait Radio of the reason for stoppage.

Whilst at anchor, a proper watch must be maintained all the time and no unauthorised craft should be allowed alongside. The signal station will report to the Coast Guard all craft seen approaching or going alongside vessels in the anchorage.

REGISTRATION PROCEDURE: (To register turn for berth before proceeding to another port).

1. Prior to arrival Master to telegraph Harbour Master, Kuwait, stating his wish to register, stating draft fore and aft, ETA, and that all Kuwait cargo is clear to discharge.
2. If Master does not request confirmation of registration, the signal station and the port takes it for granted that vessels awaits her turn staying in the anchorage, and will usually not confirm the registration for turn.
3. On arrival Kuwait anchorage Master to contact signal station by VHF or visual signals requesting confirmation of registration.
4. The vessel should not leave until such confirmation is received. Confirmation will only be given by the signal station, which accepts registrations during 24 hours.
5. Upon receipt of confirmation the vessel can leave at once. Agents will cable via Kuwait Radio the return date given by port, that is the time the vessel should be back in Kuwait.

6. A stowage plan must be shown to the port within 24 hours after registration.

TUGS: Join vessel entering dredged channel, Tug's lines used. The use of tugs by ships manoeuvring within Shuwaikh port limits under direction of Harbour Master or Pilots. Number of tugs used for each movement: *(a)* Two tugs for ships exceeding 400 ft. in length. *(b)* One tug for ships between 250 ft. and 400 ft. in length.

Five tugs available, two of 750 h.p., one of 1,000 h.p. and two of 1,140 h.p. Use of tugs is compulsory.

BERTHING: 19 deep-water berths available, plus 2 dolphin berths (also see "Developments"). The Grain Silo is at berth no. 2, capacity about 150 t.p.h.

		Depth
Berth No. 1 — 4	Conference Vessels	33 ft.
Berth No. 5 — 7	Non Conference Vessels	,,
Berth No. 8	Chartered Vessels	,,
Berth No. 9 and 10	Non Conference Vessels	,,
Berth No. 11	Chartered Vessels	,,
Berth No. 12 and 13	Non Conference Vessels	,,
Berth No. 17	Non Conference Vessels	28 ft.
Berth No. 18	Chartered Vessels	,,
Berth No. 19	Reefer — Perishable Cargo and Car Carriers.	,,

Berth turn is decided at a port meeting, held in the morning on all port-working days. With the exception of the dolphin berths, berthing takes place any hour, day or night.

1. Notification of vessels arrival. According to port regulations a questionnaire issued by the Harbour Master, duly filled in and signed by the Captain of the vessel, is to be submitted to the port prior to berthing. In many cases vessels arrive and obtain berth immediately and thus there is no possibility of presenting the questionnaire to Authorities in time. In order avoid berthing delays Masters should cable following information to the Harbour Master directly, 48 hours before arrival:
   (a) ETA.
   (b) Total cargo for discharging Kuwait.
   (c) Distribution quantity each hatch.
   (d) Declaration hazardous, inflammable and explosives cargo, and guns and ammunition.
   (e) Declaration all vessels winches in good working condition and cargo clear for discharging at Kuwait.
   (f) Draft fore and aft.

   We quote below specimen cable covering the above:
   "Vessel XXX ETA Kuwait 21/8 0600 local quantity discharging 1,400 tons general hatch one 300 hatch two 300 hatch three 250 hatch four 300 hatch five 250 no hazardous, inflammable explosives guns ammunition stop All winches derricks good working condition draft fore 24 ft. Aft 27 ft.".

   The above cable sent to the Harbour Master will facilitate berthing vessel on time. ETA to be reconfirmed before 24 hours, if any change.
2. Vessels with a cargo of up to 400 measurement tons will be given priority alongside pier.
3. Vessels carrying up to 500 tons weight will be given priority to discharge at the buoys providing heavy lifts do not exceed 20 tons, or vessel does not carry reefer cargo.
4. A vessel that intends to stay in the anchorage in Kuwait until her turn will be allowed to shift over-stowed cargo while waiting.
5. Liners carrying cement in bags will still be considered as liner ships. Thus they will not be taken out to wait their turn at the cement berth.

STEVEDORES: Aboard ship will be provided by the Agent. Labourers in barges and ashore will be provided by the Port of Kuwait but under ship's responsibility as for breakage, pilferage, etc. Small number of mobile cranes with lifting capacity up to 90 tons. However mobile cranes can only be used in port area for discharging barges alongside. Cranes are too small to be used for discharging from liner vessels and therefore, pieces over 6 tons to be discharged by vessel's own gear. 1 floating crane of 100 tons capacity available.

Working Hours: 0600-1300, 1500–2230; Overtime 1300-1500, 2200-2400 hrs. Overtime is compulsory for all vessels. On Fridays, only work on vessels which are to be completed during the day.

DISCHARGE RATES: Allowing for stoppages, non-working periods, etc. and, considering 4 or 5 gangs employed, the average discharging rates are as follows:

Tanker cargo (fuel oil)	300 t.p.h., 7,200 tons per day.
Bulk cargoes (grain)	150 t.p.h.
General cargo	300–400 tons per day.
Cement	1,750–2,000 tons per day.
Bag cargoes	800–1,000 tons per day.
Steel (bundles)	600–750 tons per day.
Timber (soft wood)	500 tons per day.
Timber (Teak wood)	400 tons per day.

MEDICAL: Masters to radio prior arrival if medical attendance required on board.

DENSITY: Salt water.

FRESH WATER: Berths Nos. 1–7 have fresh water connections and water can be supplied by pipe-line.

Berth No. 8, dolphins and anchorage – fresh water to be supplied by water barge. Capacity of barges 100 and 200 tons, 48 hours notice required.

FUEL: No coal bunkers are available.

In addition to the full facilities afforded at Mina-al-Ahmadi and Shuwaiba, light bunker fuel oil specific gravity 0.9339 – viscosity 570 sec. (300 t.p.h.), and marine diesel oil, specific gravity 0.8448 (200 t.p.h.), can be supplied alongside the deep water berths Nos. 1 to 7, while vessels are discharging, and provided nomination for supply has been made to K.N.P.C. London Office, B.P. Trading Ltd., or Gulf Eastern Co., London.

Gas oil, specific gravity 6.83, (25 t.p.h.) will be available on the No. 6 and No. 7 berths.

Small quantities of gas oil may be supplied by tanker truck to the berths and lubrication oils are available.

FIRE PRECAUTIONS: Kuwait Fire Brigade is responsible for all fire fighting in port areas and a new fire station is being built at Shuwaikh to cover the new port area and port storage areas. There is also a fire station situated in Kuwait Small Boat Harbour area. A salt water main for the fighting services is laid-on at the new deep water berths at Shuwaikh. The Kuwait fire service also maintain two 90 ft. fire fighting tenders each of which is capable of pumping 5,000 gallons of water per minute from 4 nozzles. In addition they can pump 900 gallons of foam per minute. These modern fire-fighting units are equipped with radio, radio-telephone, radar and echo sounding.

DEVELOPMENTS: 10 berths are to be constructed, with depths alongside up to 33 ft. These will be dry cargo, refrigerated cargo and container cargo berths.

GANGWAY/DECK WATCHMEN: Available, but not necessary in port area.

OPENING/CLOSING HATCHES: Opening and closing of hatches is normally carried out by the stevedores on liners, and by ship's crew on charter vessels.

CUSTOMS ALLOWANCES: Tobacco: No restrictions. Wine and/or spirit allowance: Alcoholic beverage is strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

CERTIFICATES: A survey of life rafts may be carried out unless vessel's safety certificates indicate that life rafts were surveyed less than 12 months previously.

CARGO GEAR: Ship's gear and cranes used for discharging. Slings can be hired from the port.

IDENTIFICATION CARDS: Passport or seaman's book necessary.

CONSULS:

Embassies:			
Algeria	519987	Oman	514380
Bulgaria	531181	Pakistan	532100
China	423871	Qatar	513599
Egypt	519955	Saudi Arabia	531155
France	516144	Spain	512722
Fed. Republic of Germany	423031	Sudan	519299
India	530612	Syria	530163
Iran	533220	Tunisia	817366
Iraq	533466	Turkey	530761
Italy	810514	UAE	518381
Japan	424051	UK	432040
Jordan	533500	USA	424156
Republic of Lebanon	519765	USSR	431422
Libya	518188	Yemen Arab Rep.	518855
Morocco	813700	Yugoslavia	810821
Consulates:			
Austria	333550	Paraguay	435147
Costa Rica	238048	Sweden	816583
Cyprus	433075	Switzerland	431142
Denmark	251397	The People's Democratic	
Norway	124912	Rep. of Yemen	517898
Charge D'Affaires:			
Belgium	512440	Netherland	420268
Czechoslovakia	514451	Norway	433735
German Democratic Rep.	817055	Poland	510355
Commercial Attaches:			
Hungary	519615	Rumania	519640

REPAIRS: Small repairs can be arranged if sufficient notice is given. Repair facilities available for Gyro, Radar and electronics.

DRY DOCK: No dry docking facilities.

SURVEYORS: Lloyds Register of Shipping (Kuwait): American Bureau of Shipping (Bahrain); Bureau Veritas (Bahrain); Norske Veritas (Bahrain).

REPATRIATION: Can be arranged. Seamen arriving at Kuwait Airport to join vessels at Kuwait ports can obtain transit visa at the airport if Agents arrange to submit the necessary guarantee to the Immigration Authorities confirming that they are in-transit and joining vessels calling at Kuwait. In order to meet the crew at airport and arrange transit visa, cables confirming their arrivals and flight numbers are to be sent to Agents to reach them at least 24 hours before arrival of crew. Marine Superintendent of Owners, or Owners' Representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions abroad.

AIRPORT: Served by regular airlines. Airport 17 km. from town.

HOLIDAYS: New Year's Day, Id AL Fitr, National Day (February 25), Mount Arafat Day (Wakfa), Id AL Adha, New Hijra Year, Birthday of Prophet Mohammad, Isra wa ALma'iraj. The above days are subject to alteration.

No overtime work allowed on holidays and Fridays.

EMERGENCY CALLS:

Harbour Master	810754/820220
Berthing Master	810439/820325
Signal Station	810446/820323
Fire Station Shuwaikh	813501/817573
Fire Boats	816777
Quarantine Doctor	820433/820432
Hospital 'Sabah', exchange	815000
Hospital 'Sabah', emergency ward	815000/424
Police Station, Shuwaikh	435042
Immigration Shuwaikh	813676
Customs Shuwaikh	810319

TELEPHONES: Cannot be arranged on board.
PROVISIONS: All kinds of food available at reasonable prices.
SERVICES: Swedish Welfare for Seamen. Lloyd's Surveyor. Butterworth Tank Cleaning Machines and Equipment and also under-water cleaning.
SHORE LEAVE: Permitted.
REGULATIONS: The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. The following are two amended paragraphs of this law:

Paragraph 1, Art. 4. "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than one thousand and five hundred and not more than six thousand Dinars. In the event of his commiting a similar crime within a period of one year from the date of his conviction, such a person shall be punished by a fine of not less than three thousand and not more than six thousand Kuwaiti Dinars, and in the event of his committing yet another crime within a year from this last conviction he shall be punished by a fine of six thousand Kuwaiti Dinars".

Paragraph 3, Art. 6. "The person responsible for pollution may suspend the detention order against the ship on payment, as a cash guarantee, of six thousand Kuwaiti Dinars to the official entrusted with the execution of such order."

The Master shall advise the Harbour Master and/or Pilot of any special damage or disability to the ship under his command before berthing or unberthing.

A vessel in outer anchorage receiving a Movement Order in writing, by signal or VHF, and awaiting the Pilot, shall carry:
By day: "G" Flag, over a black ball or shape.
By night: A white light over a red light.

Ships that receive instructions to berth at specified hours and not adhering to these instructions could lose their turn and be liable to pay charges for the time lost at the berth, and facilities arranged for and not used due to such delay.

Ships that receive instructions to unberth at specified hours and not adhering to these instructions, i.e. retarding the movement of incoming ship, will be liable to pay charges for time lost at the berth and the facilities for the incoming ship, and not used, due to such delay.

Ships unable to comply with the berthing or unberthing instructions should notify the Harbour Master in ample time of their inability to so do by VHF, visual signals, personally or through Agent.

A ship entering or navigating within the dredged channel or inner basin shall have at least 1 anchor ready for immediate use.

The Master of a ship alongside Shuwaikh wharf or dolphin berth, shall ensure that:

(a) A safe and proper accommodation ladder to the quay is provided, adequately lit during the hours of darkness.

(b) A Quartermaster or watchman is stationed on deck, in charge of the ship's gangway, who shall inform the Master or the Duty Officer whenever required by the Port Authority Officials, and shall check that no authorised persons will enter the officer's or crew's accommodations.

(c) The crew or watchman to attend the mooring ropes and lines, and shall cause their adjustment from time to time, as necessary on the rise and fall of the water.

(d) That no substance, matter or material is thrown overboard, either into the water or on to the wharf.

(e) That no engine repairs are undertaken which would prevent the movement of the vessel under her own power, without first obtaining the permission of the Harbour Master.

(f) That all pipe discharges on that side of the ship nearest to the wharf are either adequately and properly covered to prevent their effluent falling on to the wharf, or their use discontinued while the ship remains alongside.

(g) It is forbidden to jettison or ballast other than clean water or pump out the bilges or oil of any description within the port limits.

(h) All ships loaded with petroleum or crude oil at the wharf shall have the end of a steel hawser of sufficient strength, paid out to the water edge, at the offshore bow and quarter, to enable tugs to take the vessel to place of safety with the least possible delay.

(i) The Master shall at all times retain on board sufficient crew to work his ship.

The Master shall not shift his vessel while alongside the wharf, prior to receiving permission from the Harbour Master or Berthing Master.

The Master shall not connect water hoses to the water supply points and take water on board before receiving permission from the person in charge of water distribution.

The Master shall report to the Harbour Master or Berthing Master any incident, accident or unusual happening on board his ship.

The Master not complying with the above-stated Port Rules, shall be liable to suffer the penalties prescribed for contravention.

Warning: Port tugs are supplied with nylon and polypropyline hawsers, which require particular attention when securing to ship's bollards, in order that they do not slip. Extra turns than normal on the bollards are recommended.

TIME: GMT plus 3 hours.
SHIPMASTER'S REPORT: December, 1975:
Radio: Masters can communicate with their Agents or may call long distance abroad by calling Kuwait Maritime on VHF Channel 16 and shifting to appropriate channels, Channels 24 to 28. Kuwait Maritime will do the proper connections and the charge is per tariff.
Developments: The two deep water berths are now operational but there is no fuel oil or water pipe-line. Water is supplied by motor tankers of 13 tons capacity.
AUTHORITY: Government of Kuwait, Ministry of Communications.

AGENT: International Shipping Agency Limited, POB Safat No. 20637, KIC Building, 1st Floor, Safat Square, Kuwait. Tel. 441860, 441861, 441862. AO 510901. Telex: 2208 (Answerback "ISASHIP KWT"). and 2396 (Answerback "ISATUG KT"). Cables: "Shipagent Kuwait".

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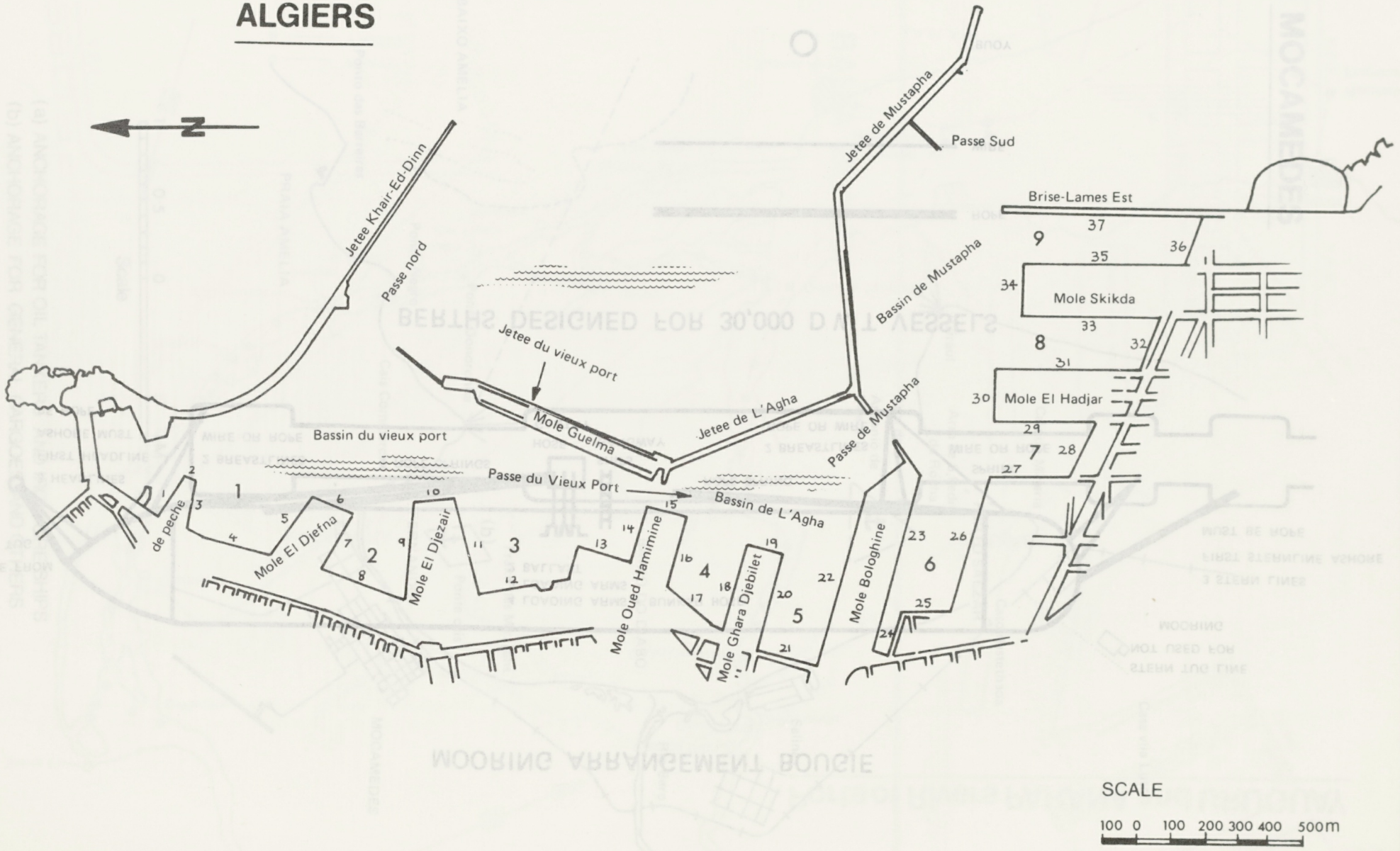
PLAN
SECTION

PLAN SECTION

ALGIERS



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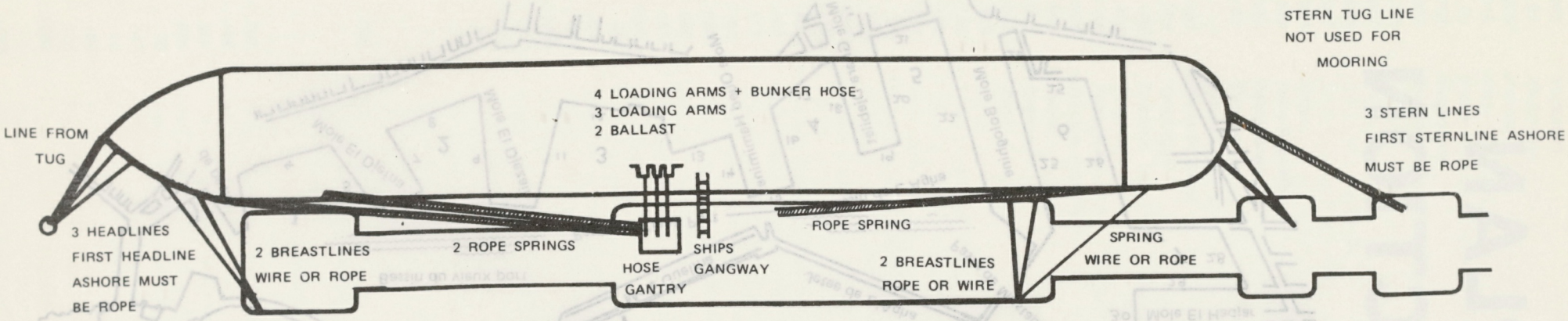
MOORING ARRANGEMENT BOUGIE



BERTHS DESIGNED FOR 30,000 D W T VESSELS

ROPE

WIRE

BUOY

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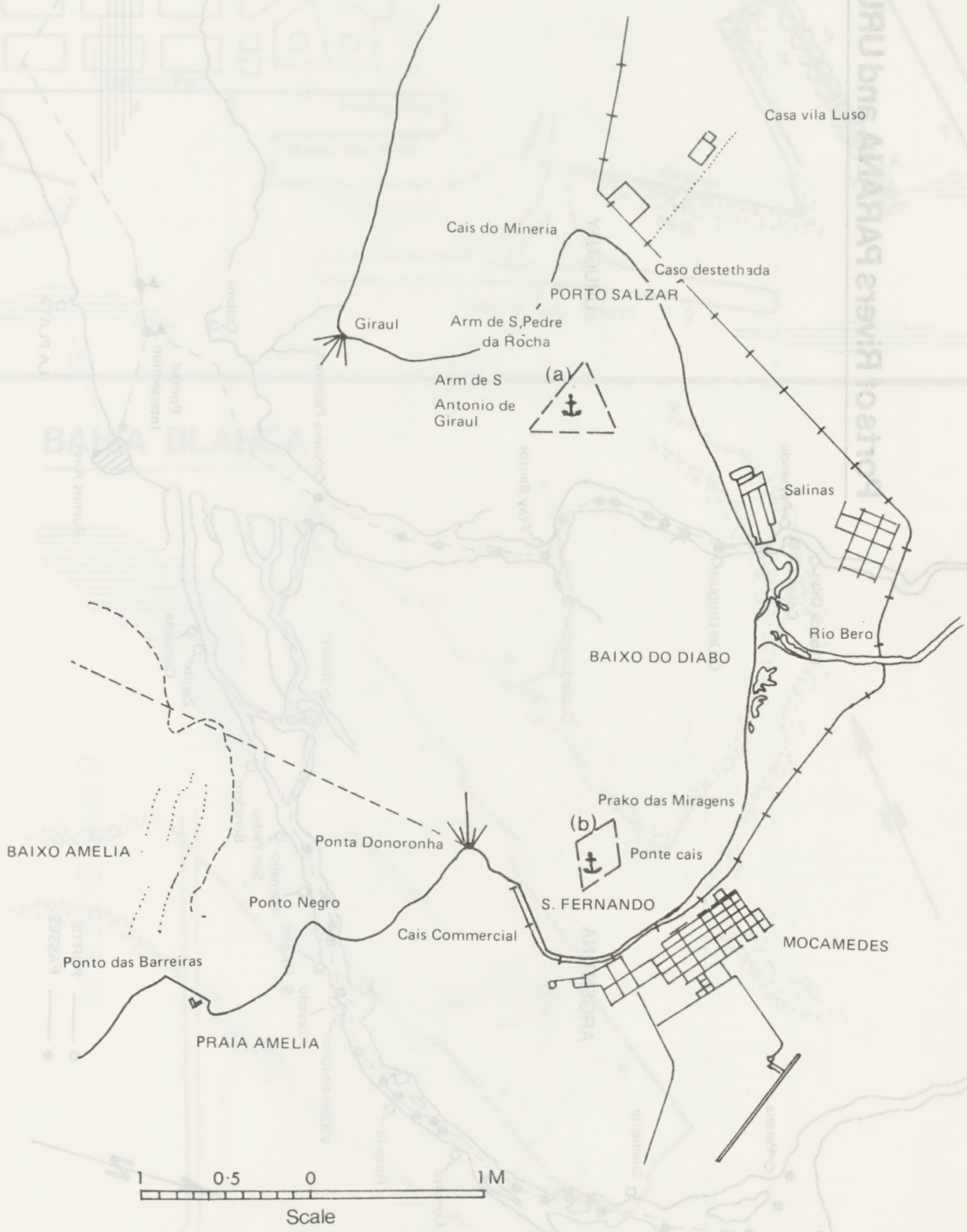
MOCAMEDES



(a) ANCHORAGE FOR OIL TANKERS AND IRON ORE SHIPS
(b) ANCHORAGE FOR GENERAL CARGOES AND OTHERS

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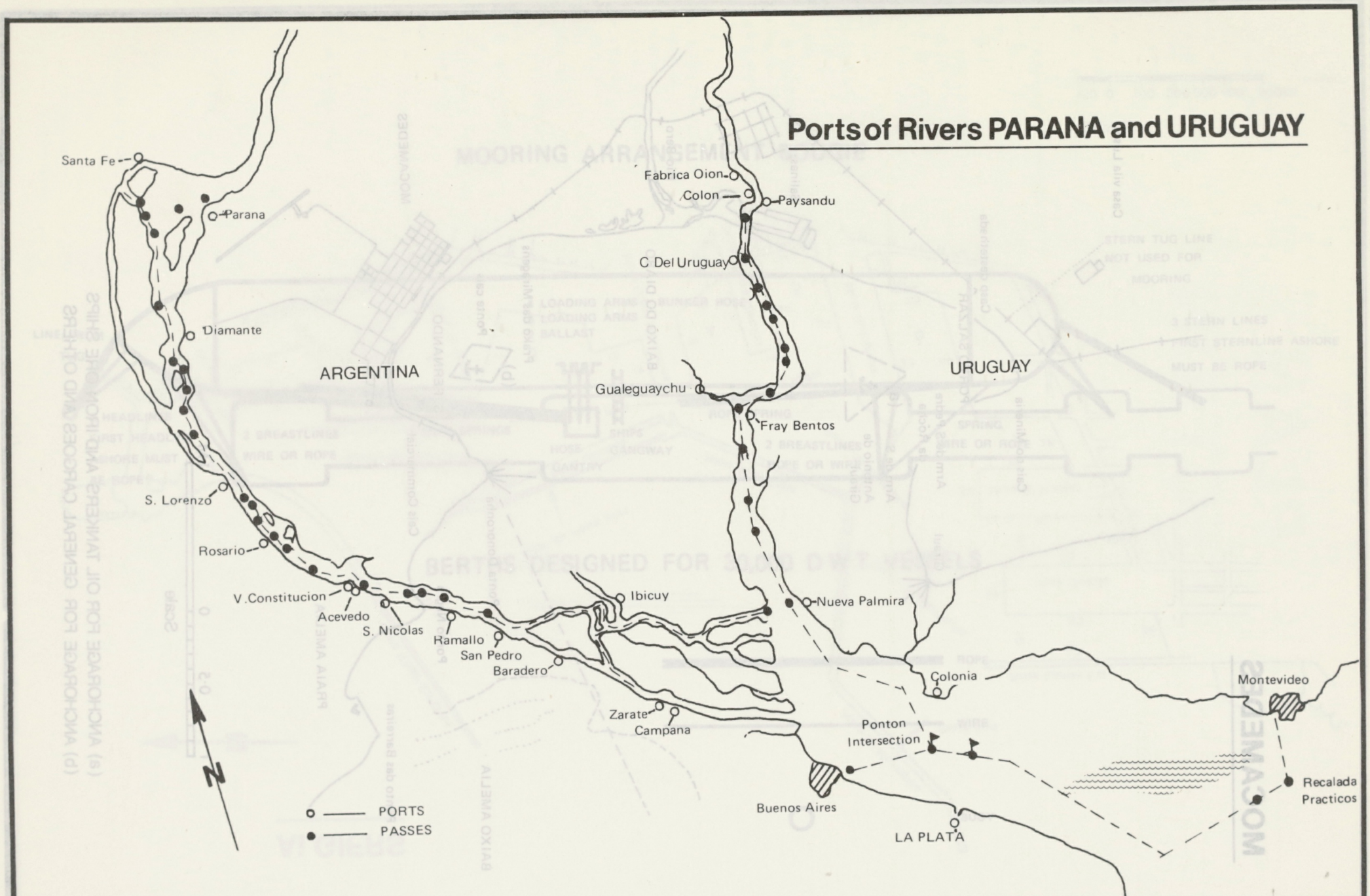
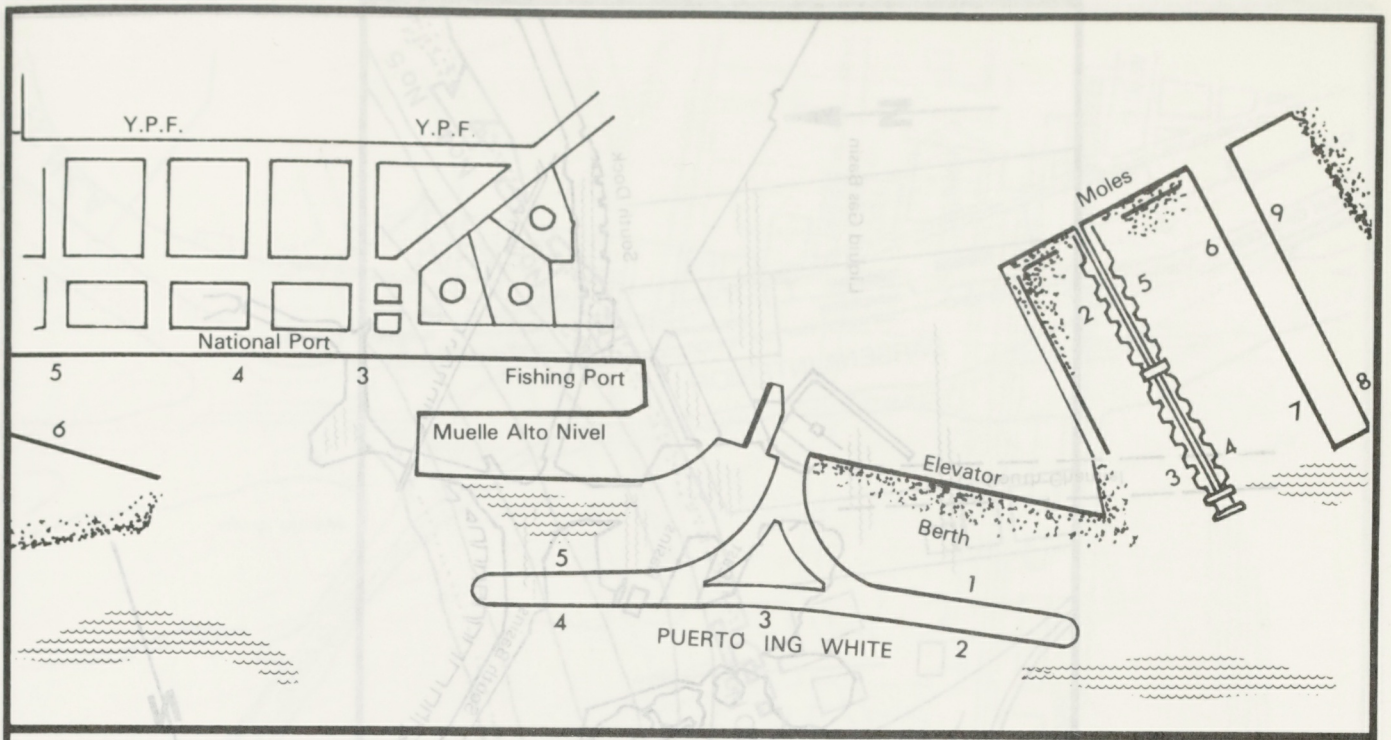
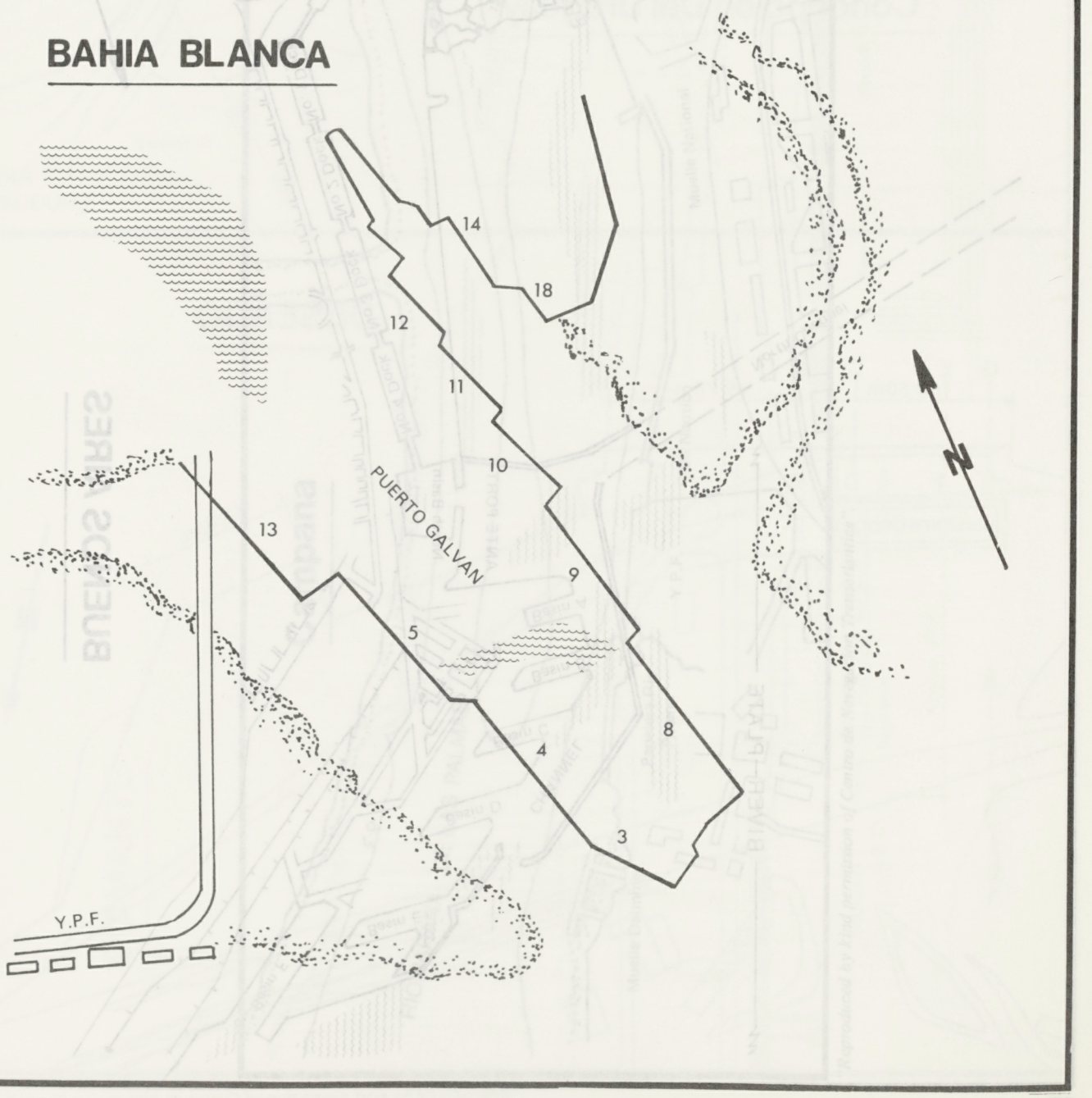

Ports of Rivers PARANA and URUGUAY
Santa Fe
Parana
Diamante
ARGENTINA
S. Lorenzo
Rosario
V.Constitucion
Acevedo
S. Nicolas
Ramallo
San Pedro
Baradero
Zarate
Campana
Ibicuy
Fabrica Oion
Colon
Paysandu
C Del Uruguay
URUGUAY
Gualeguaychu
Fray Bentos
Nueva Palmira
Colonia
Montevideo
Ponton
Intersection
Recalada
Practicos
Buenos Aires
LA PLATA
N
PORTS
PASSES



BAHIA BLANCA



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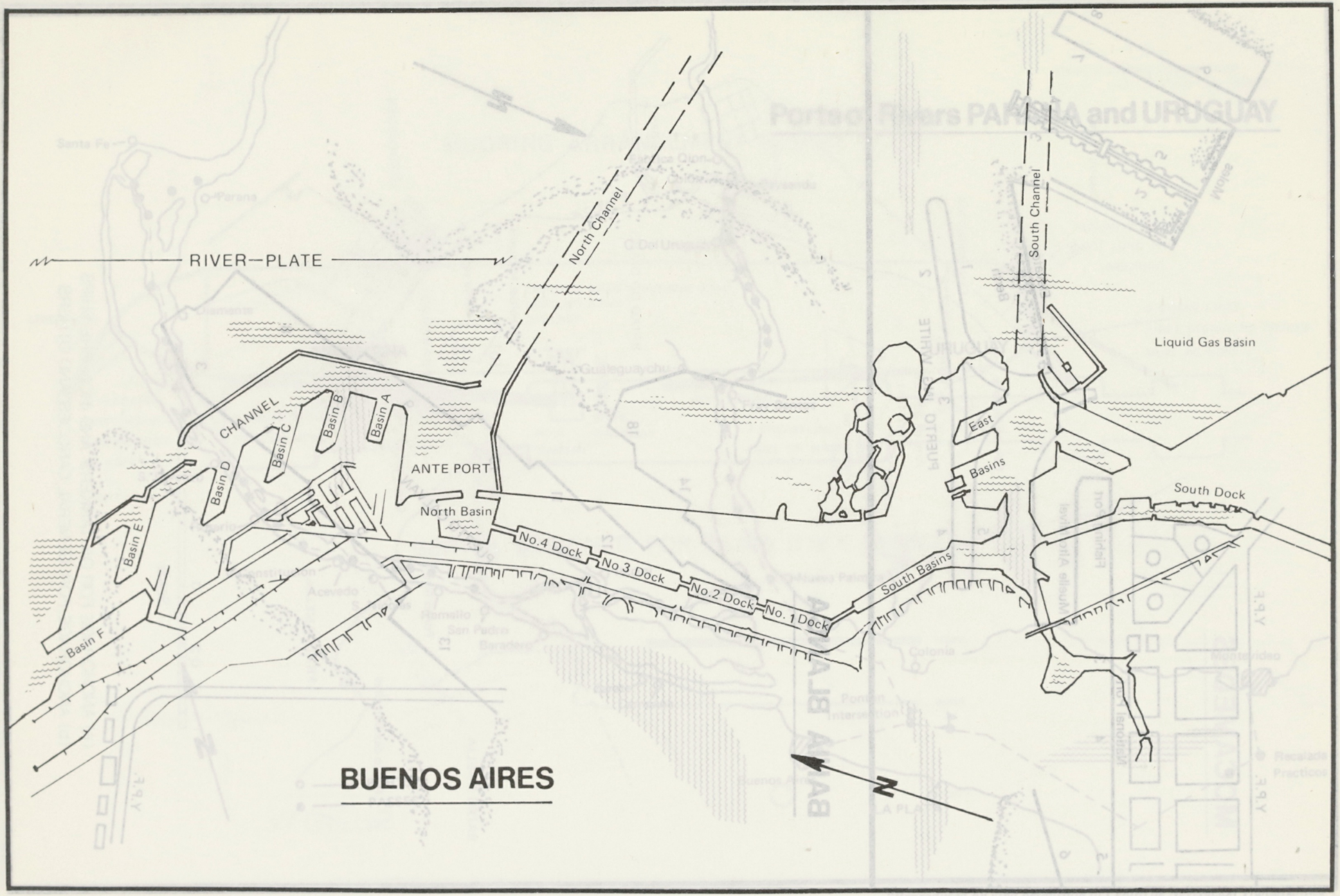

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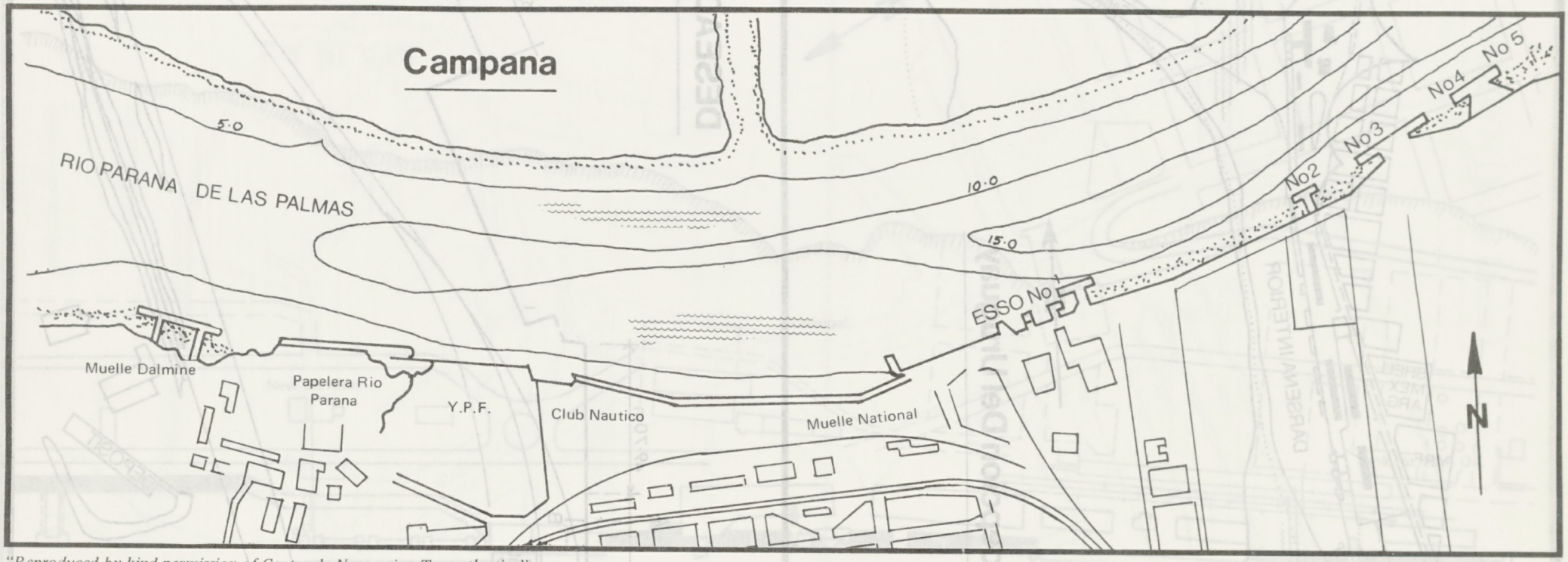

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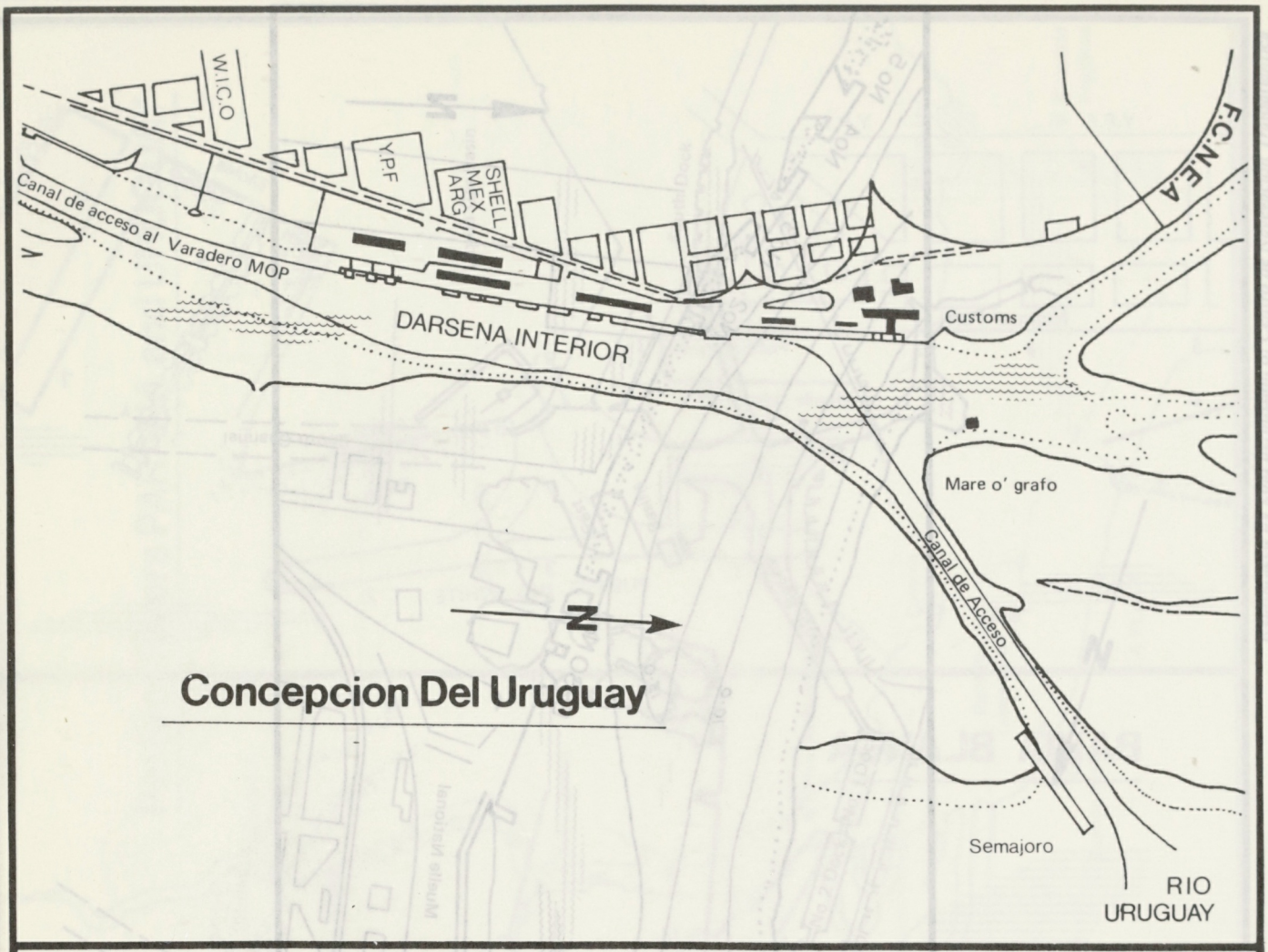

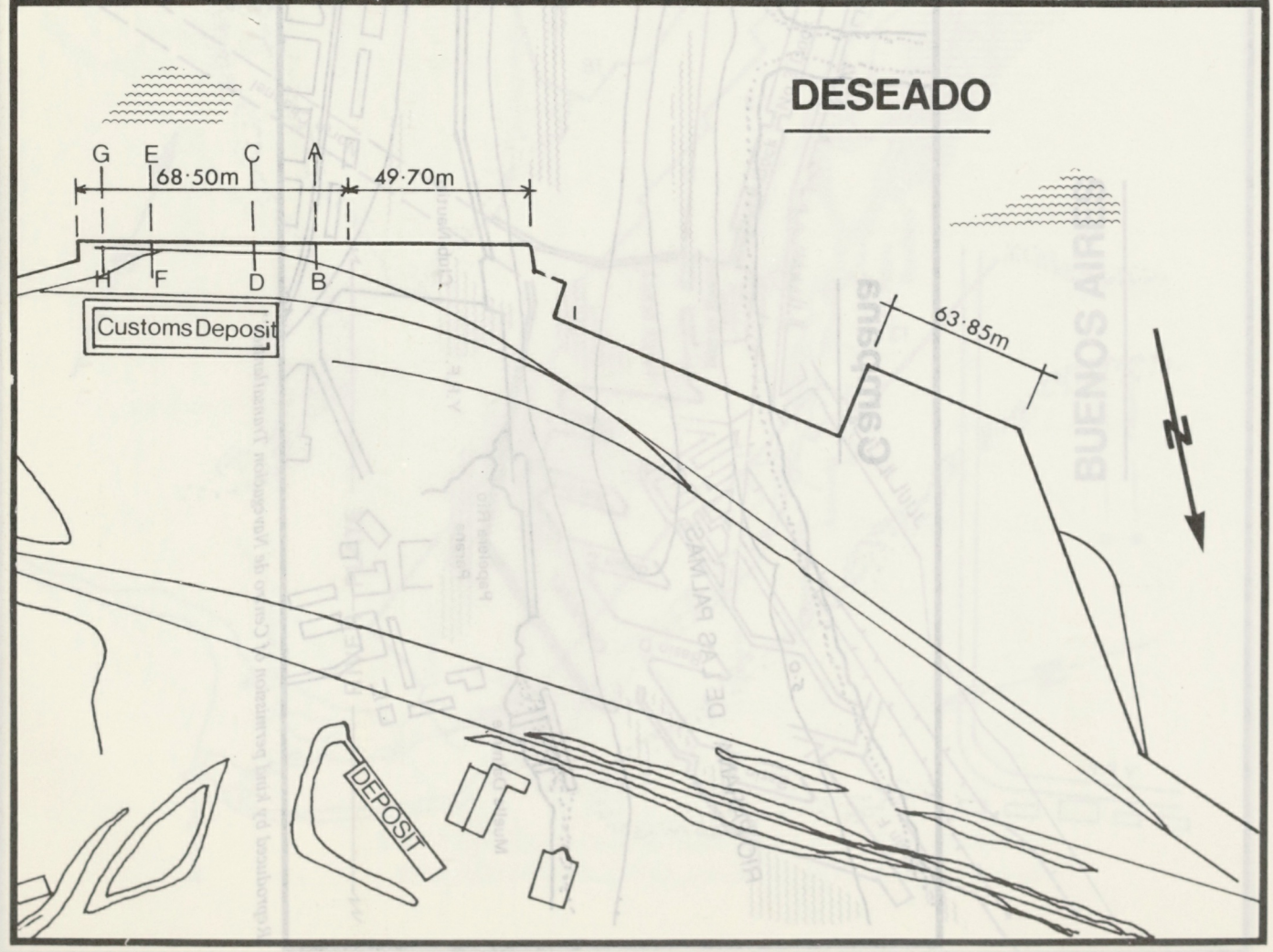

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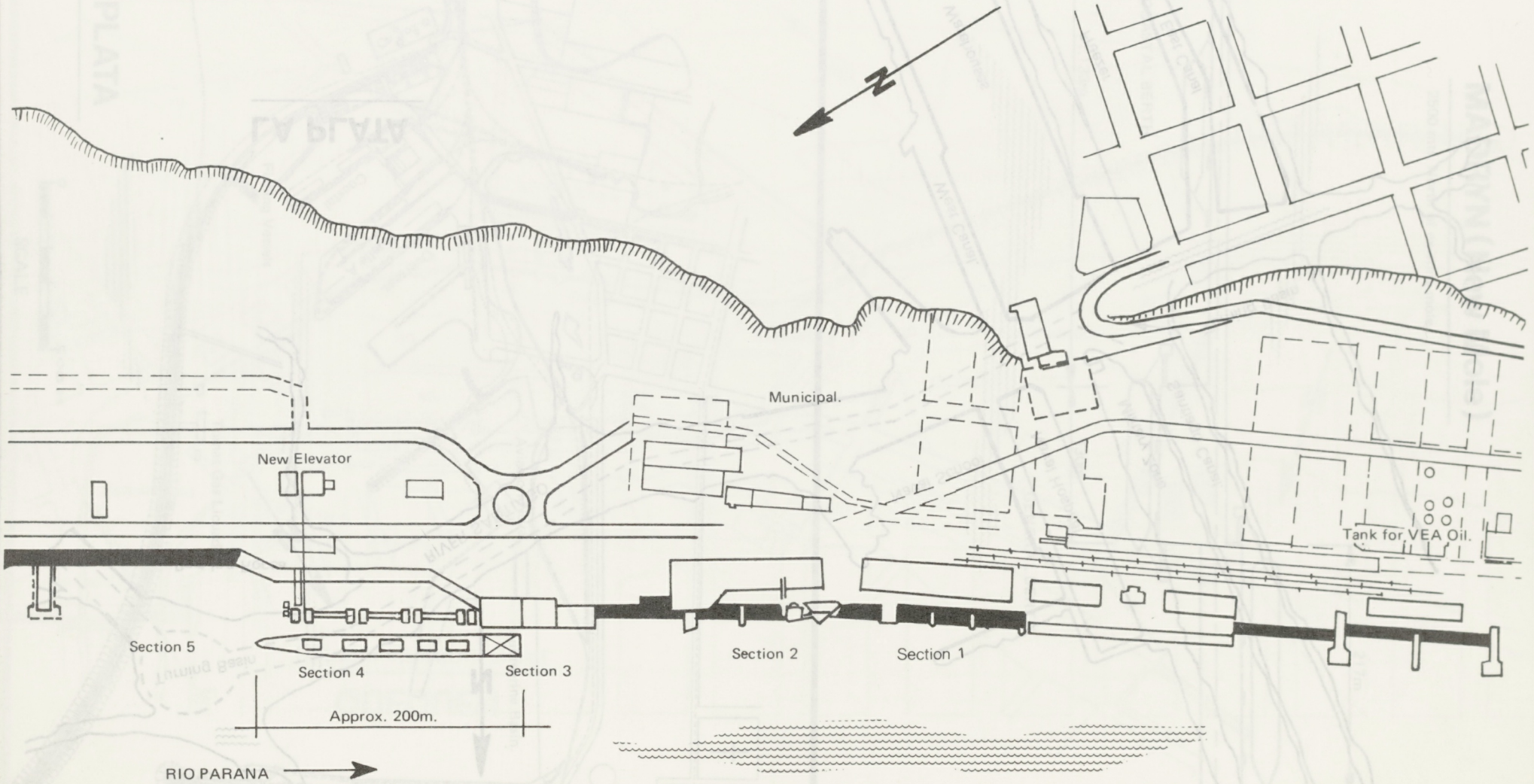
DIAMANTE



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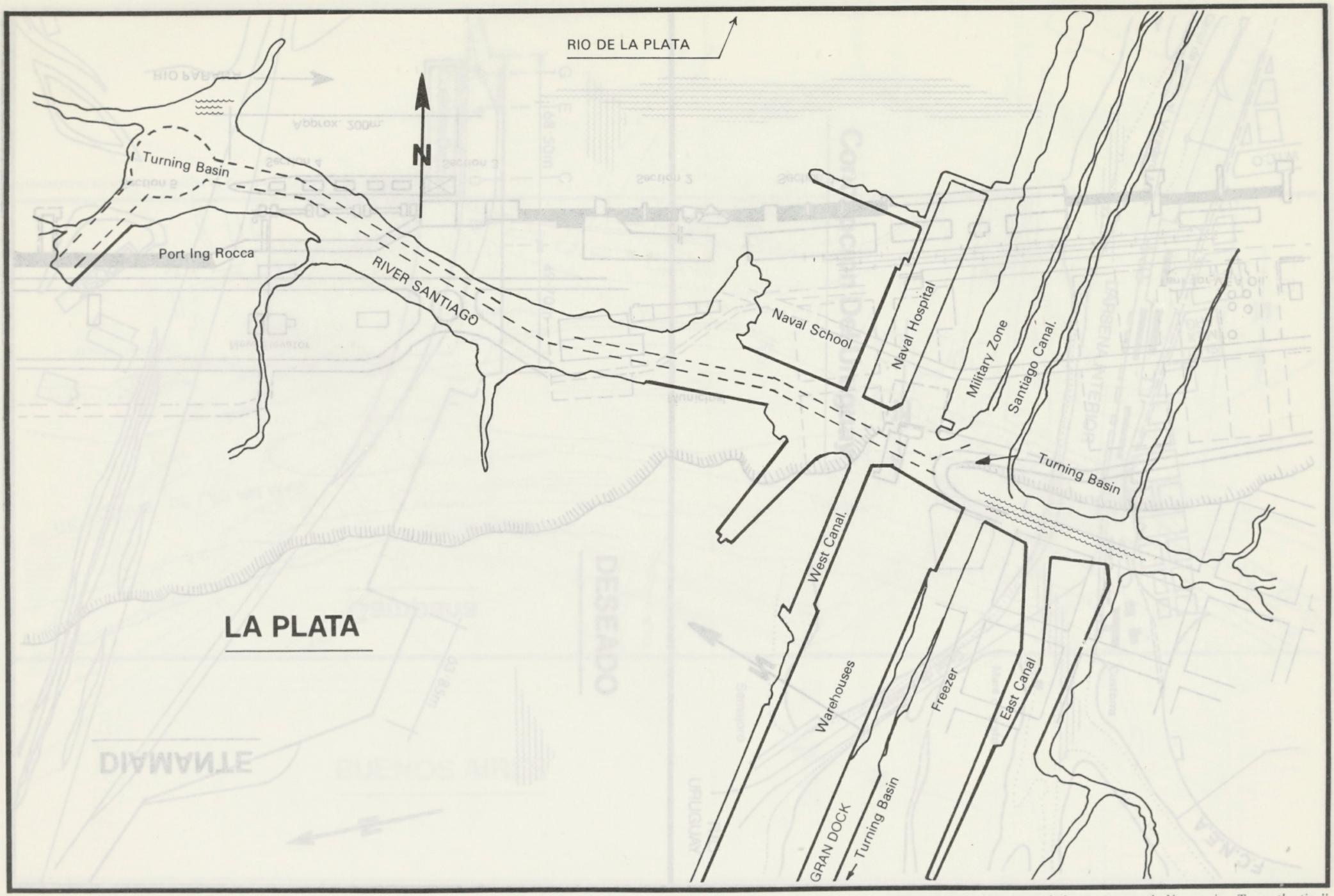

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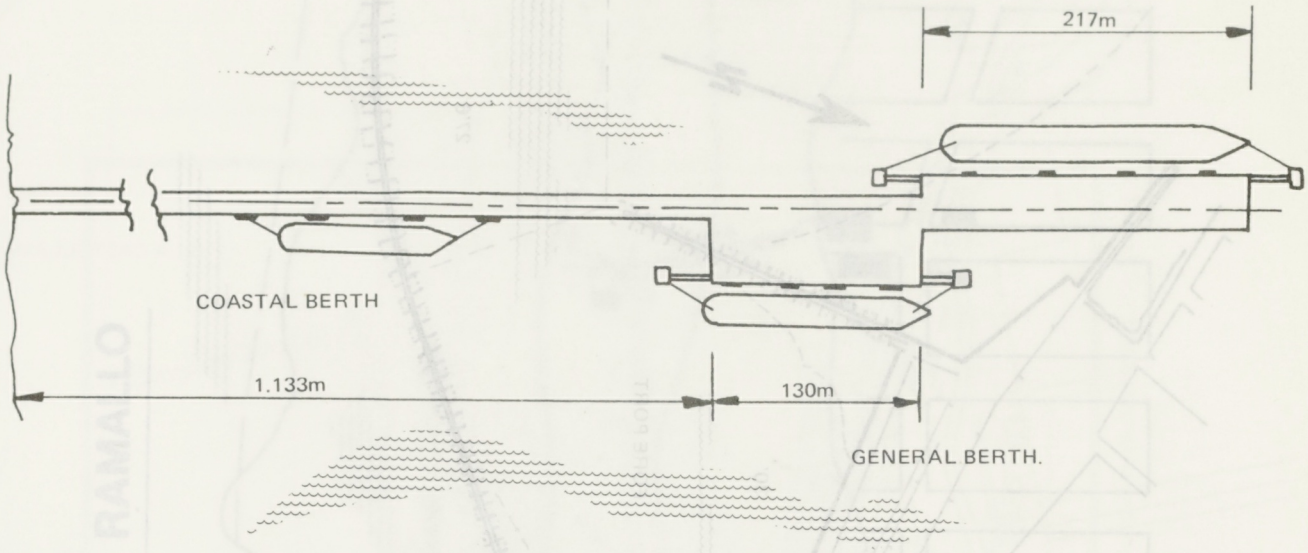
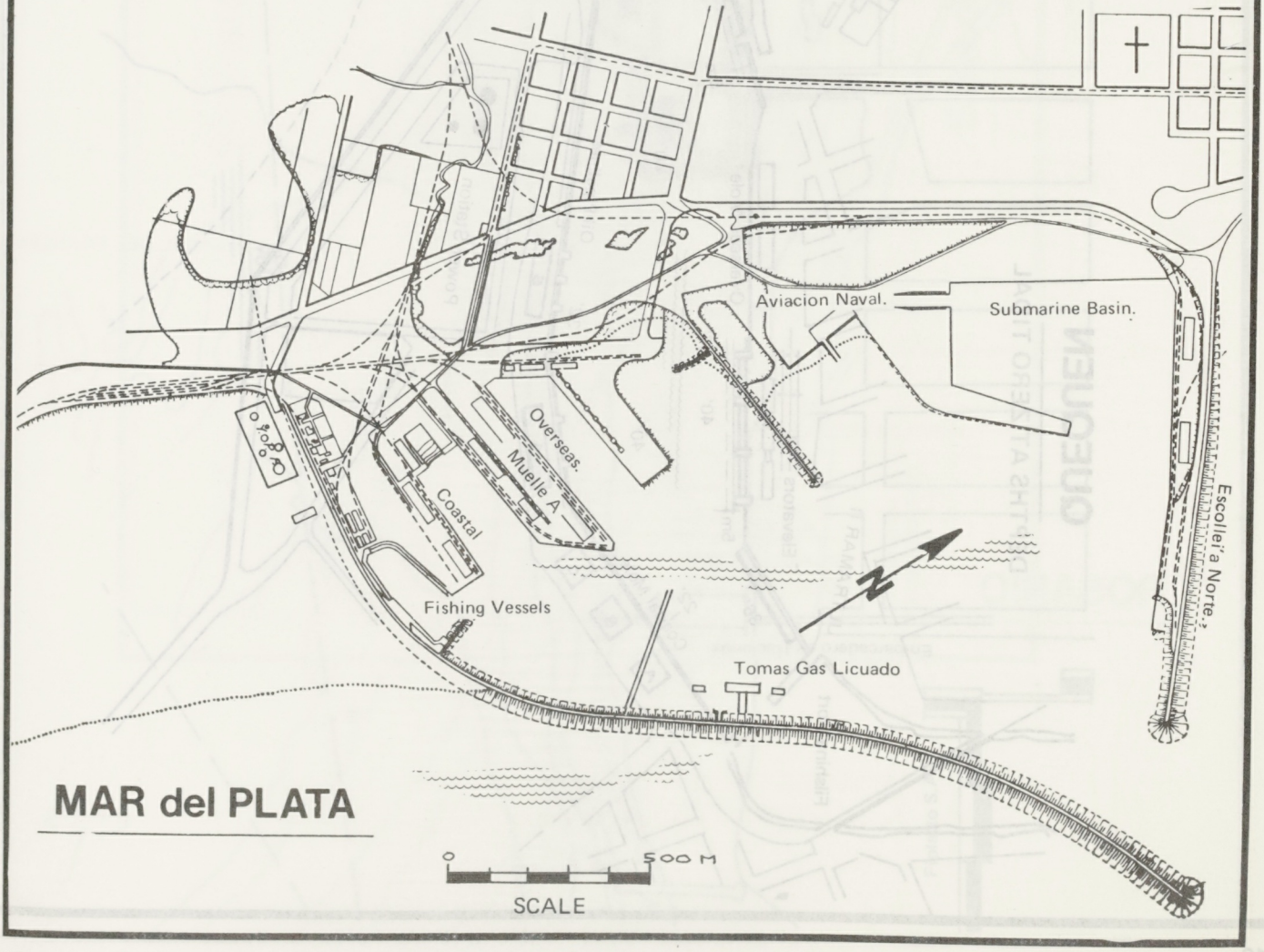
MADRYN (New Mole)

2500 mts. North of existing mole.



MAR del PLATA



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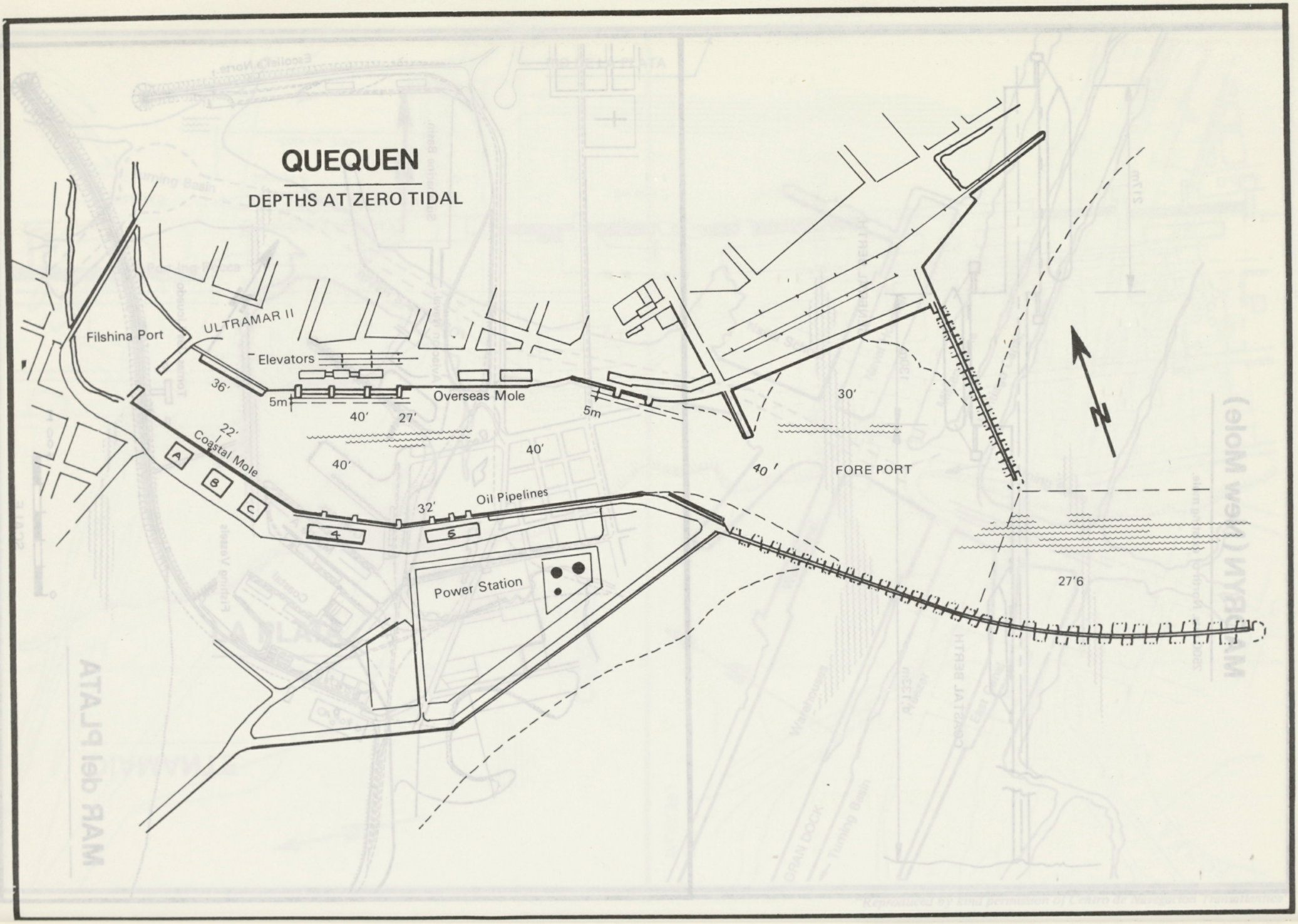
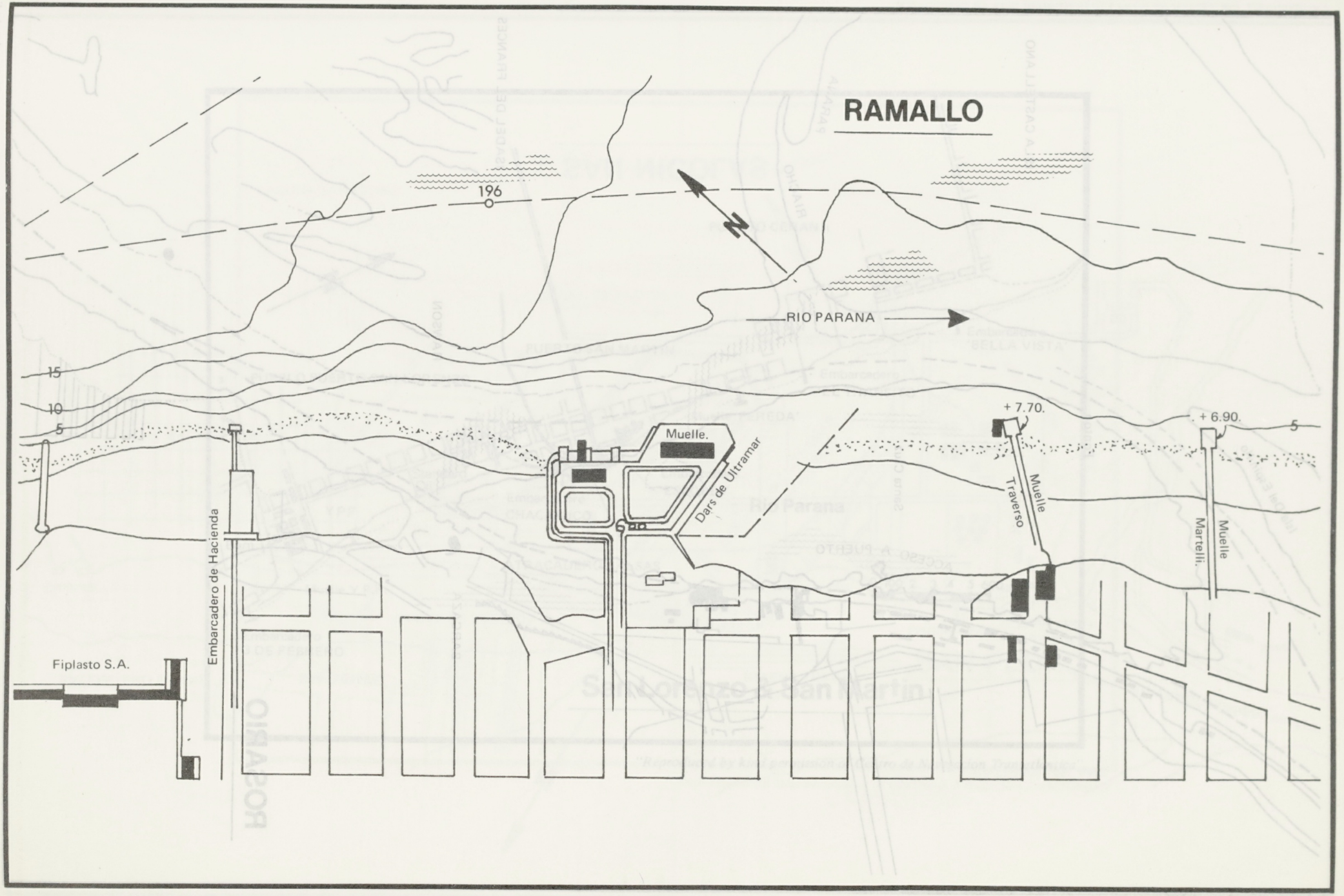

QUEQUEN
DEPTHS AT ZERO TIDAL
Filshina Port
ULTRAMAR II
Elevators
36'
5m
Overseas Mole
40'
27'
5m
30'
22'
Coastal Mole
A
B
C
40'
40'
40'
FORE PORT
32'
Oil Pipelines
4
5
Power Station
27'6
N



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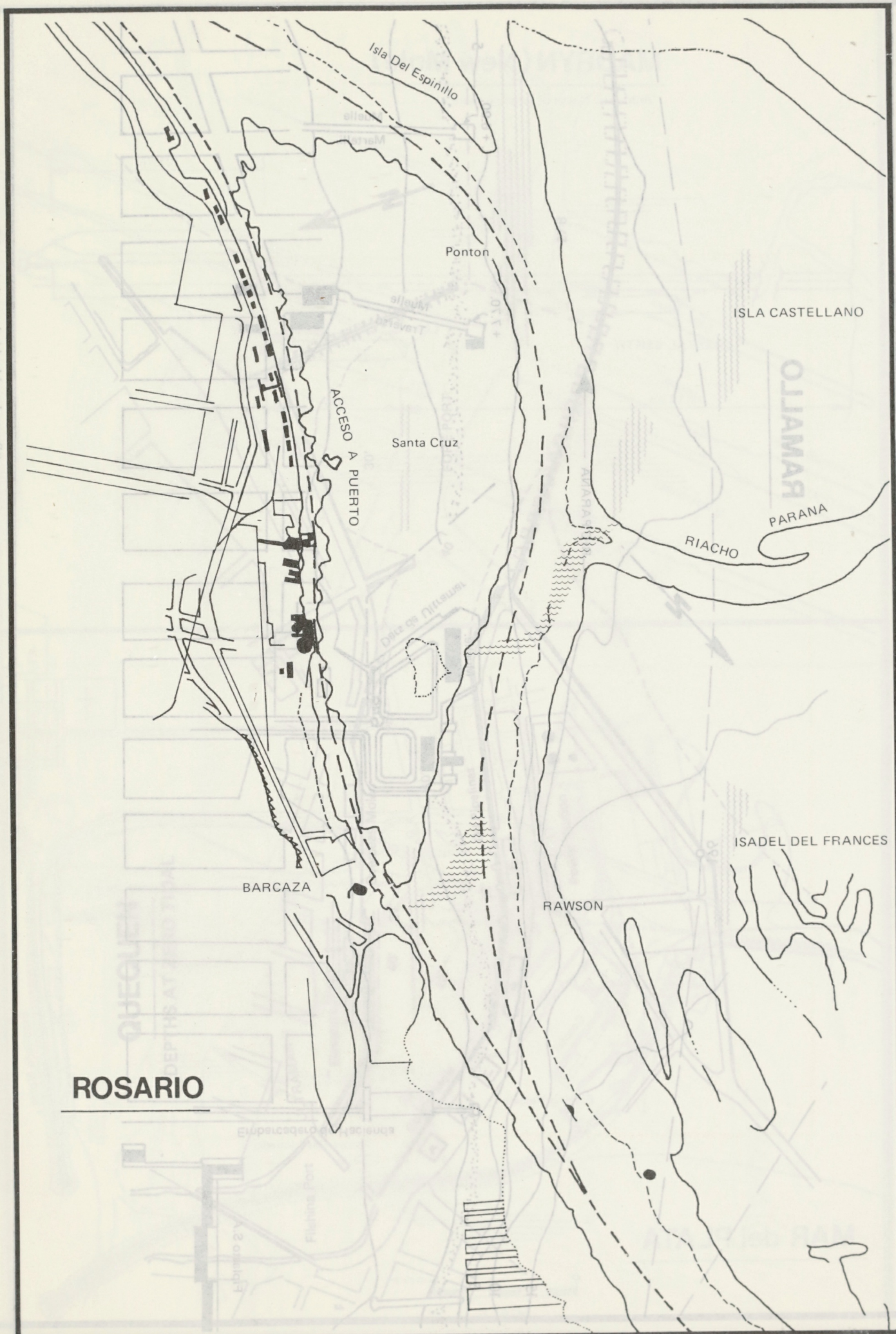

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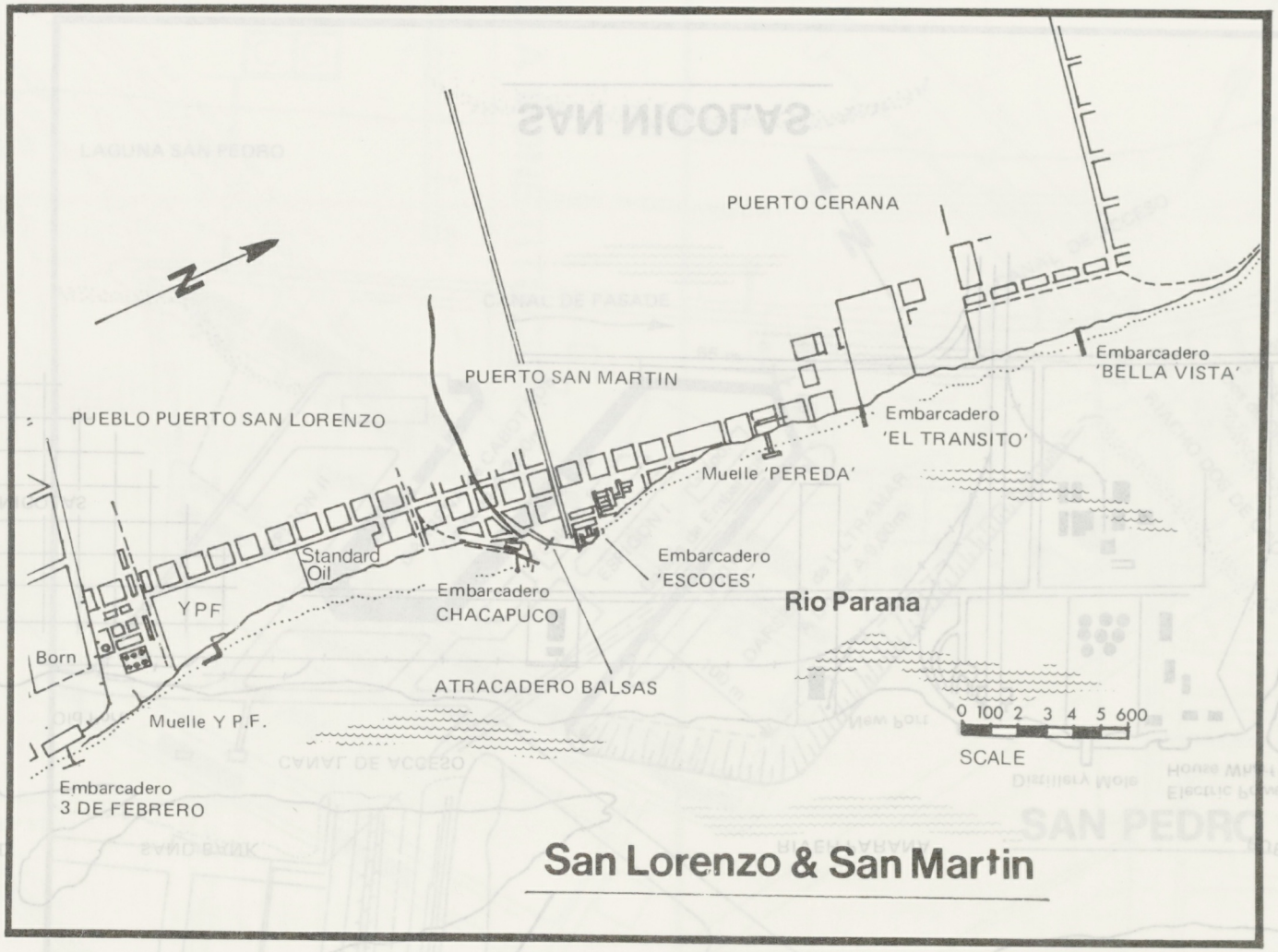

San Lorenzo & San Martin

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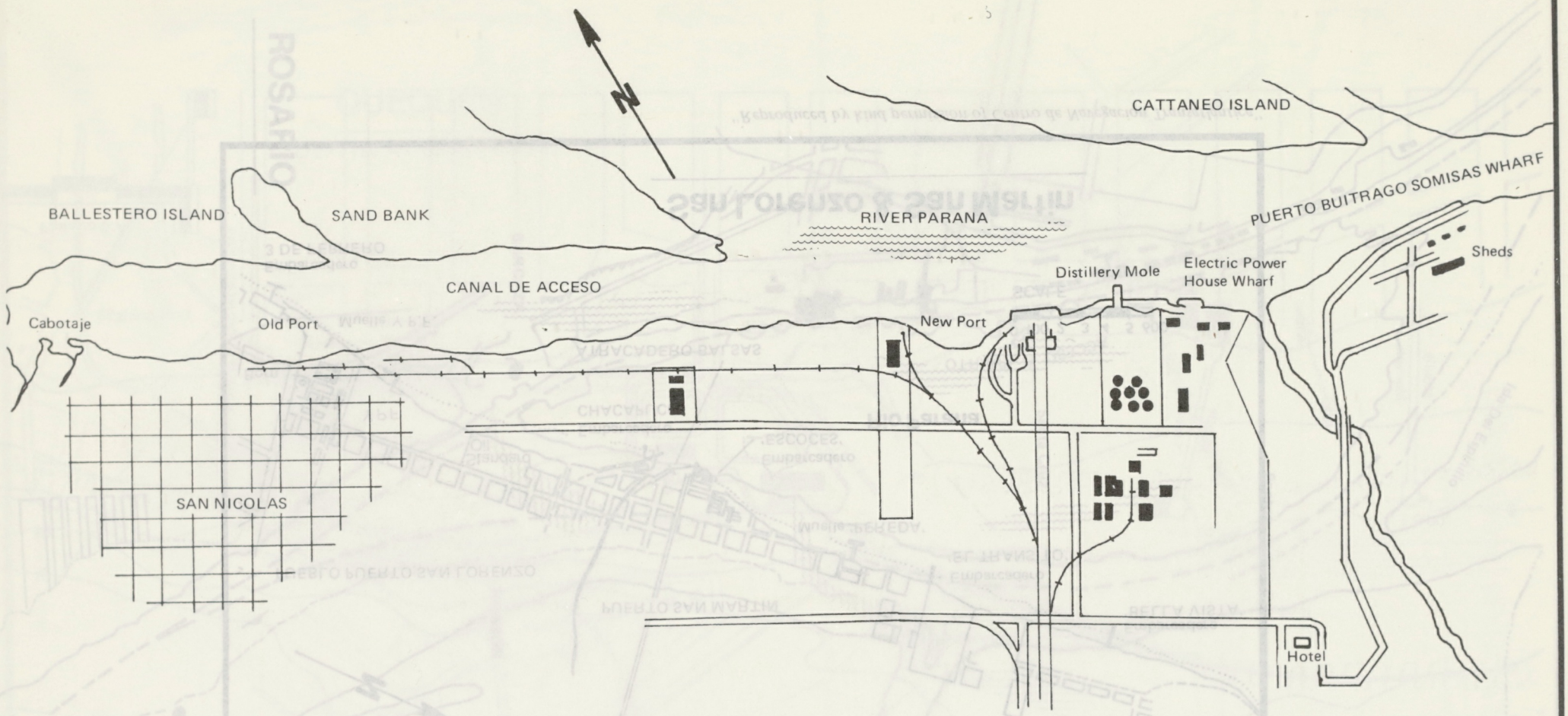

SAN NICOLAS

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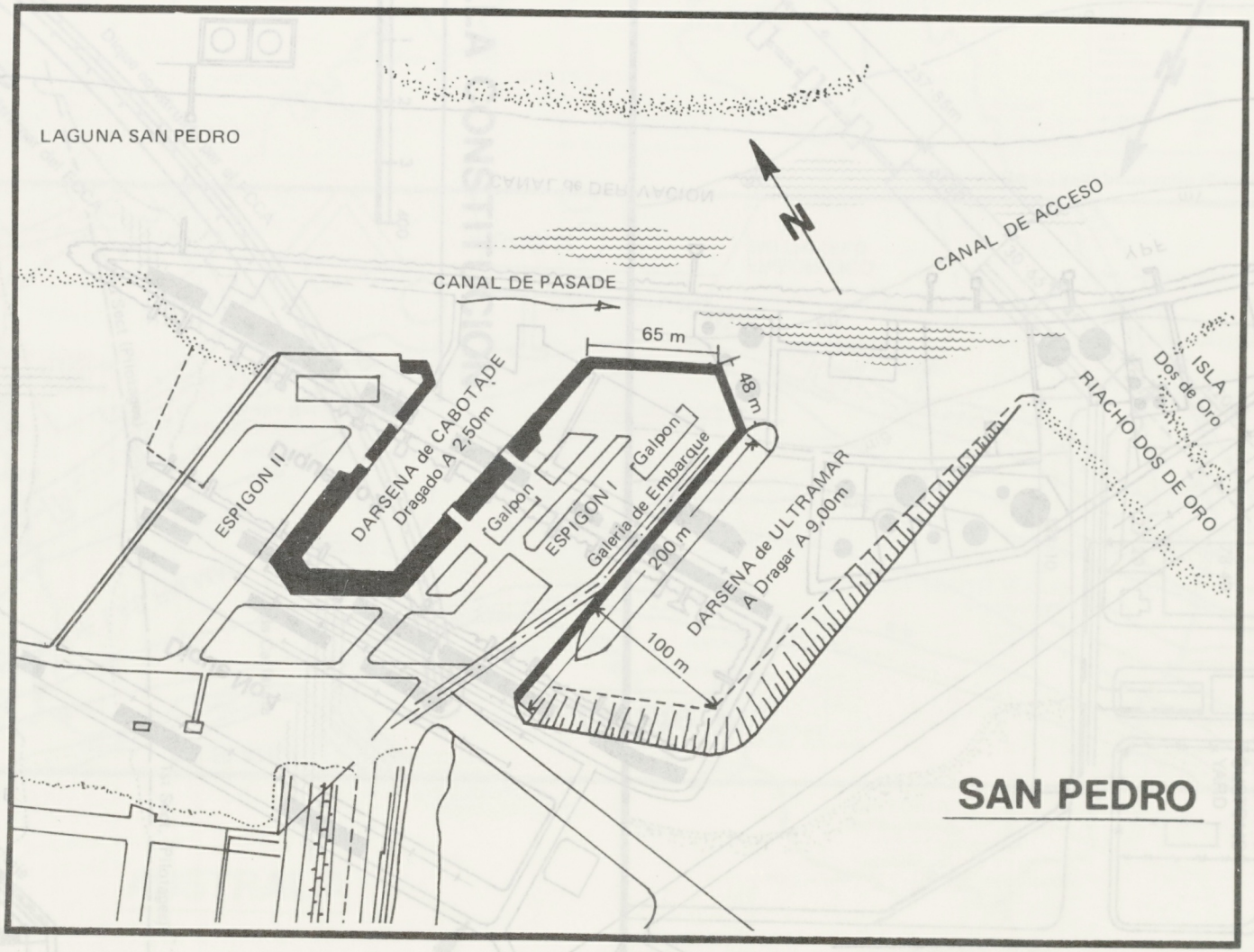

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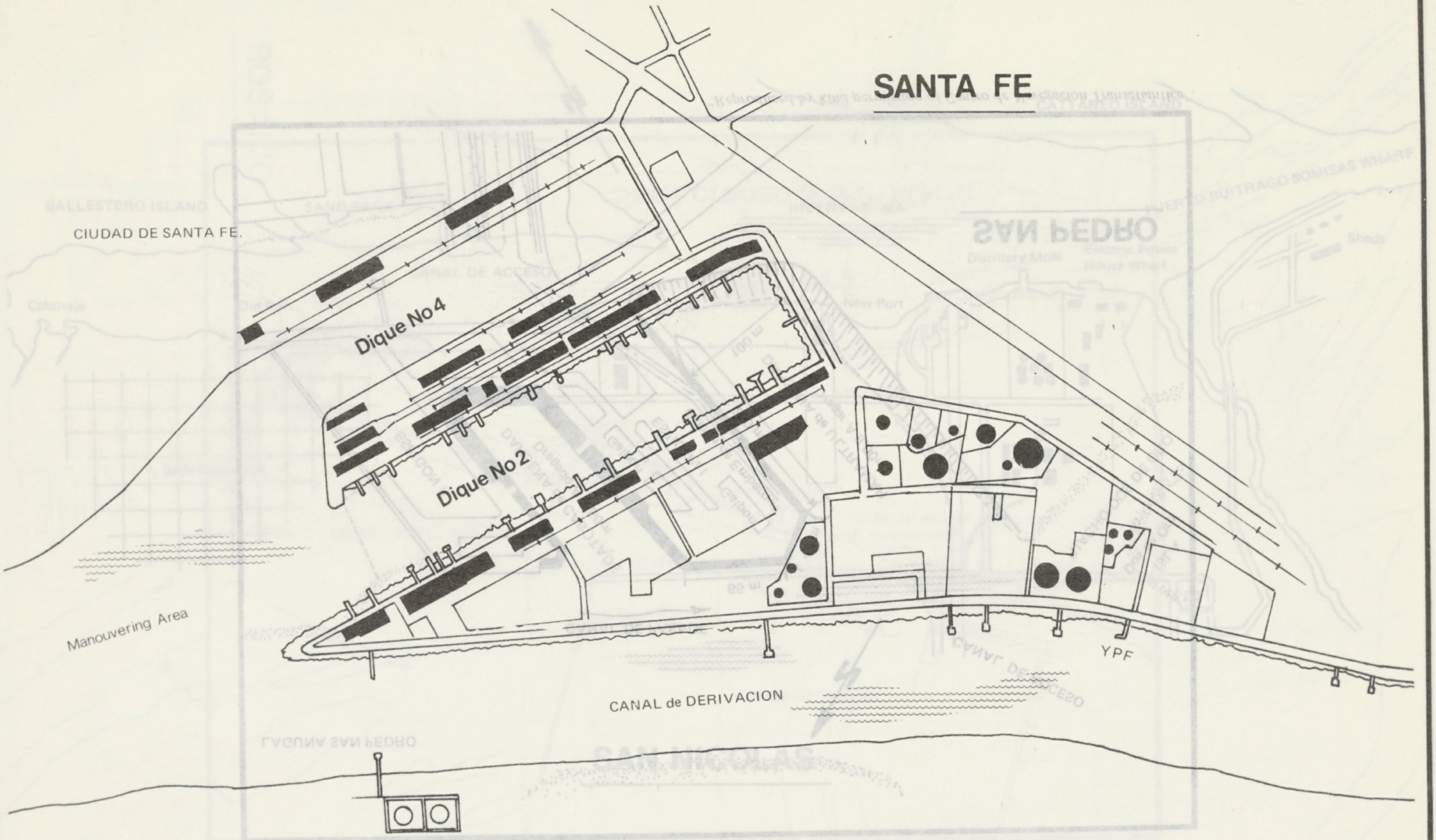
SANTA FE



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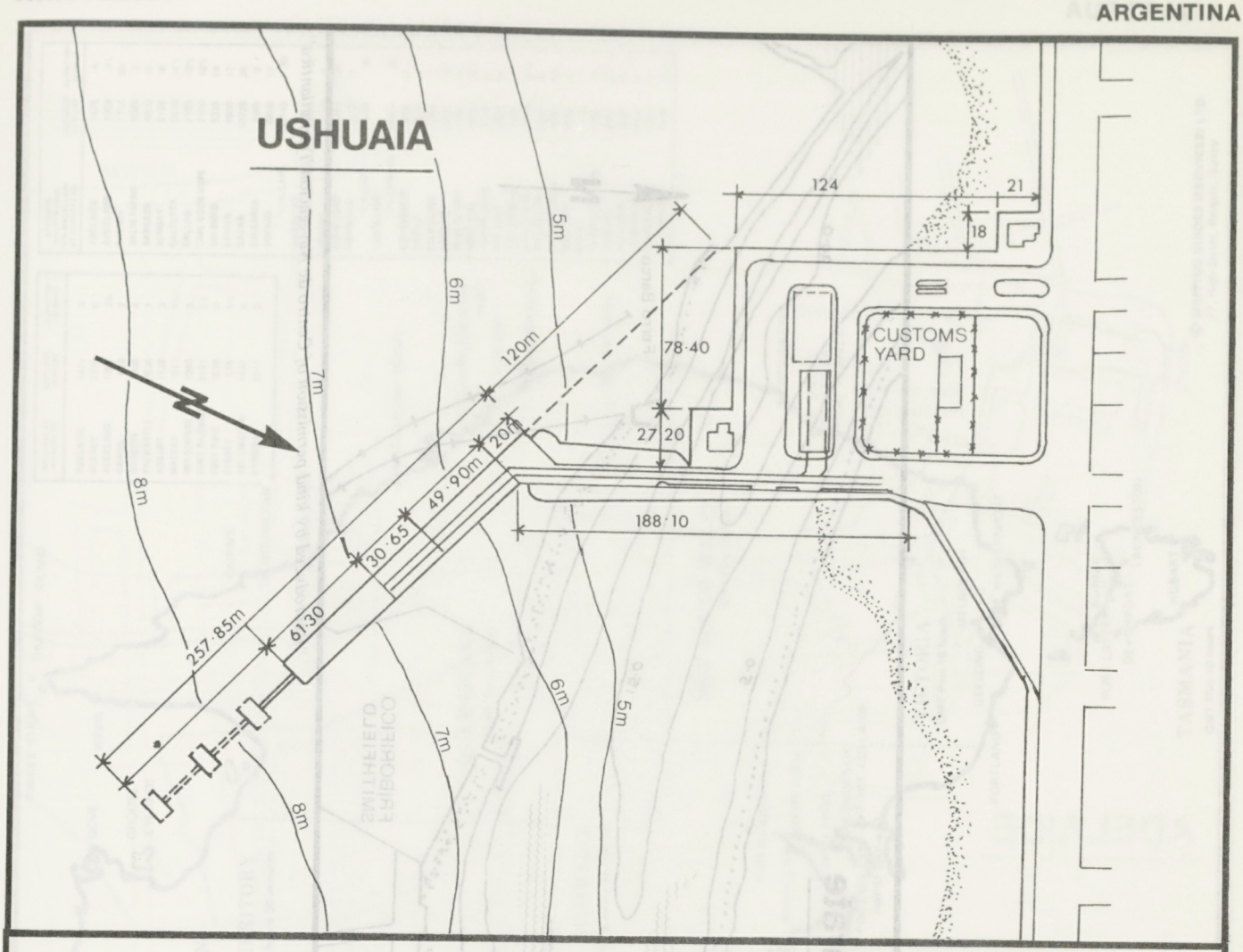

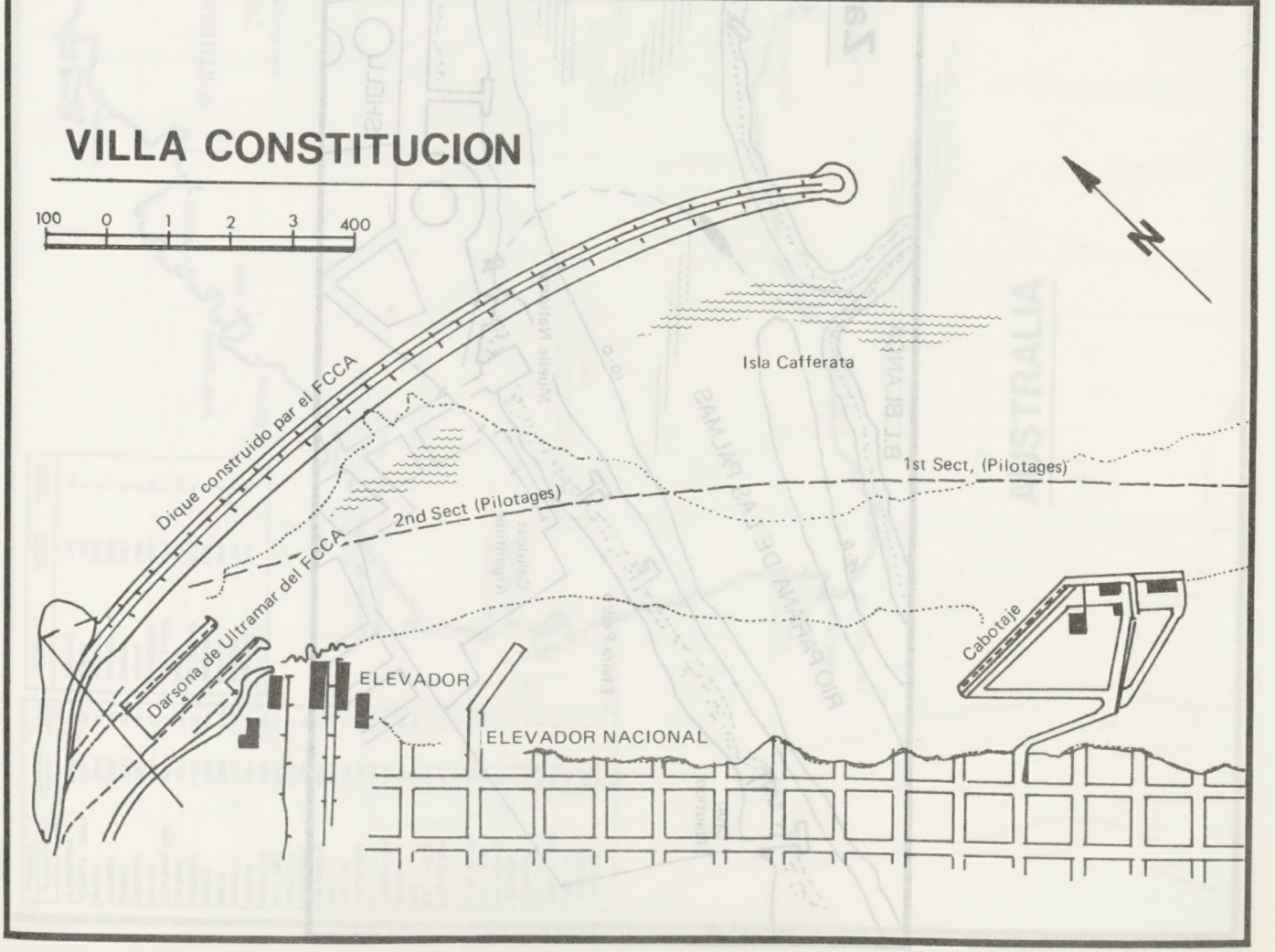

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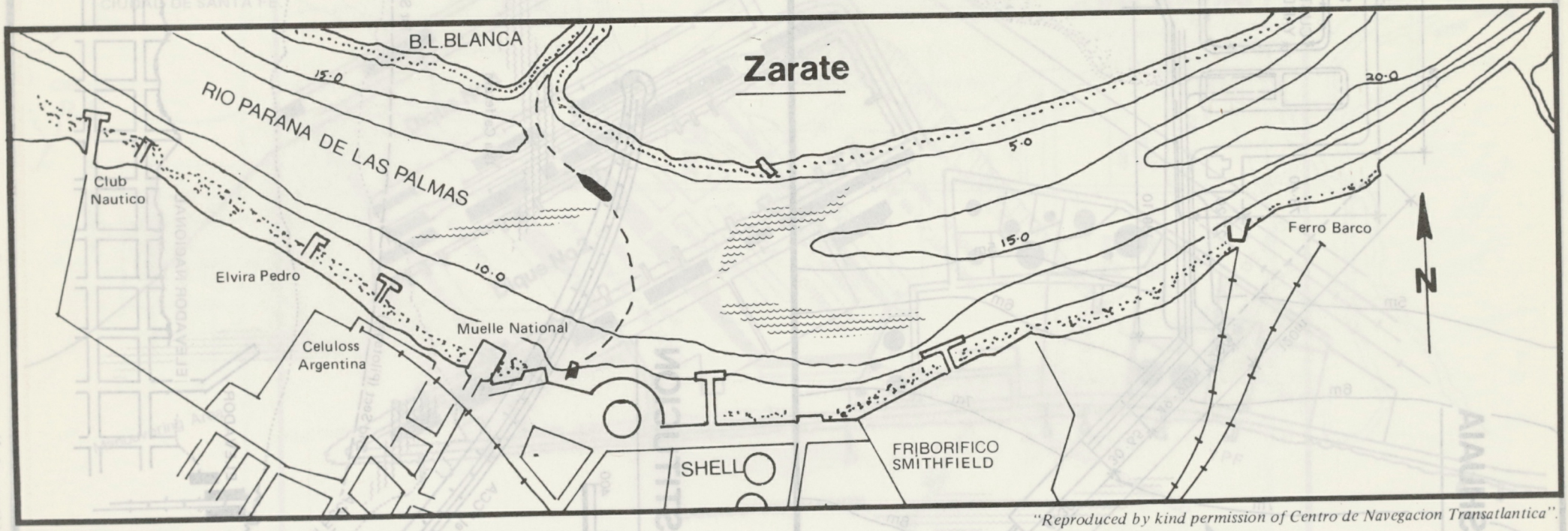

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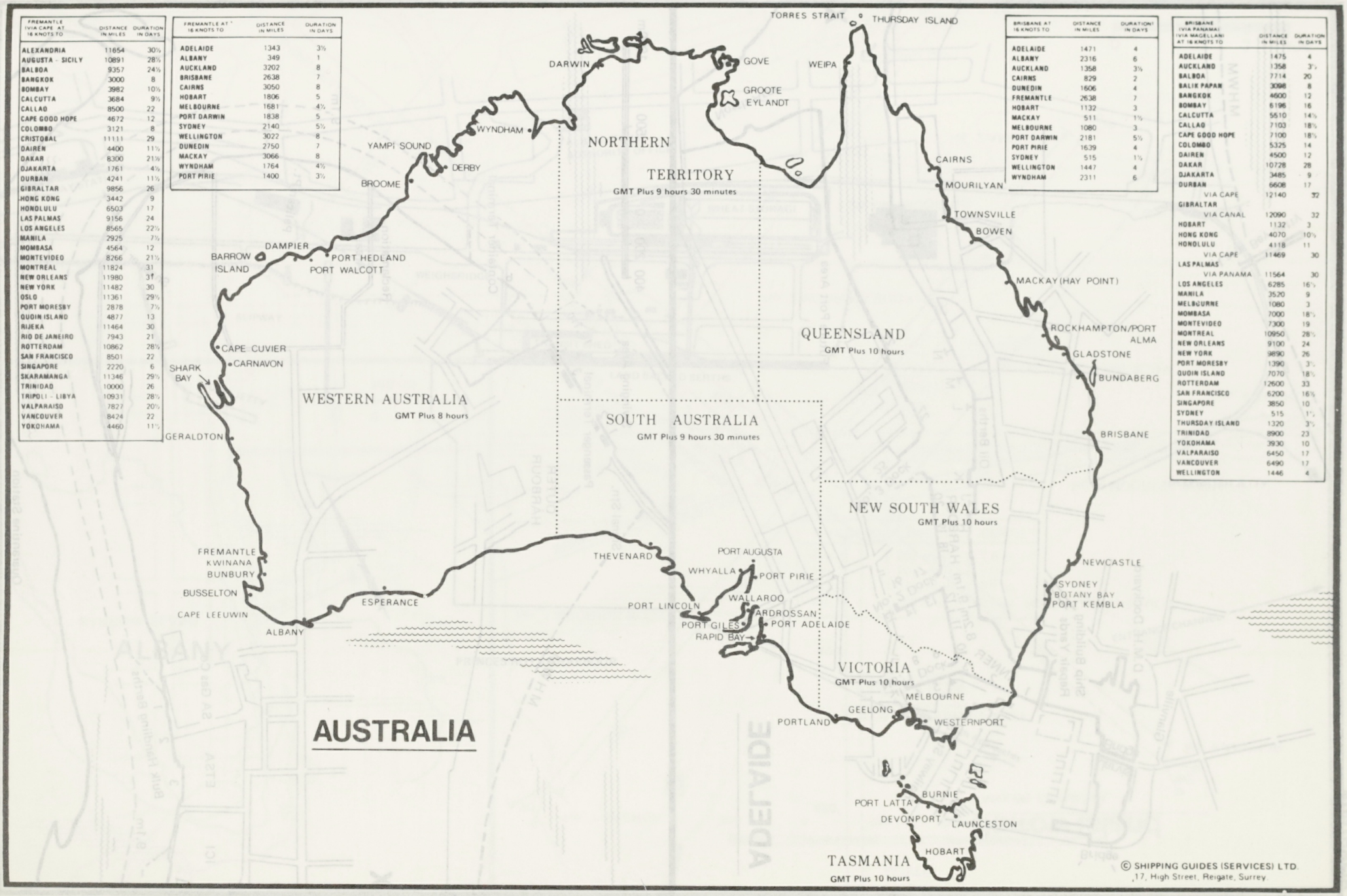

FREMANTLE (VIA CAPE) AT 16 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
ALEXANDRIA	11654	30½
AUGUSTA - SICILY	10891	28½
BALBOA	9357	24½
BANGKOK	3000	8
BOMBAY	3982	10½
CALCUTTA	3684	9½
CALLAO	8500	22
CAPE GOOD HOPE	4672	12
COLOMBO	3121	8
CRISTOBAL	11111	29
DAIREN	4400	11½
DAKAR	8300	21½
DJAKARTA	1761	4½
DURBAN	4241	11½
GIBRALTAR	9856	26
HONG KONG	3442	9
HONOLULU	6503	17
LAS PALMAS	9156	24
LOS ANGELES	8565	22½
MANILA	2925	7½
MOMBASA	4564	12
MONTEVIDEO	8266	21½
MONTREAL	11824	31
NEW ORLEANS	11980	31
NEW YORK	11482	30
OSLO	11361	29½
PORT MORESBY	2878	7½
QUOIN ISLAND	4877	13
RIJEKA	11464	30
RIO DE JANEIRO	7943	21
ROTTERDAM	10862	28½
SAN FRANCISCO	8501	22
SINGAPORE	2220	6
SKARAMANGA	11346	29½
TRINIDAD	10000	26
TRIPOLI - LIBYA	10931	28½
VALPARAISO	7827	20½
VANCOUVER	8424	22
YOKOHAMA	4460	11½

FREMANTLE AT 16 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
ADELAIDE	1343	3½
ALBANY	349	1
AUCKLAND	3202	8
BRISBANE	2638	7
CAIRNS	3050	8
HOBART	1806	5
MELBOURNE	1681	4½
PORT DARWIN	1838	5
SYDNEY	2140	5½
WELLINGTON	3022	8
DUNEDIN	2750	7
MACKAY	3066	8
WYNDHAM	1764	4½
PORT PIRIE	1400	3½

BRISBANE AT 16 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
ADELAIDE	1471	4
ALBANY	2316	6
AUCKLAND	1358	3½
CAIRNS	829	2
DUNEDIN	1606	4
FREMANTLE	2638	7
HOBART	1132	3
MACKAY	511	1½
MELBOURNE	1080	3
PORT DARWIN	2181	5½
PORT PIRIE	1639	4
SYDNEY	515	1½
WELLINGTON	1447	4
WYNDHAM	2311	6

BRISBANE (VIA PANAMA) (VIA MAGELLAN) AT 16 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
ADELAIDE	1475	4
AUCKLAND	1358	3½
BALBOA	7714	20
BALIK PAPAN	3098	8
BANGKOK	4600	12
BOMBAY	6196	16
CALCUTTA	5510	14½
CALLAO	7103	18½
CAPE GOOD HOPE	7100	18½
COLOMBO	5325	14
DAIREN	4500	12
DAKAR	10728	28
DJAKARTA	3485	9
DURBAN	6608	17
VIA CAPE	12140	32
GIBRALTAR		
VIA CANAL	12090	32
HOBART	1132	3
HONG KONG	4070	10½
HONOLULU	4118	11
VIA CAPE	11469	30
LAS PALMAS		
VIA PANAMA	11564	30
LOS ANGELES	6285	16½
MANILA	3520	9
MELBOURNE	1080	3
MOMBASA	7000	18½
MONTEVIDEO	7300	19
MONTREAL	10950	28½
NEW ORLEANS	9100	24
NEW YORK	9890	26
PORT MORESBY	1390	3½
QUOIN ISLAND	7070	18½
ROTTERDAM	12600	33
SAN FRANCISCO	6200	16½
SINGAPORE	3850	10
SYDNEY	515	1½
THURSDAY ISLAND	1320	3½
TRINIDAD	8900	23
YOKOHAMA	3930	10
VALPARAISO	6450	17
VANCOUVER	6490	17
WELLINGTON	1446	4

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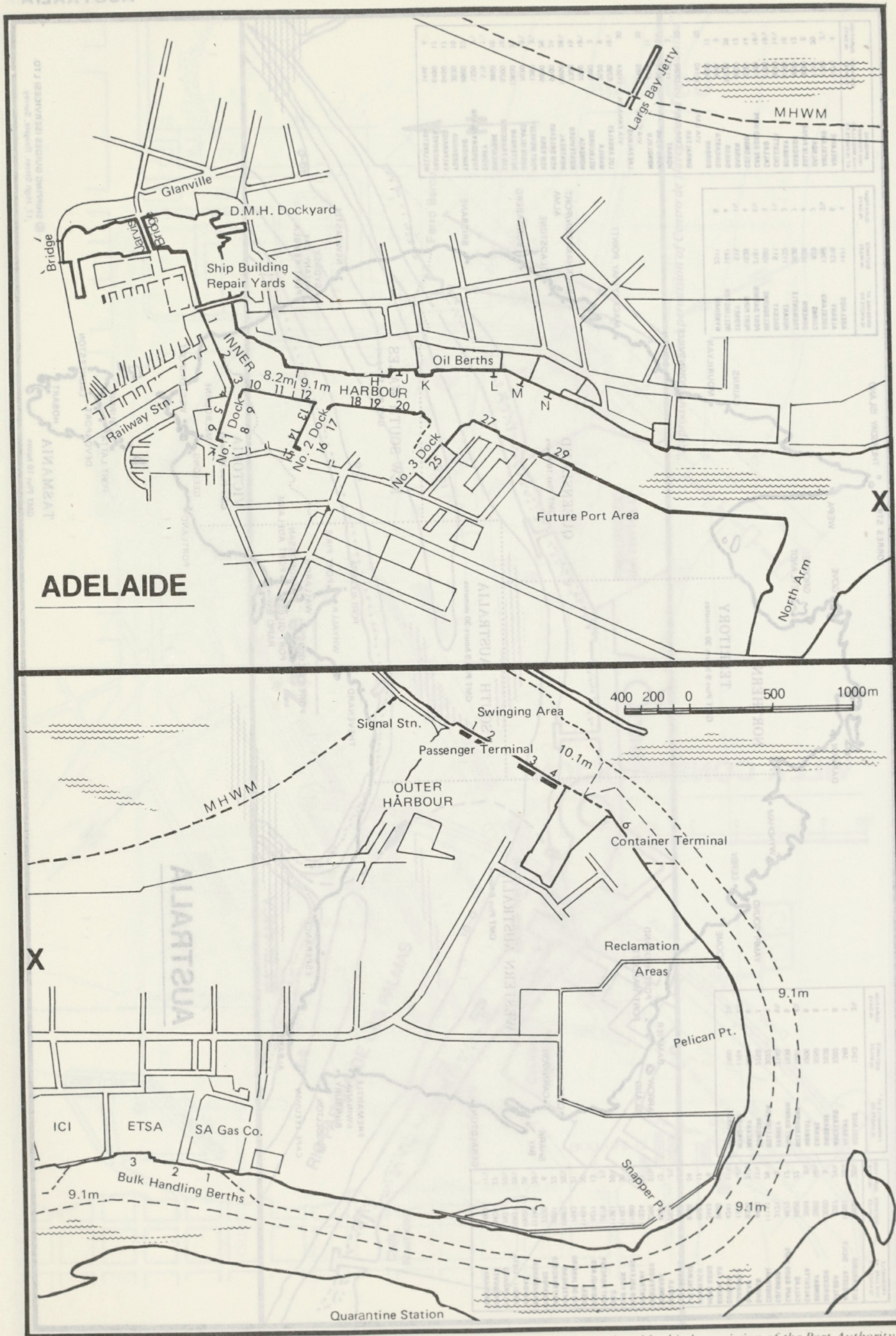

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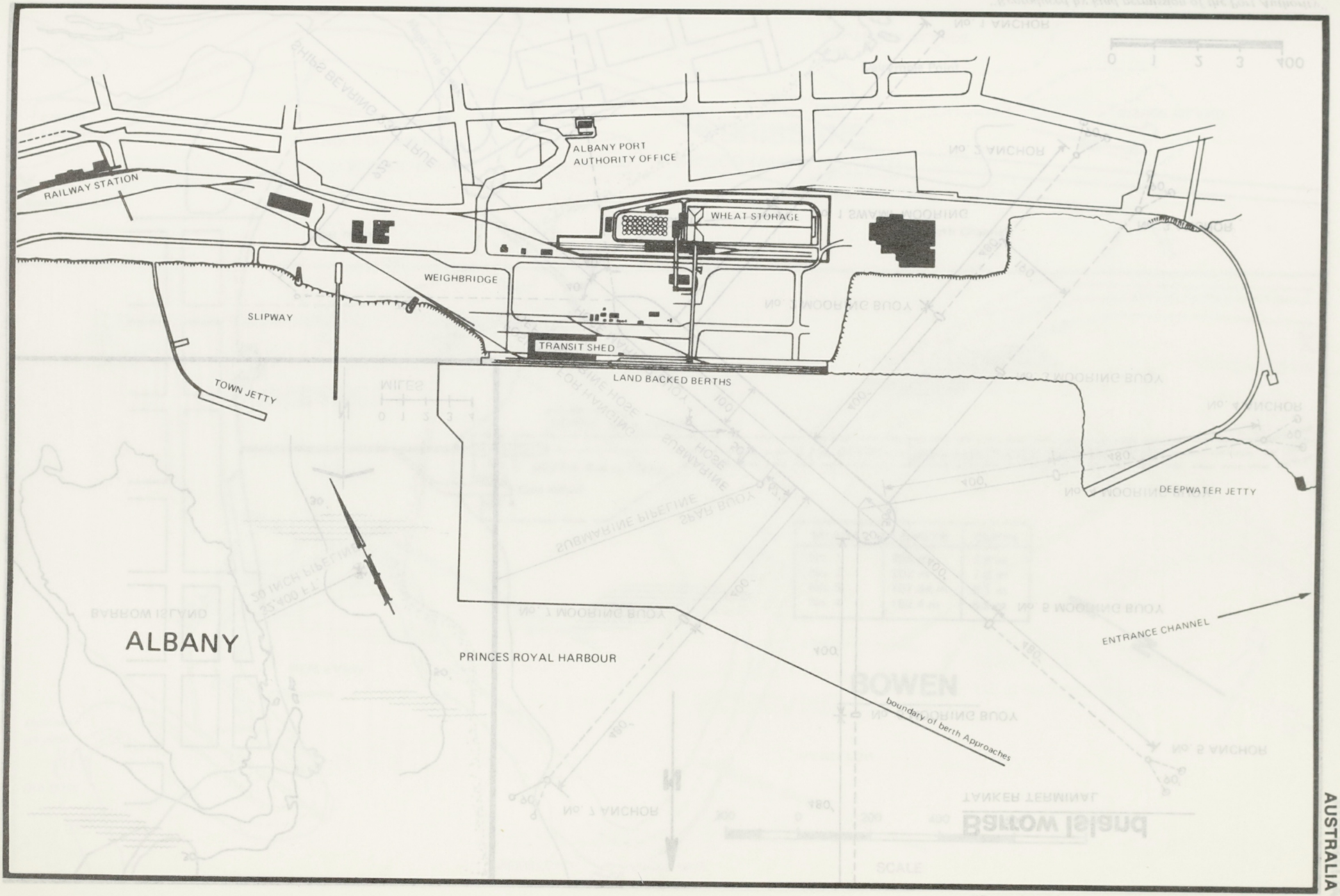

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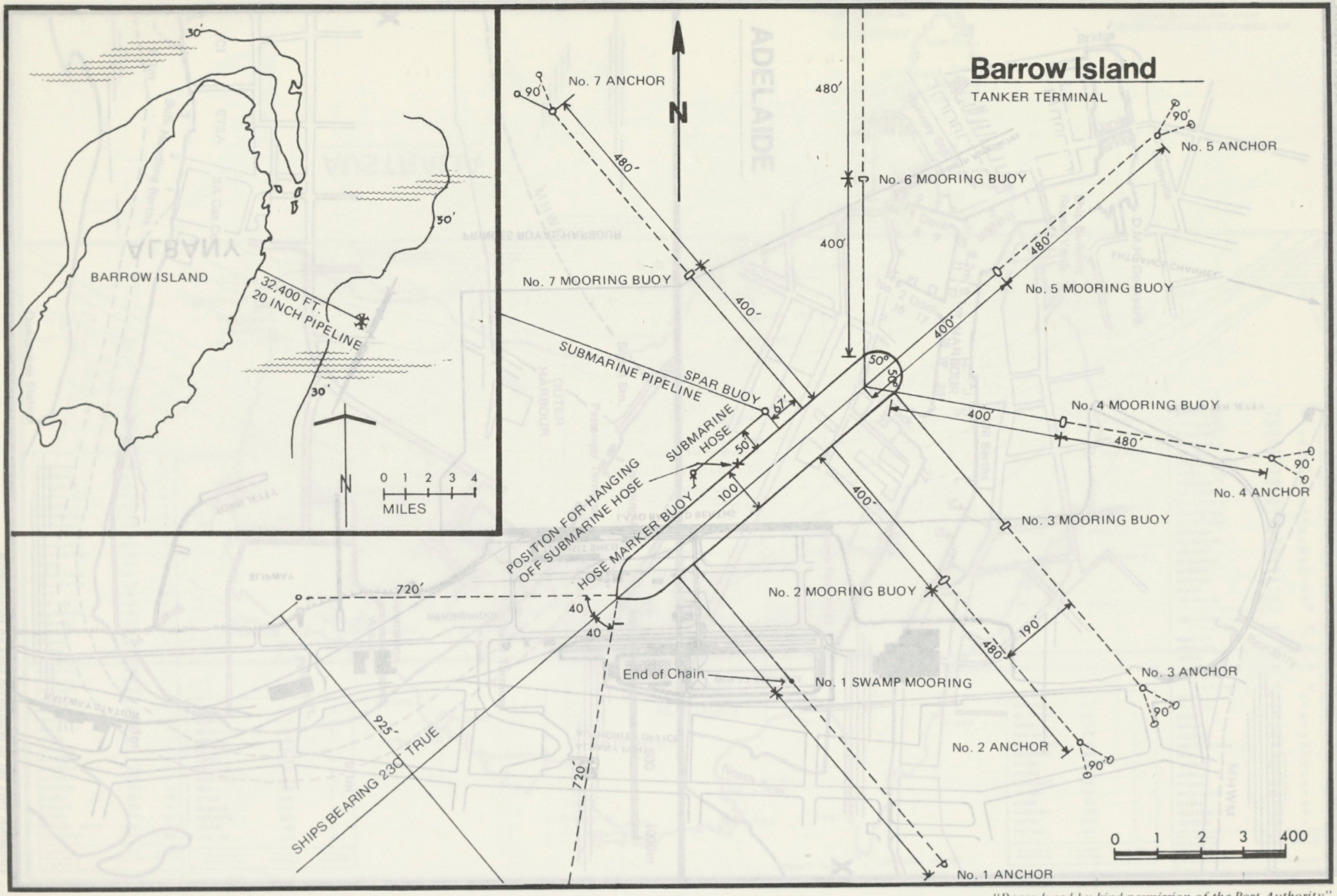

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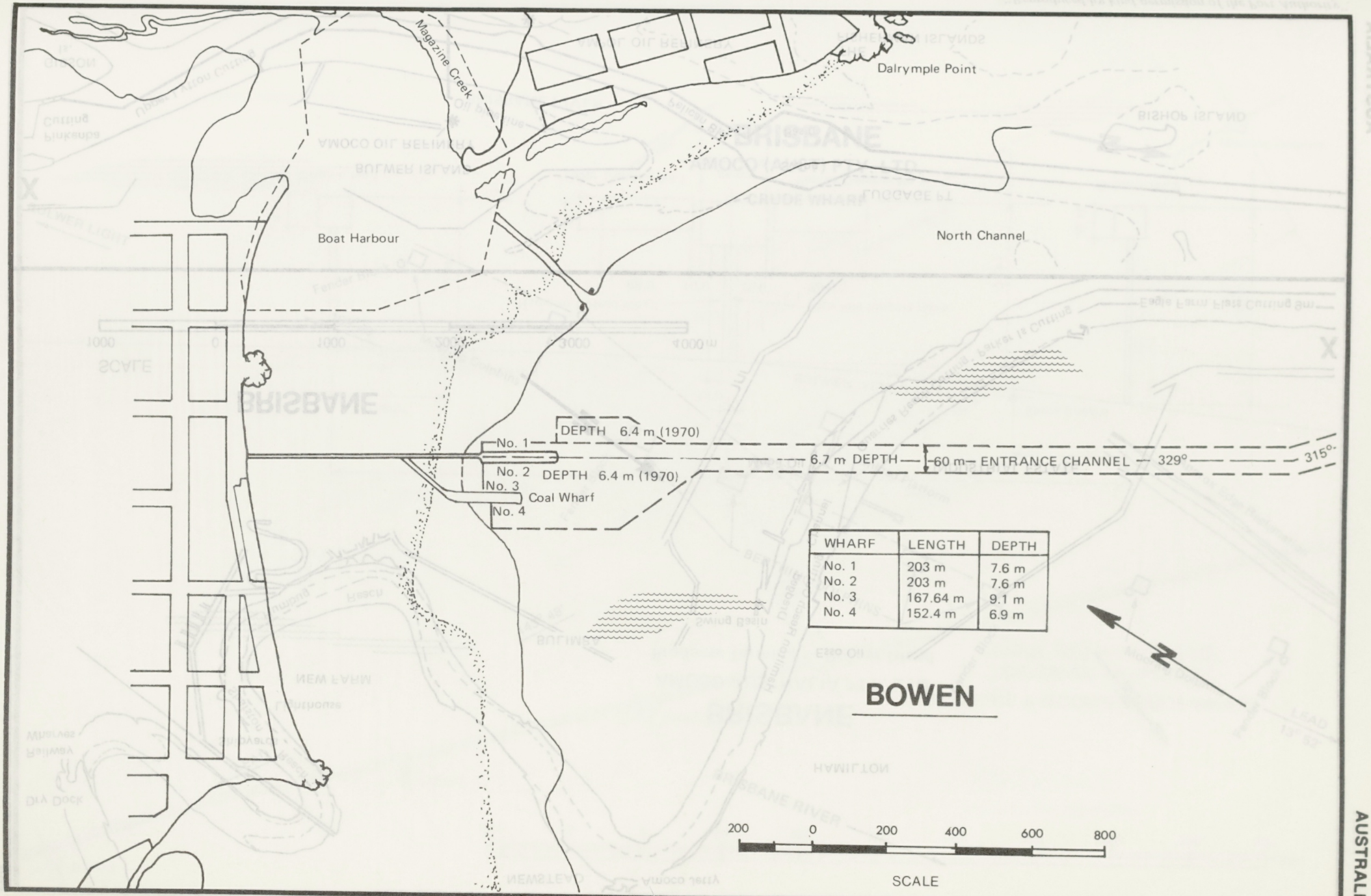

WHARF	LENGTH	DEPTH
No. 1	203 m	7.6 m
No. 2	203 m	7.6 m
No. 3	167.64 m	9.1 m
No. 4	152.4 m	6.9 m

BOWEN

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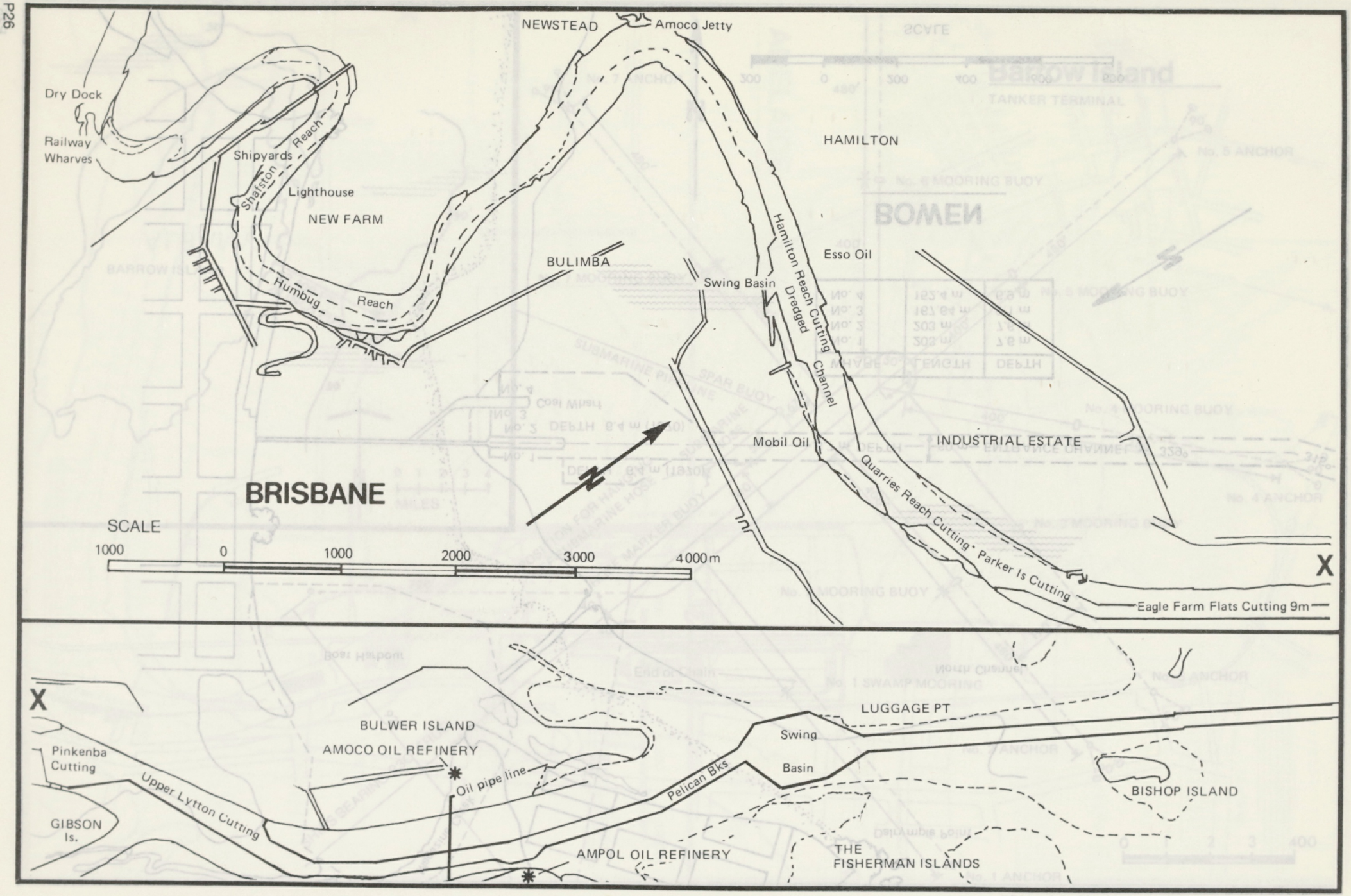

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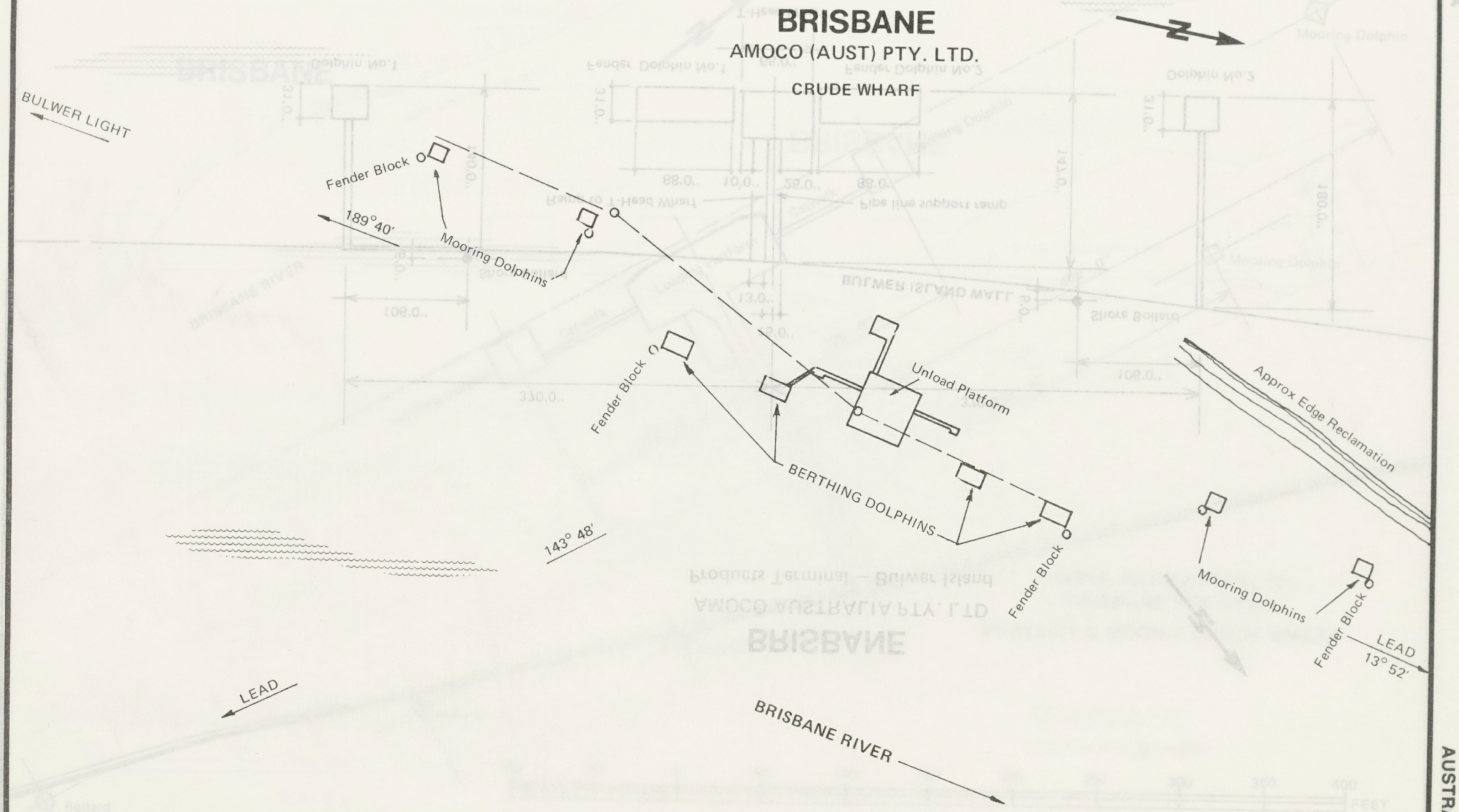
BRISBANE

AMOCO (AUST) PTY. LTD.

CRUDE WHARF



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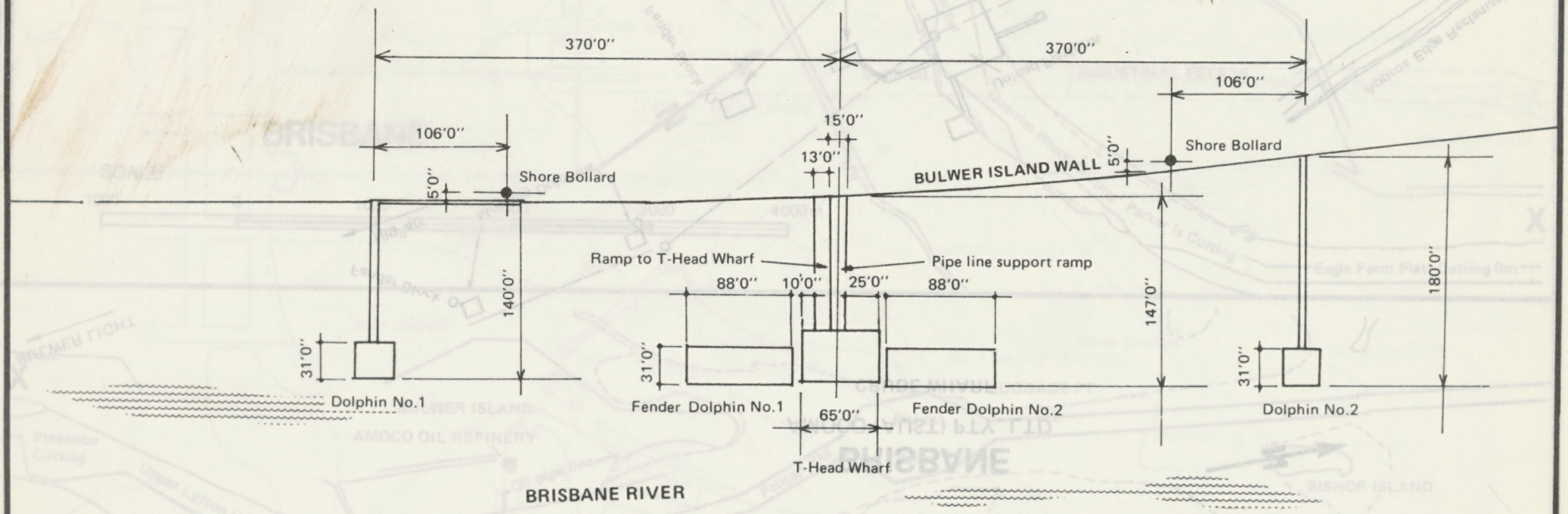
BRISBANE

AMOCO AUSTRALIA PTY. LTD

Products Terminal – Bulwer Island



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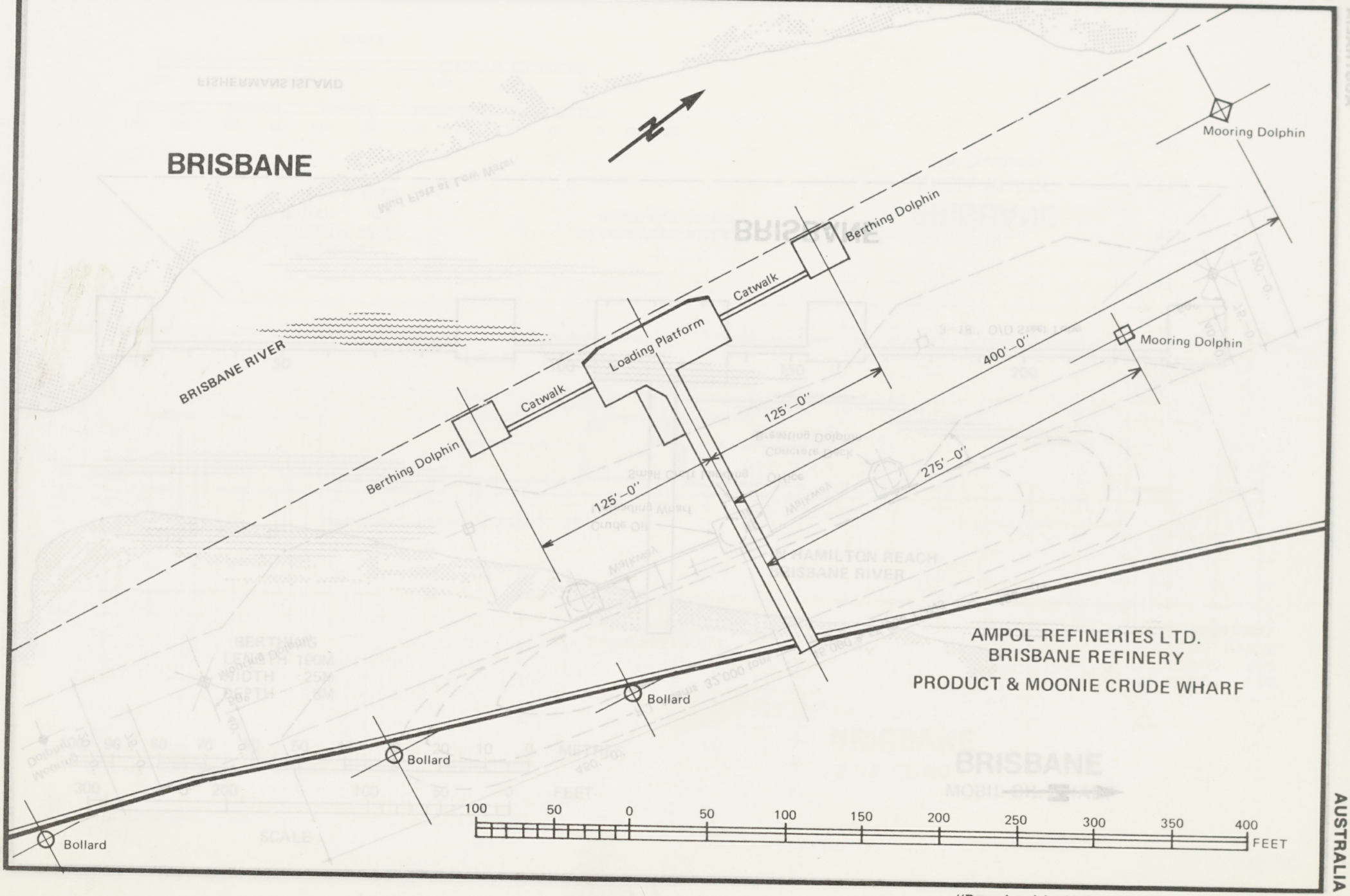

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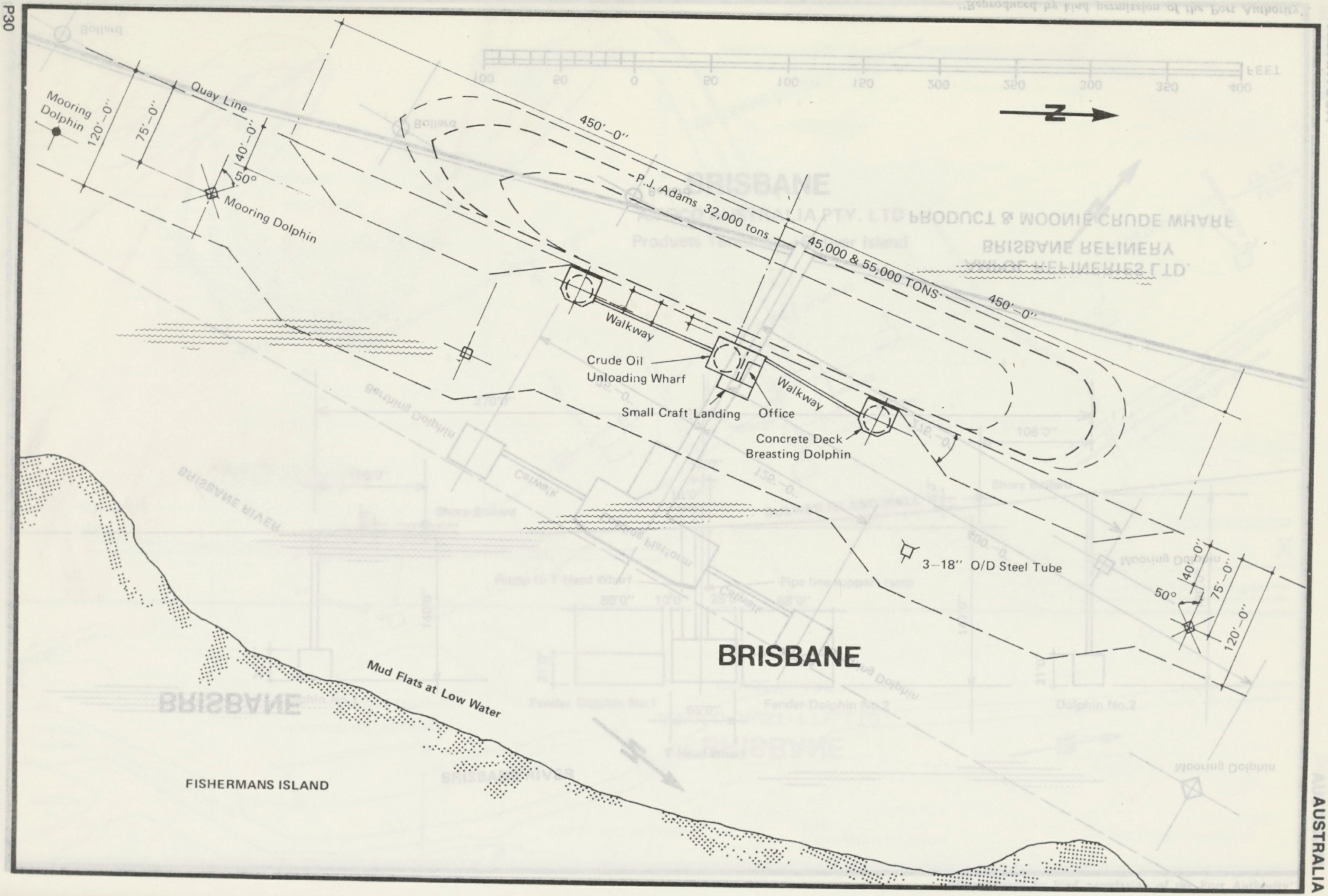

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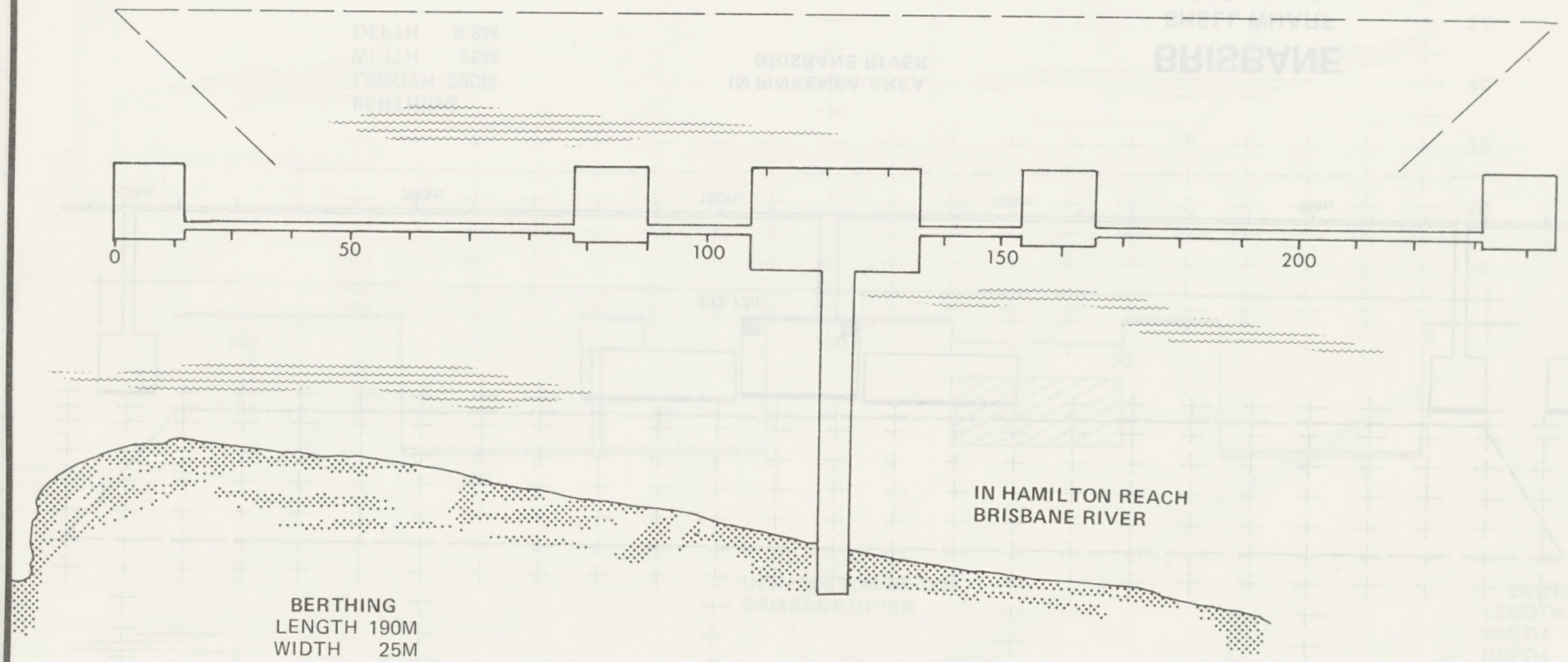

BRISBANE

MOBIL OIL WHARF

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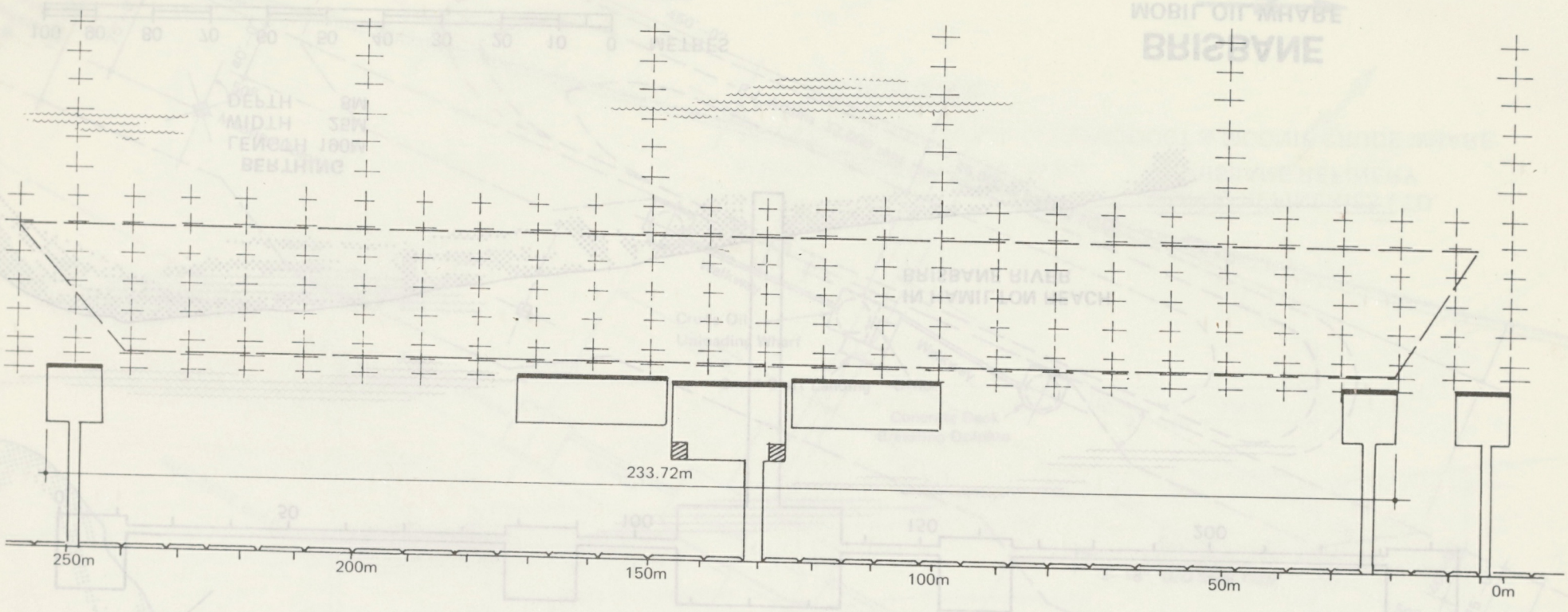
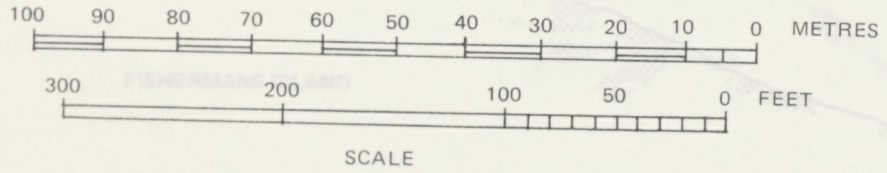


BERTHING
LENGTH 220M
WIDTH 25M
DEPTH 9.8M

IN PINKENBA AREA
BRISBANE RIVER

BRISBANE

SHELL WHARF
(Oil Products)



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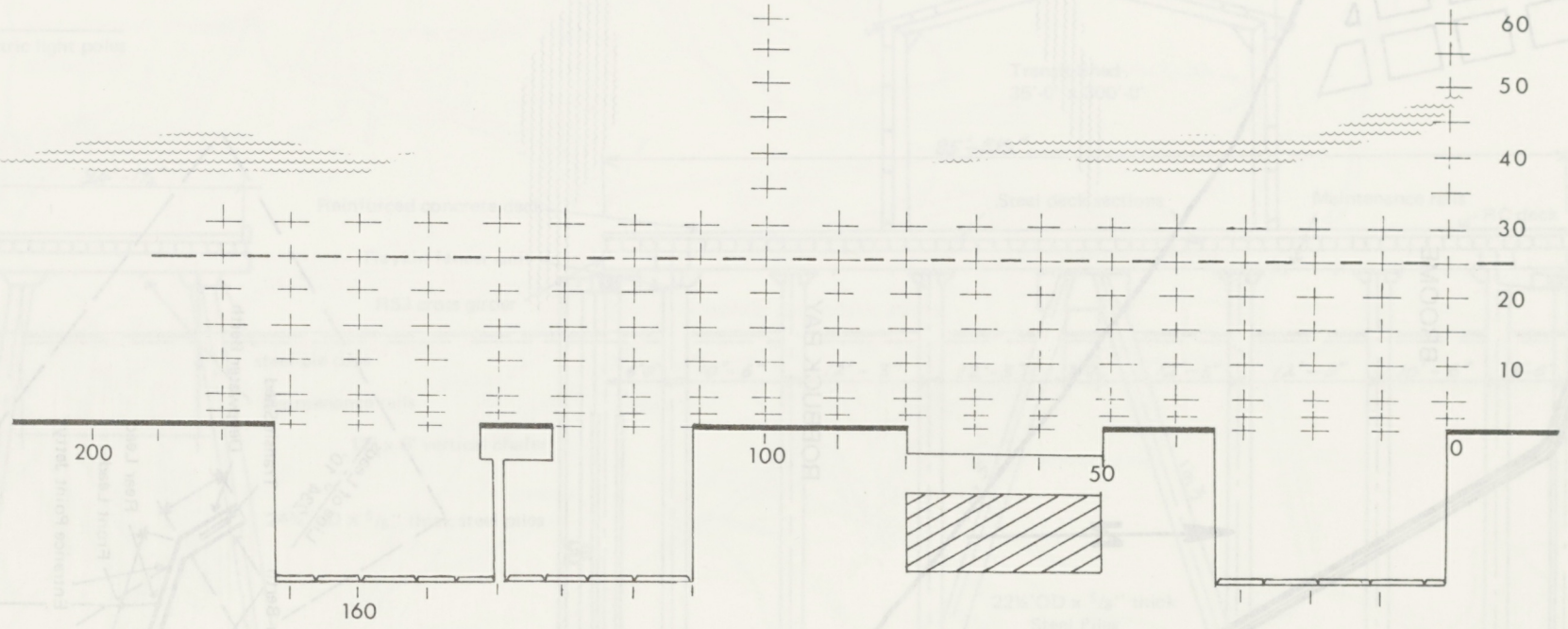
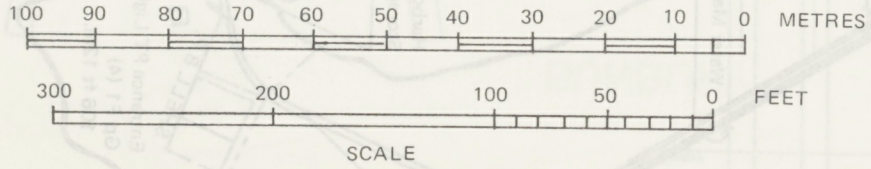


IN HAMILTON REACH
BRISBANE RIVER

BERTHING
LENGTH 160M
WIDTH 25M
DEPTH 9.1M



BRISBANE

B.H.P. CO NO.1

AUSTRALIA

P33

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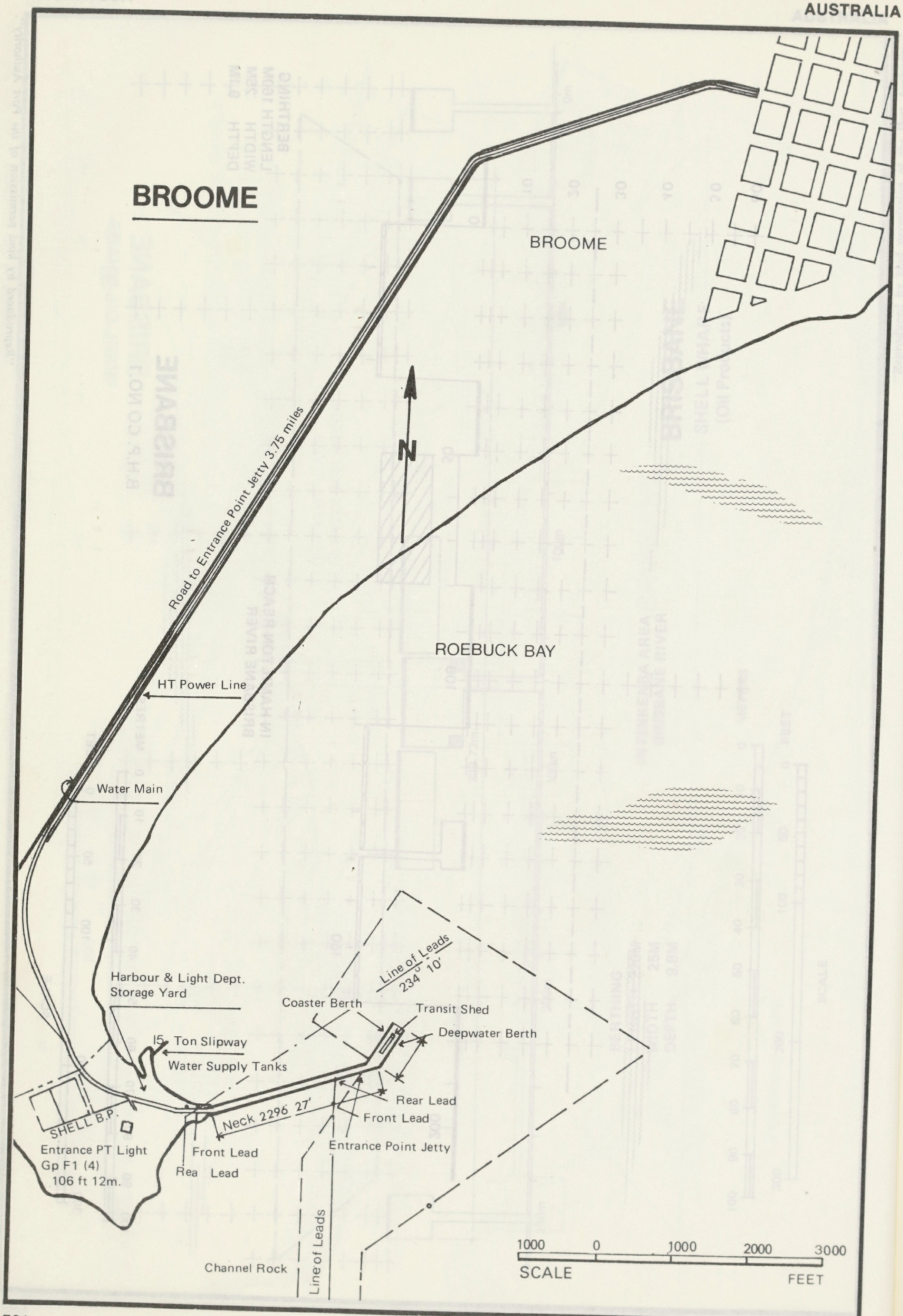

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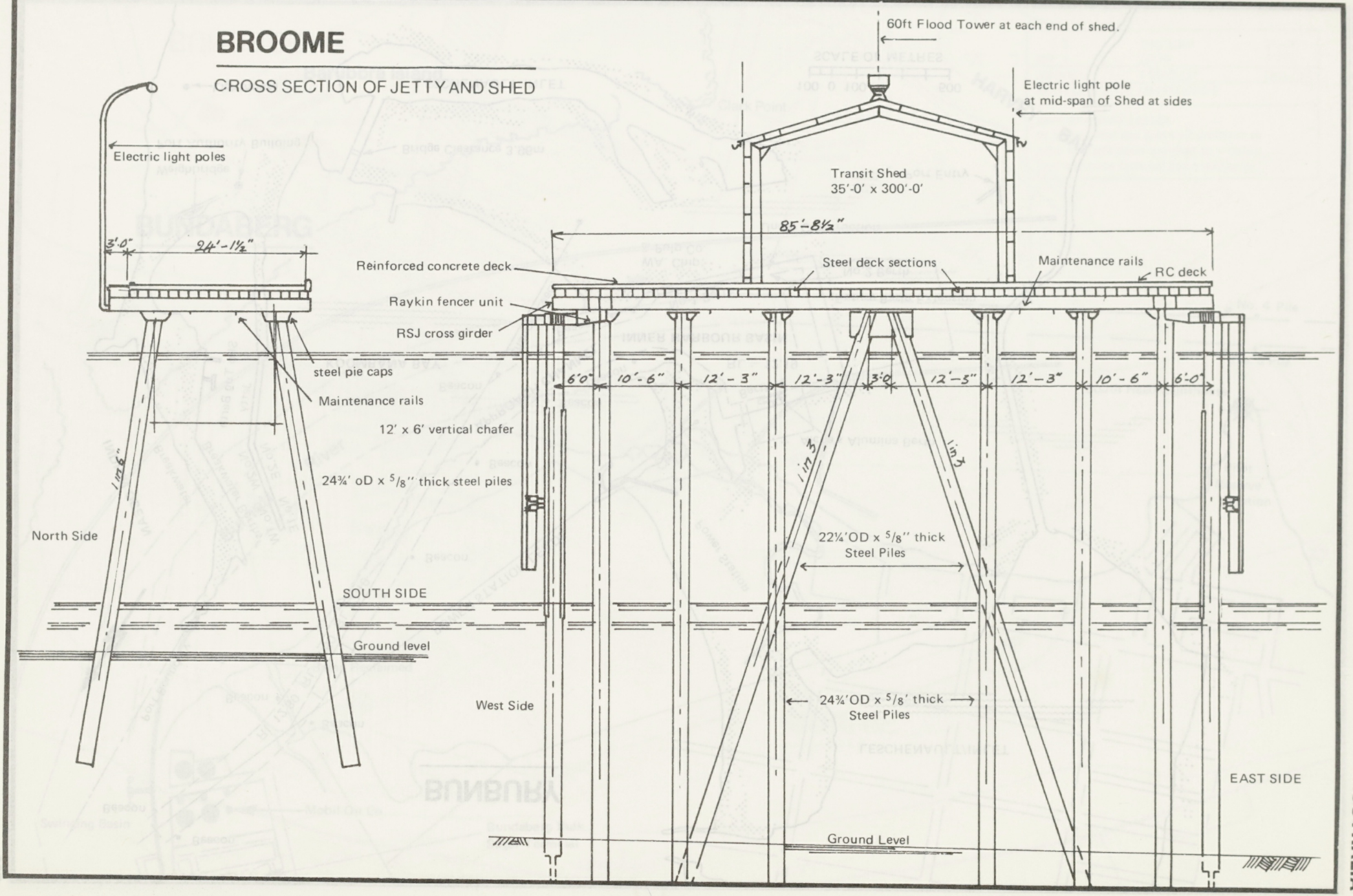
BROOME

CROSS SECTION OF JETTY AND SHED



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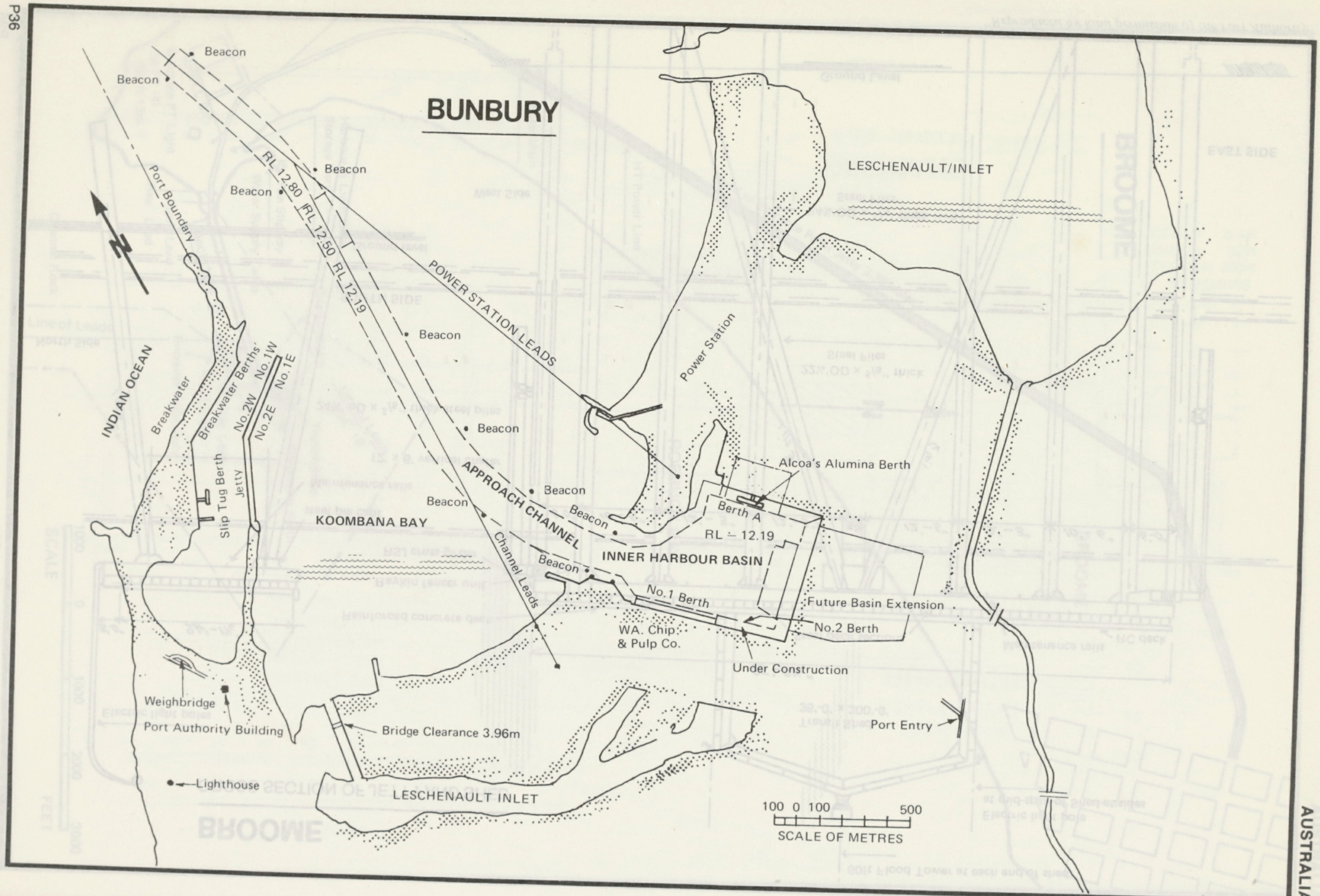

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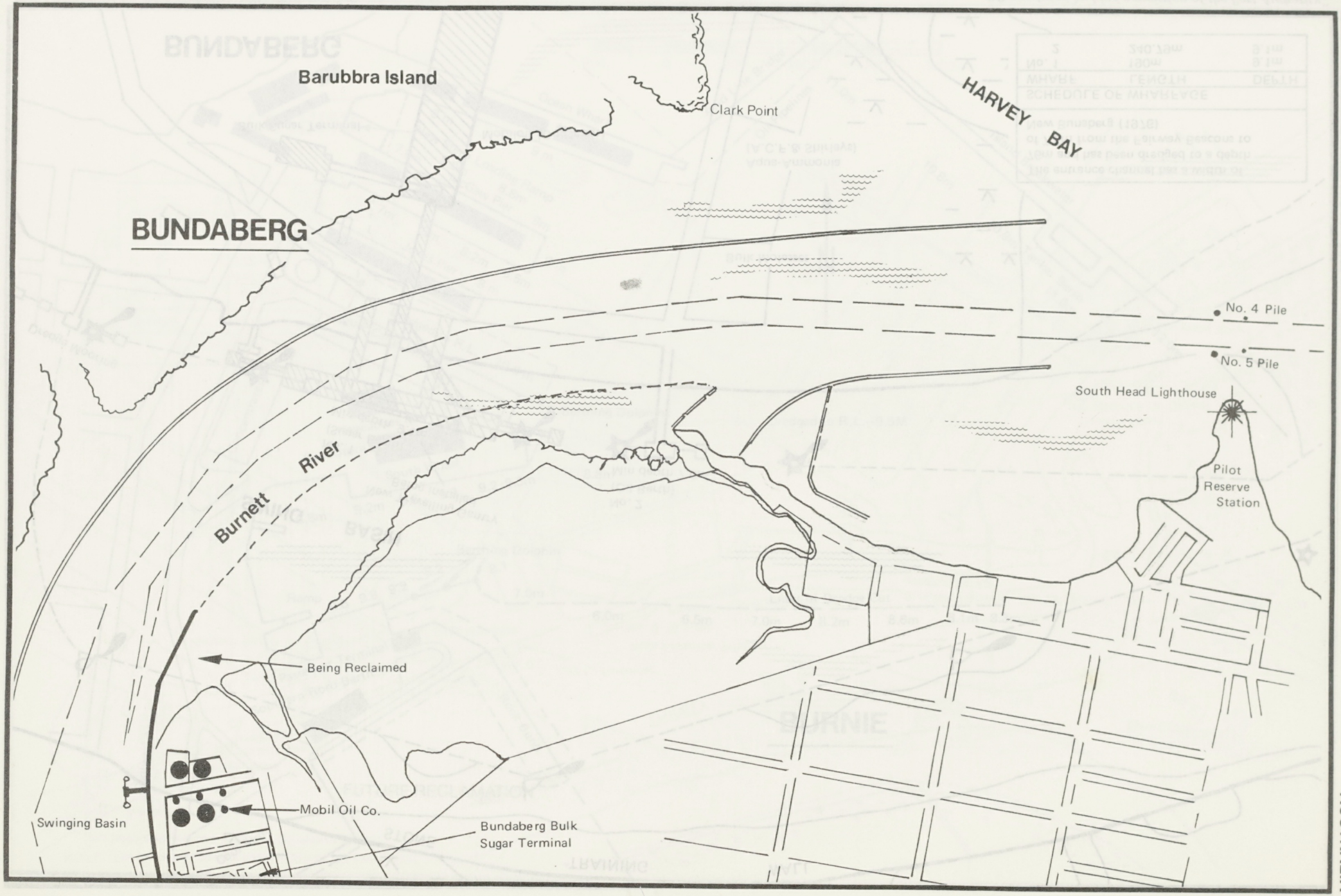

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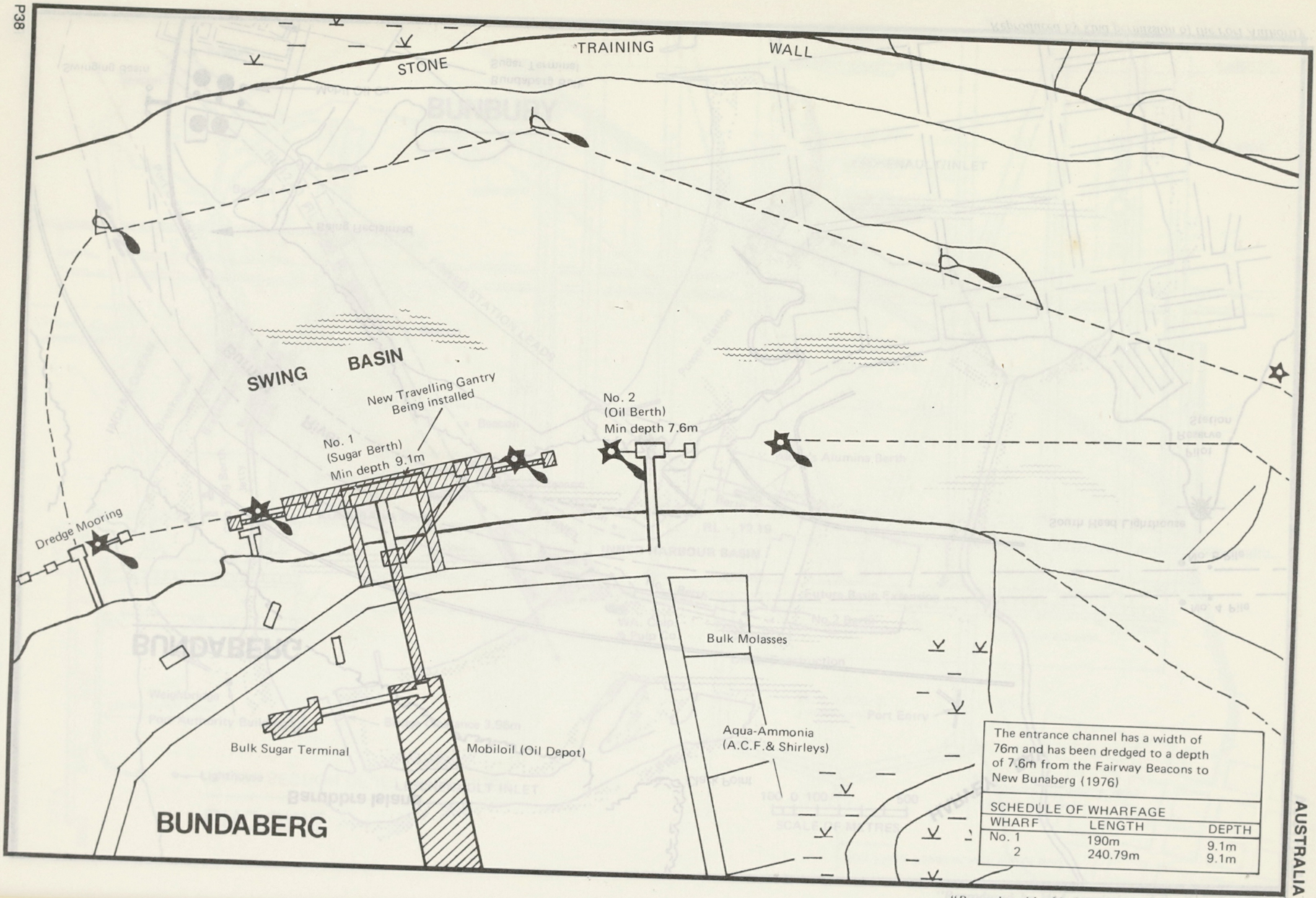

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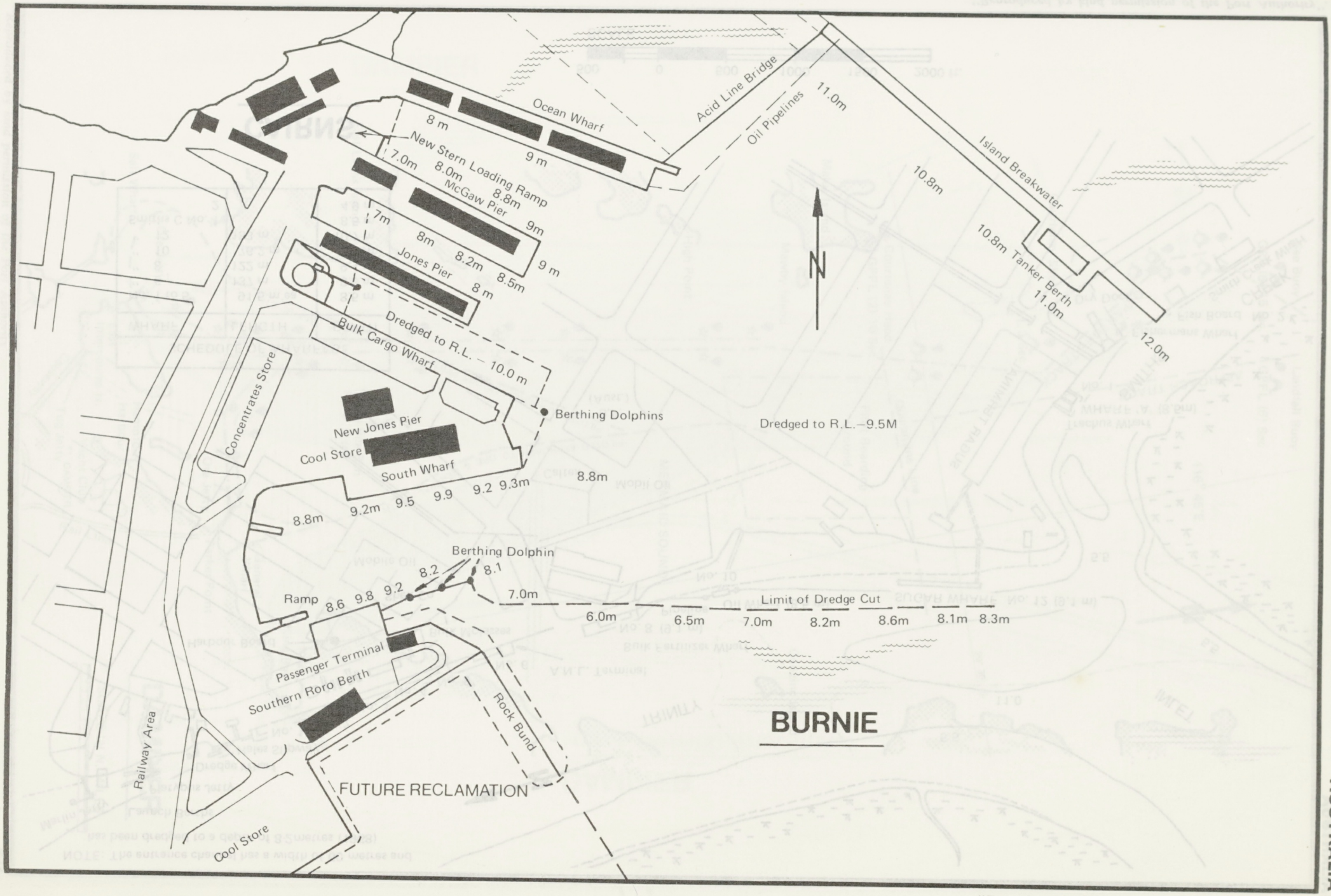

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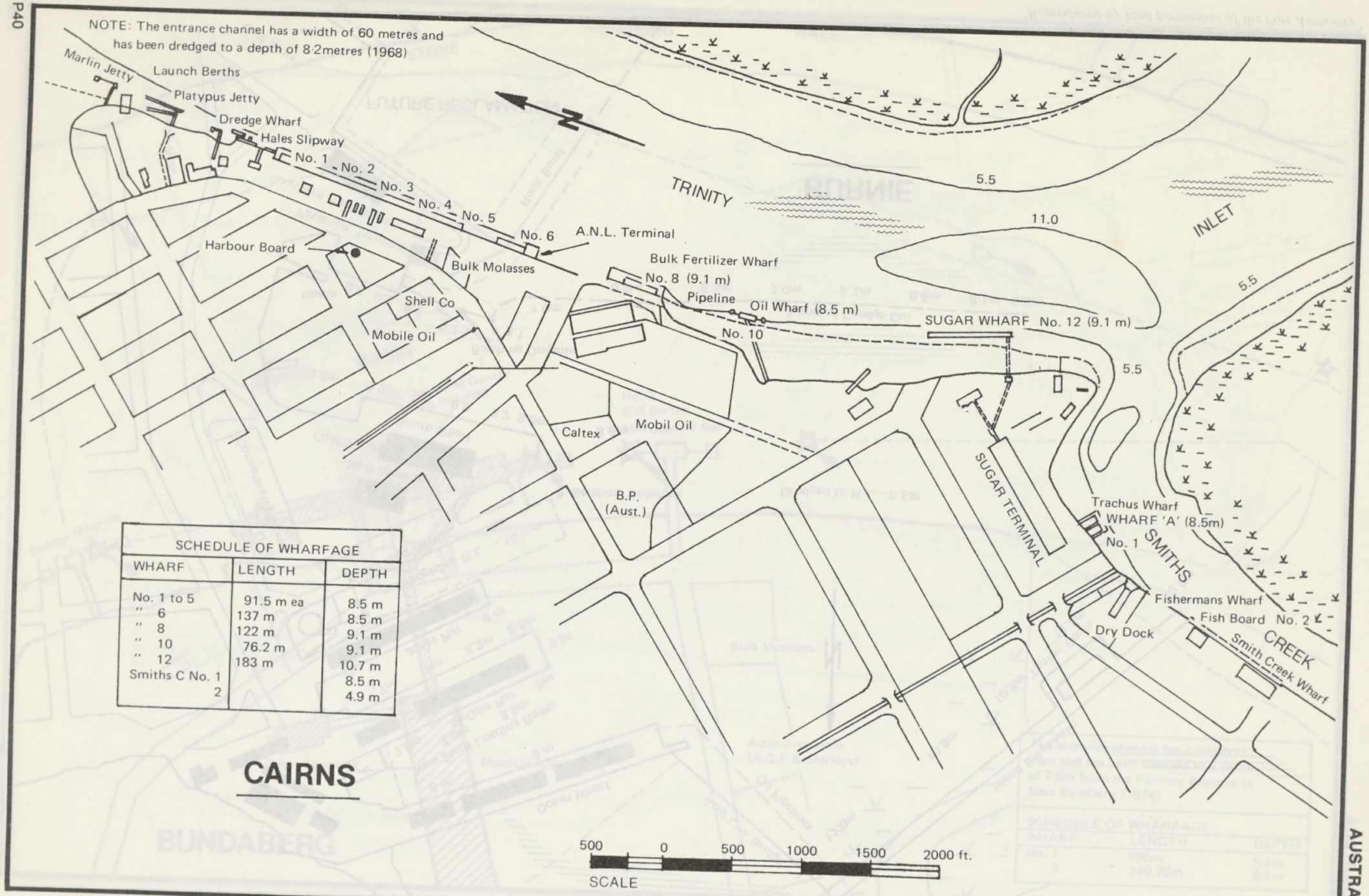
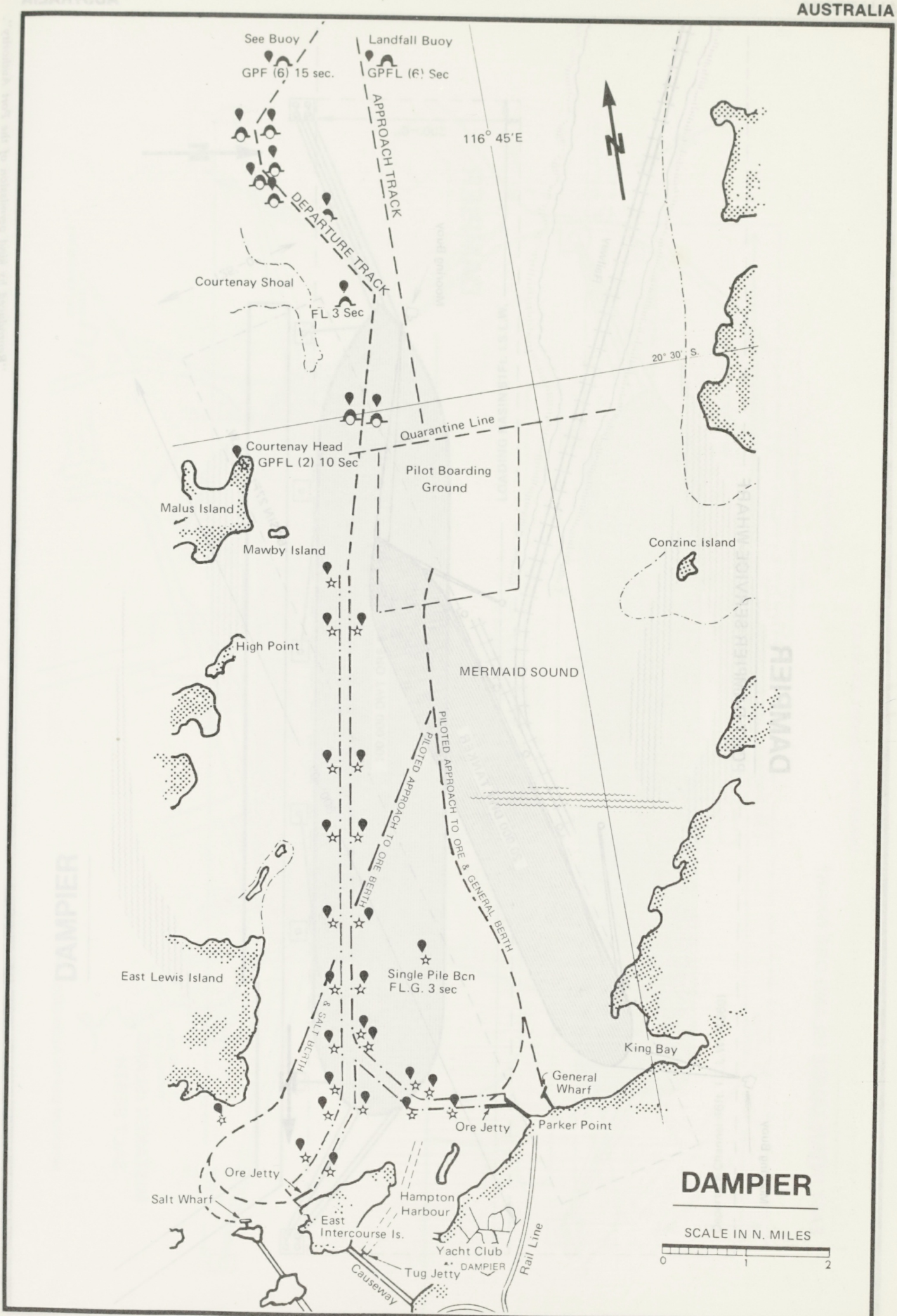


SCHEDULE OF WHARFAGE		
WHARF	LENGTH	DEPTH
No. 1 to 5	91.5 m ea	8.5 m
" 6	137 m	8.5 m
" 8	122 m	9.1 m
" 10	76.2 m	9.1 m
" 12	183 m	10.7 m
Smiths C No. 1		8.5 m
2		4.9 m

CAIRNS



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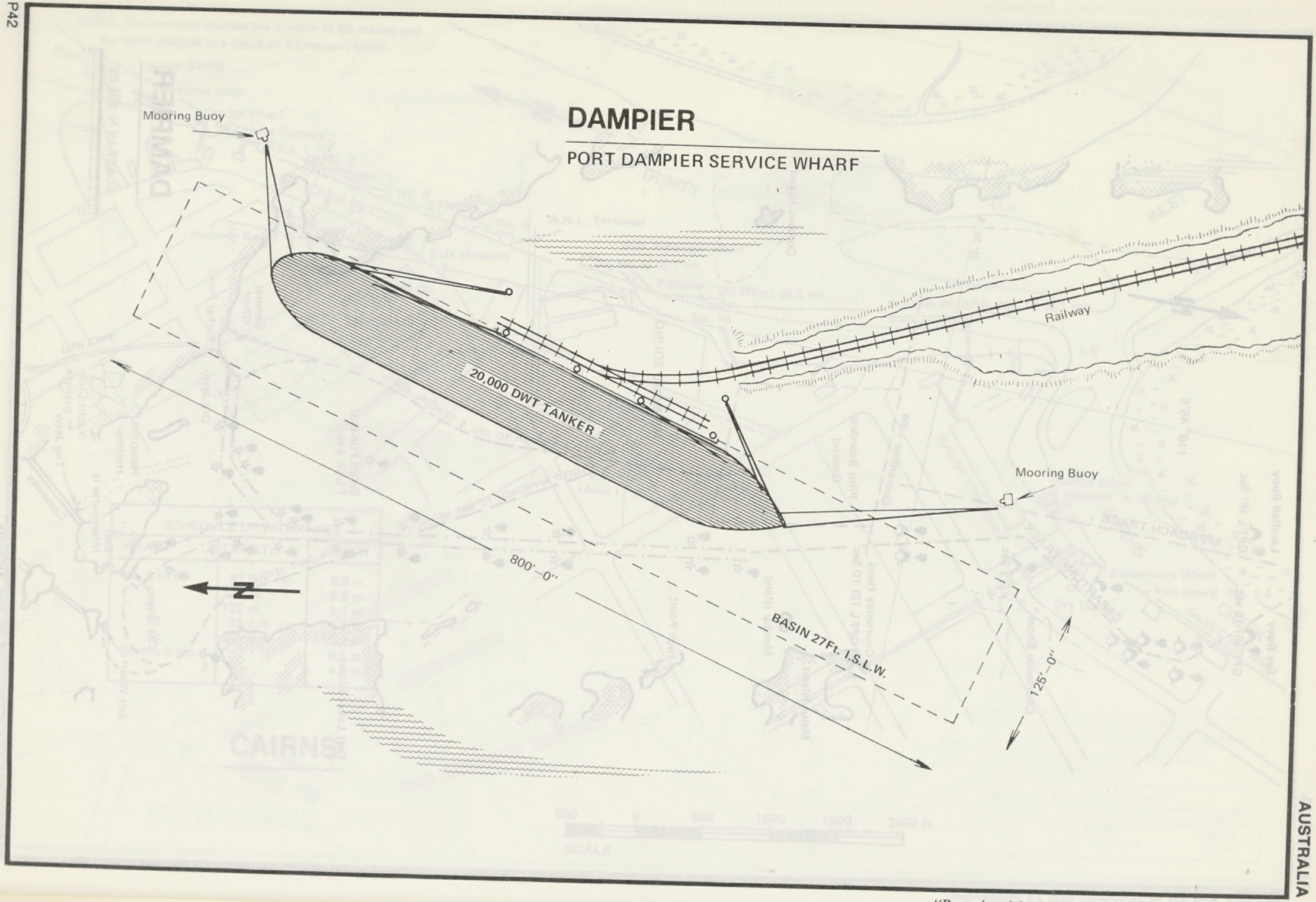
DAMPIER
PORT DAMPIER SERVICE WHARF
Mooring Buoy
Railway
20,000 DWT TANKER
Mooring Buoy
800'-0"
N
BASIN 27Ft. I.S.L.W.
125'-0"

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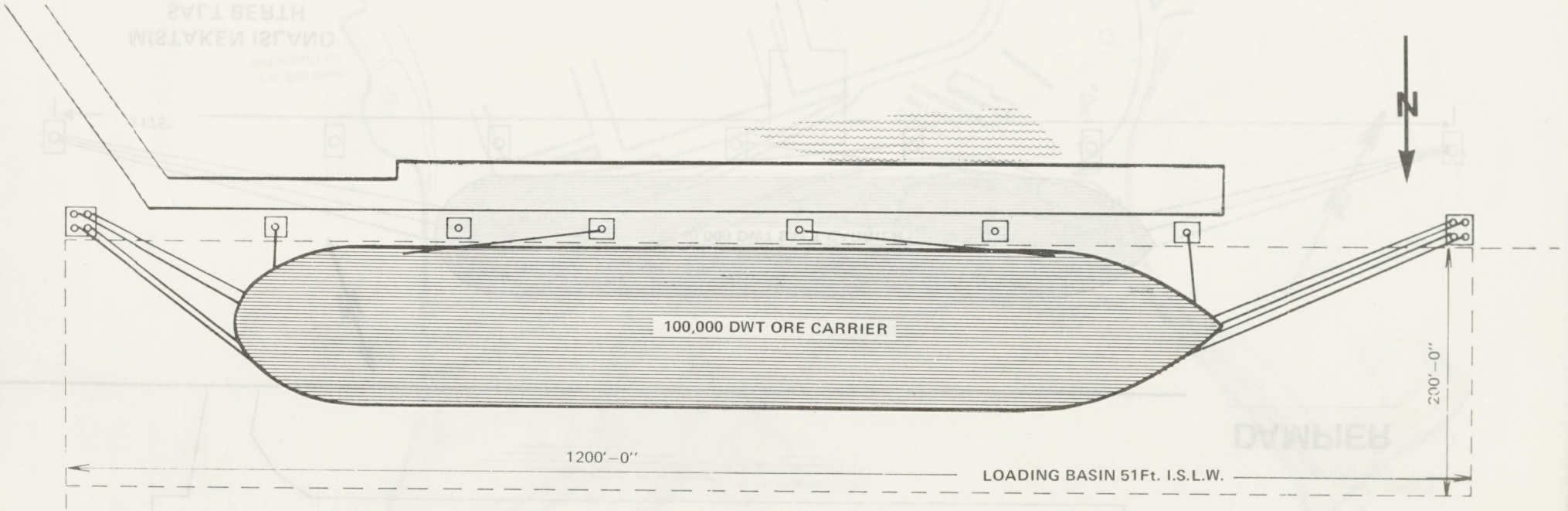
DAMPIER



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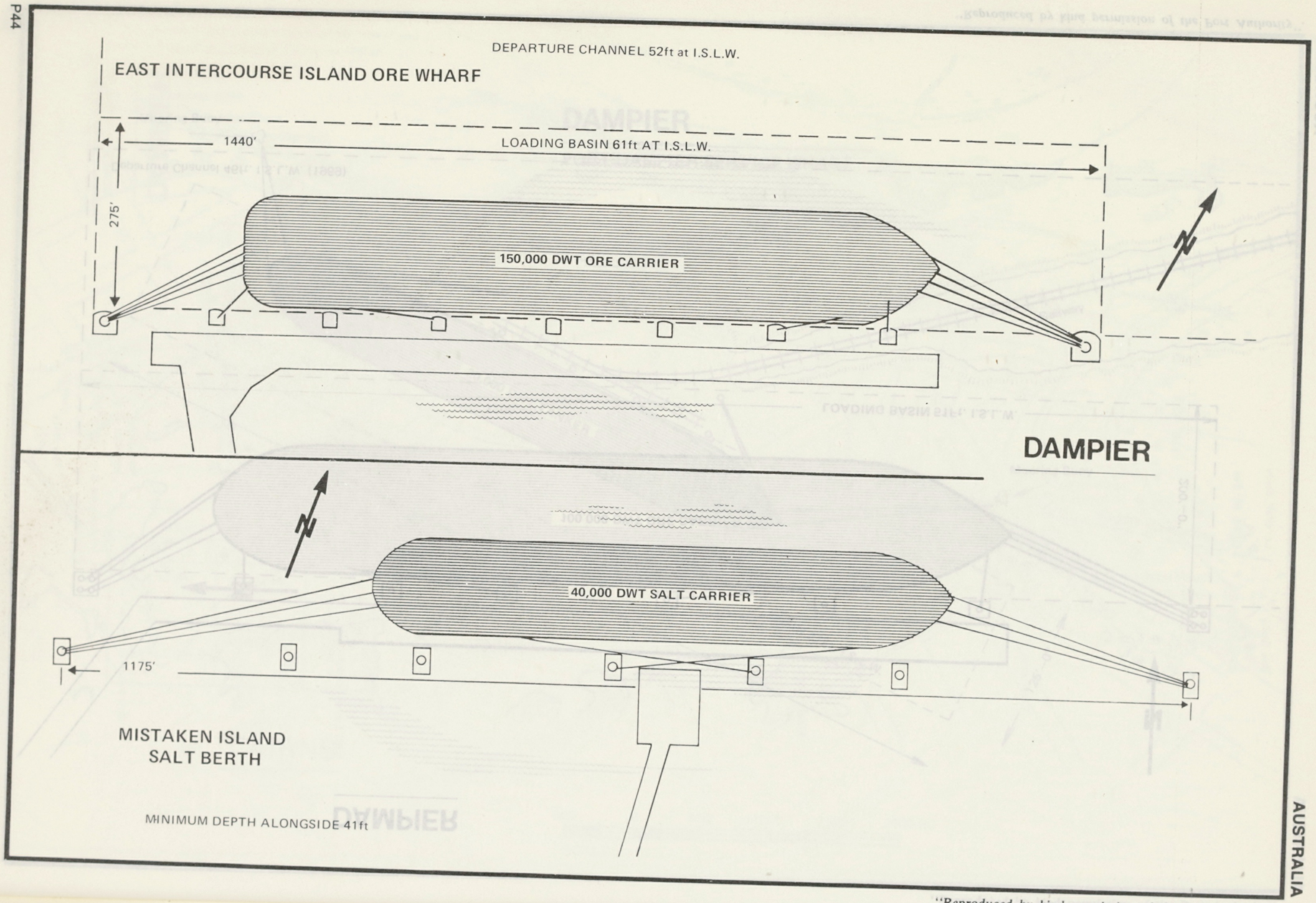

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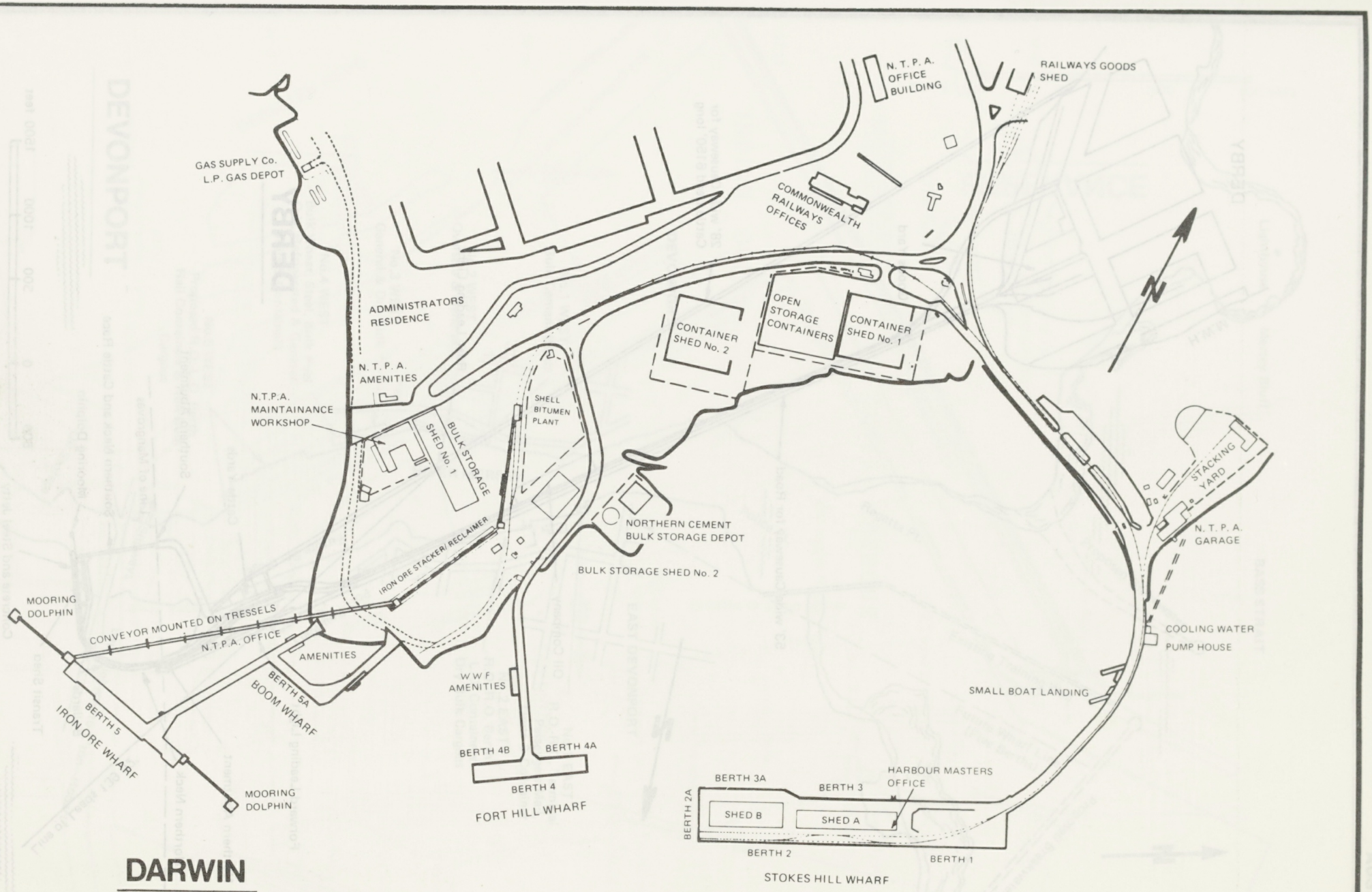

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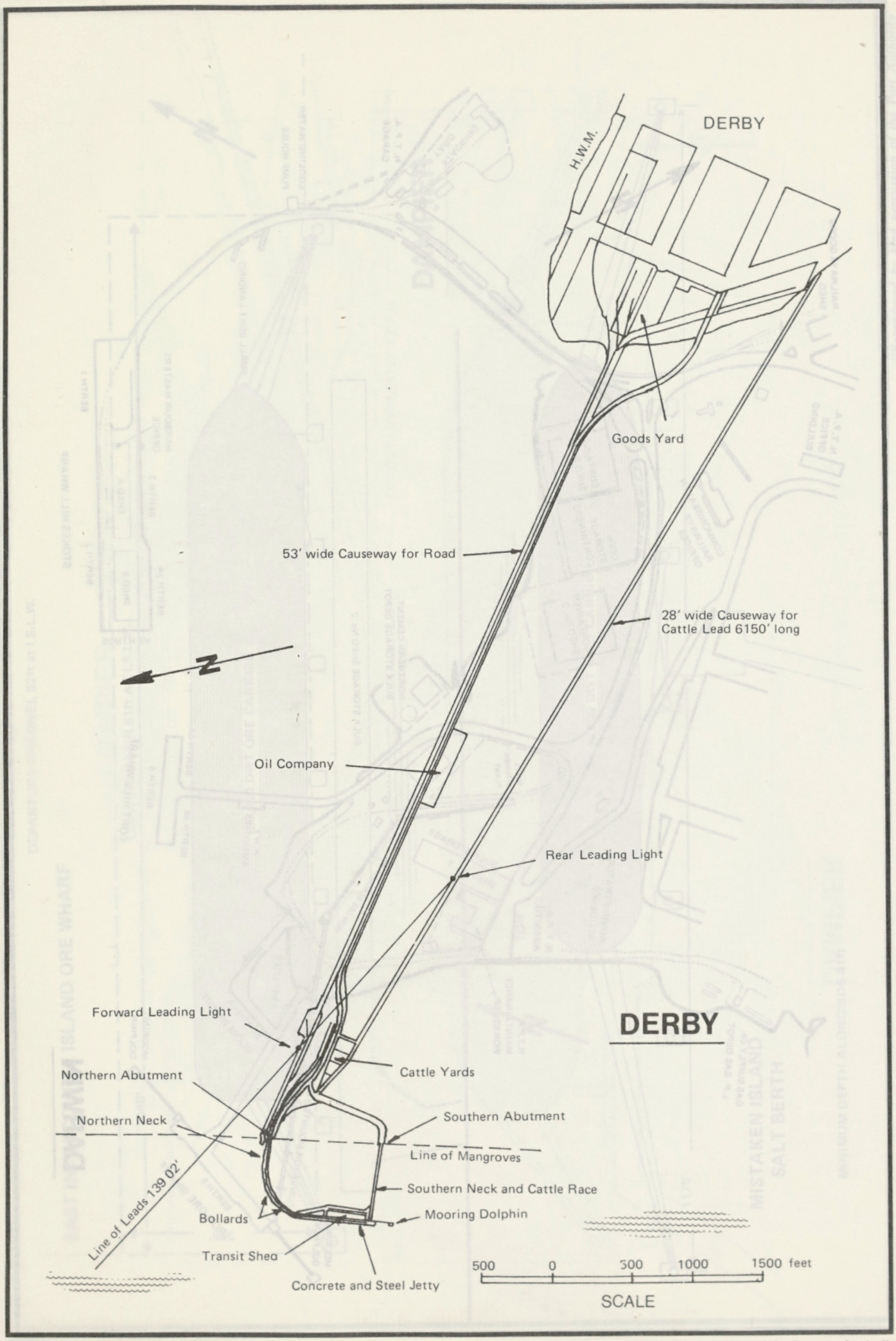

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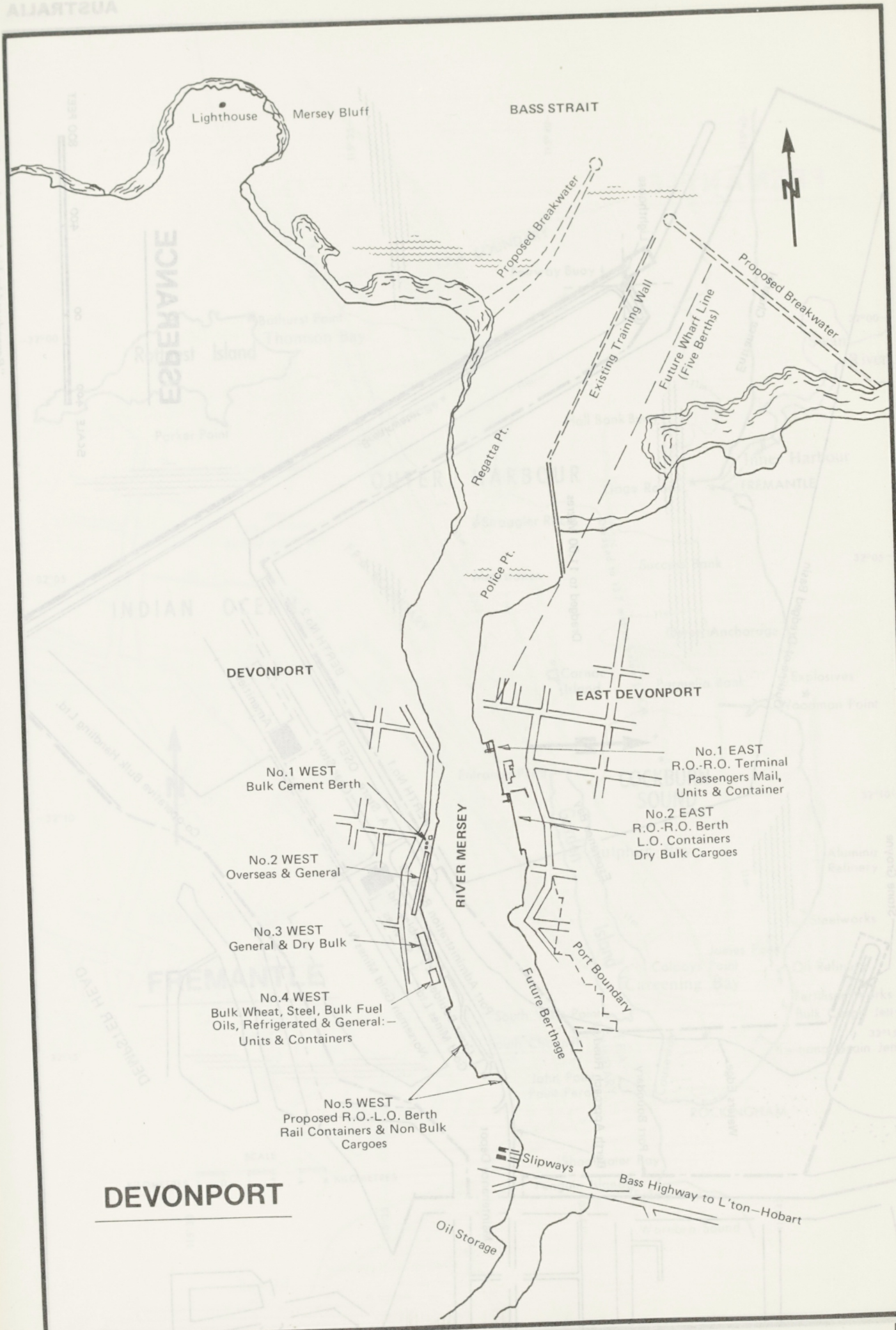

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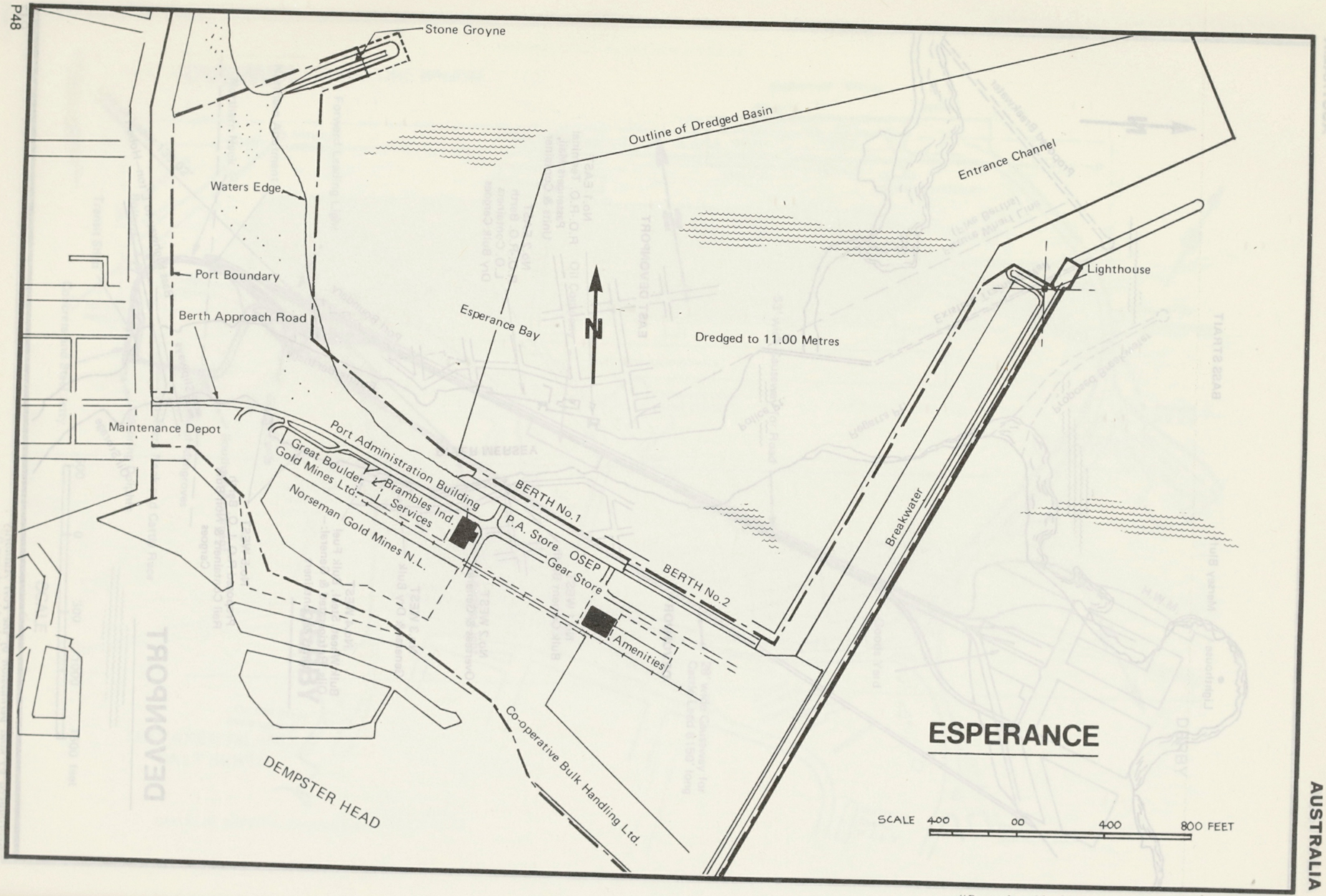

AUSTRALIA

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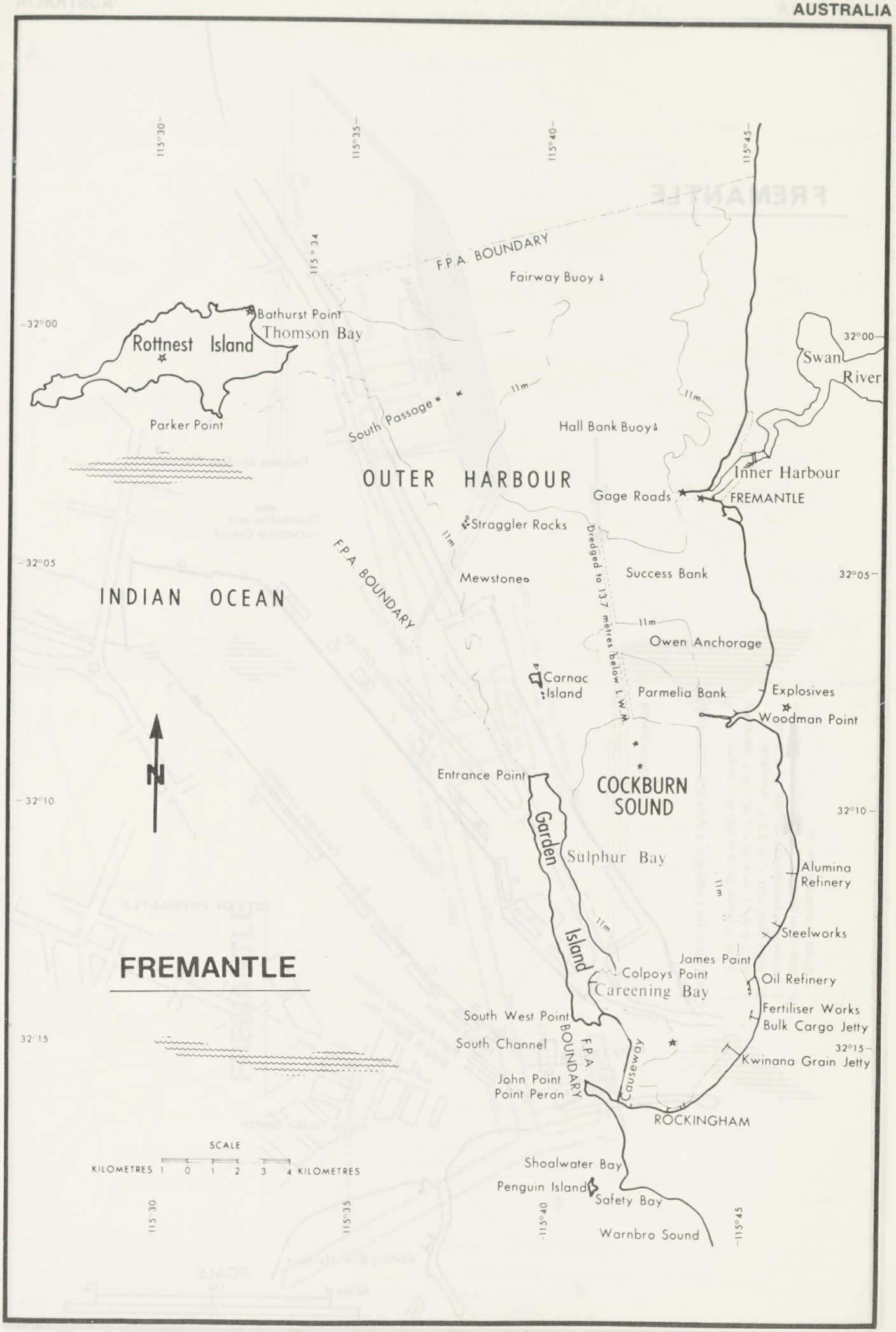

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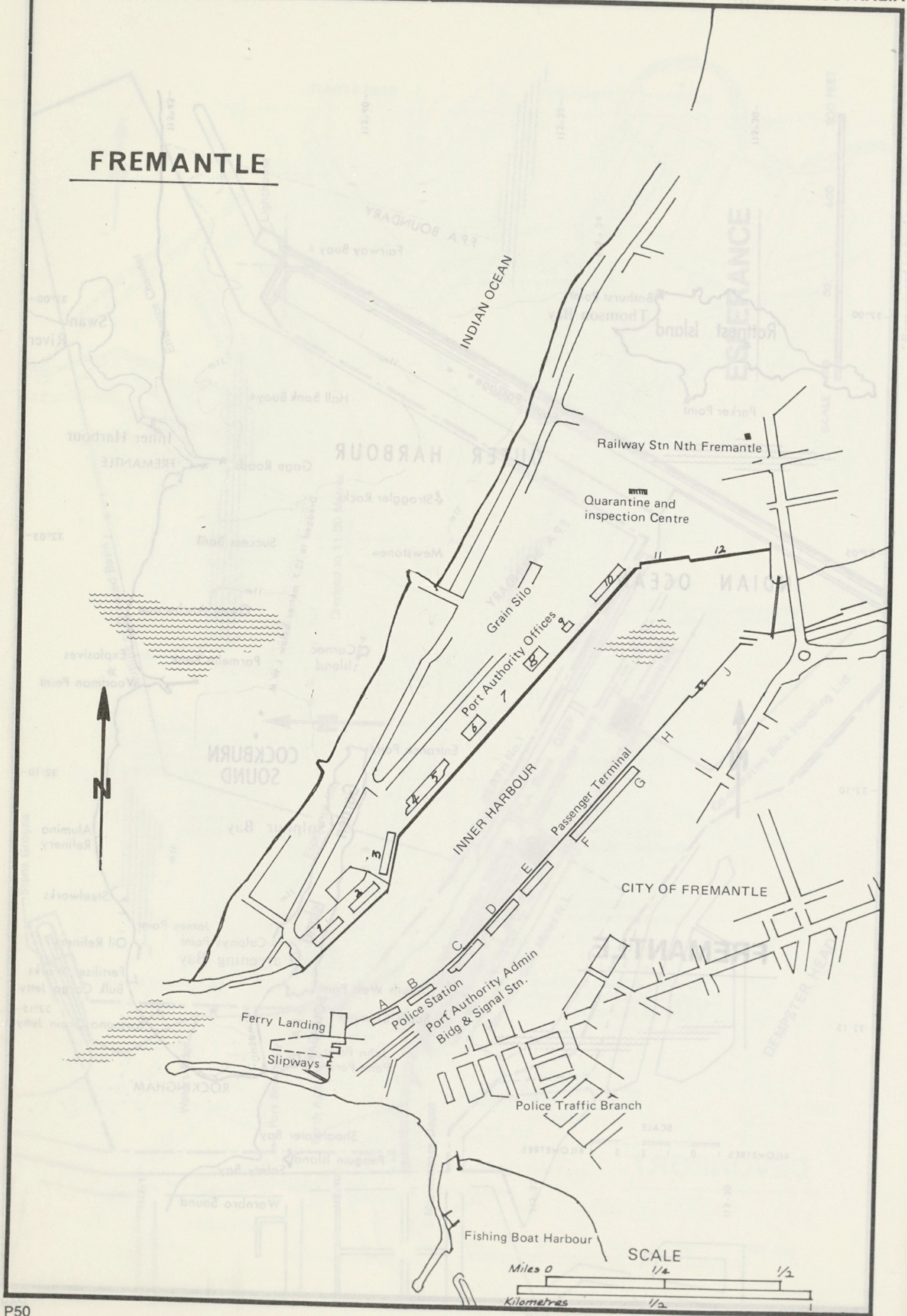

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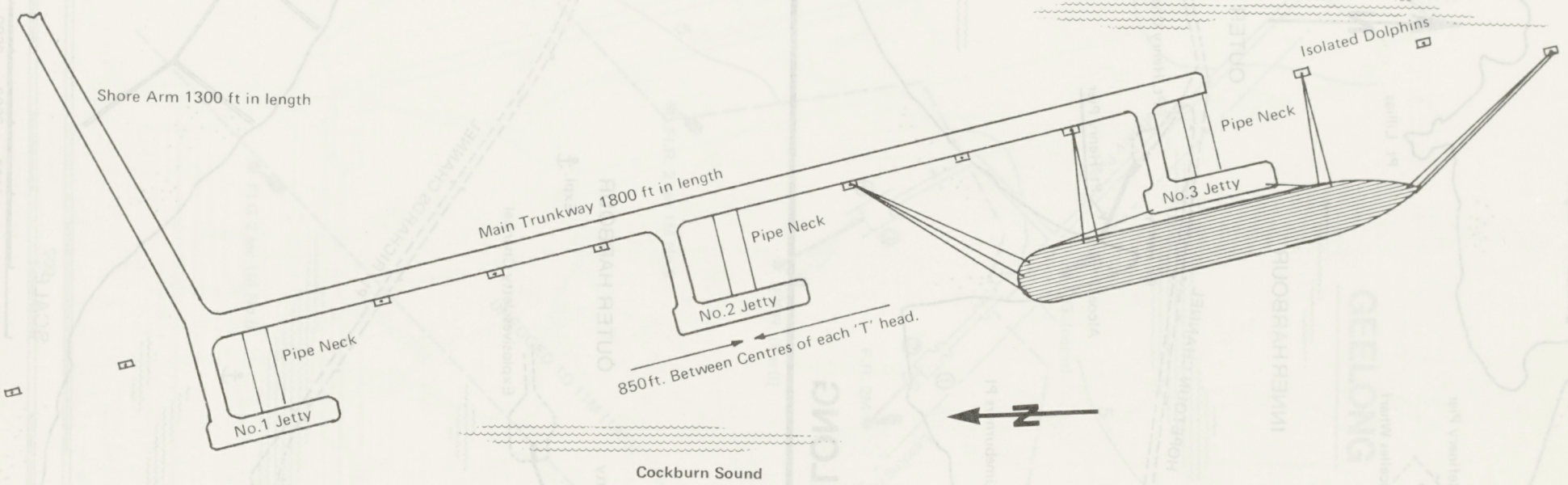
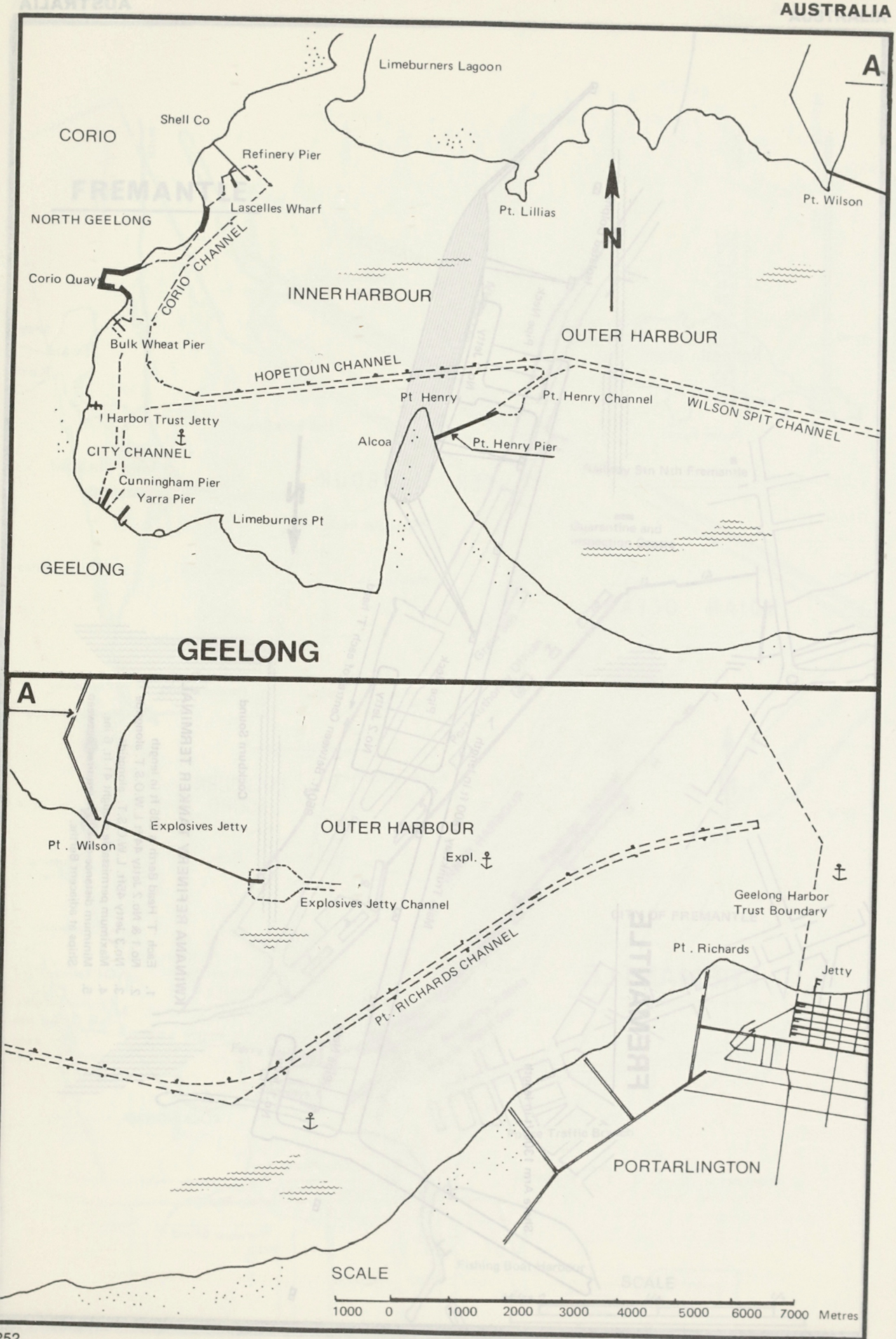
FREMANTLE



KWINANA REFINERY TANKER TERMINAL

1. Each 'T' Head Berth is 235 ft in length
2. No.1 & No.2 Jetty 44 ft L.W.O.S.T. alongside
3. No.3 Jetty 45ft. L.W.O.S.T. alongside
4. Maximum permissable draught 41 ft. 6 ins.
5. Minimum distance of 100 ft required between Ships at adjacent Berths.



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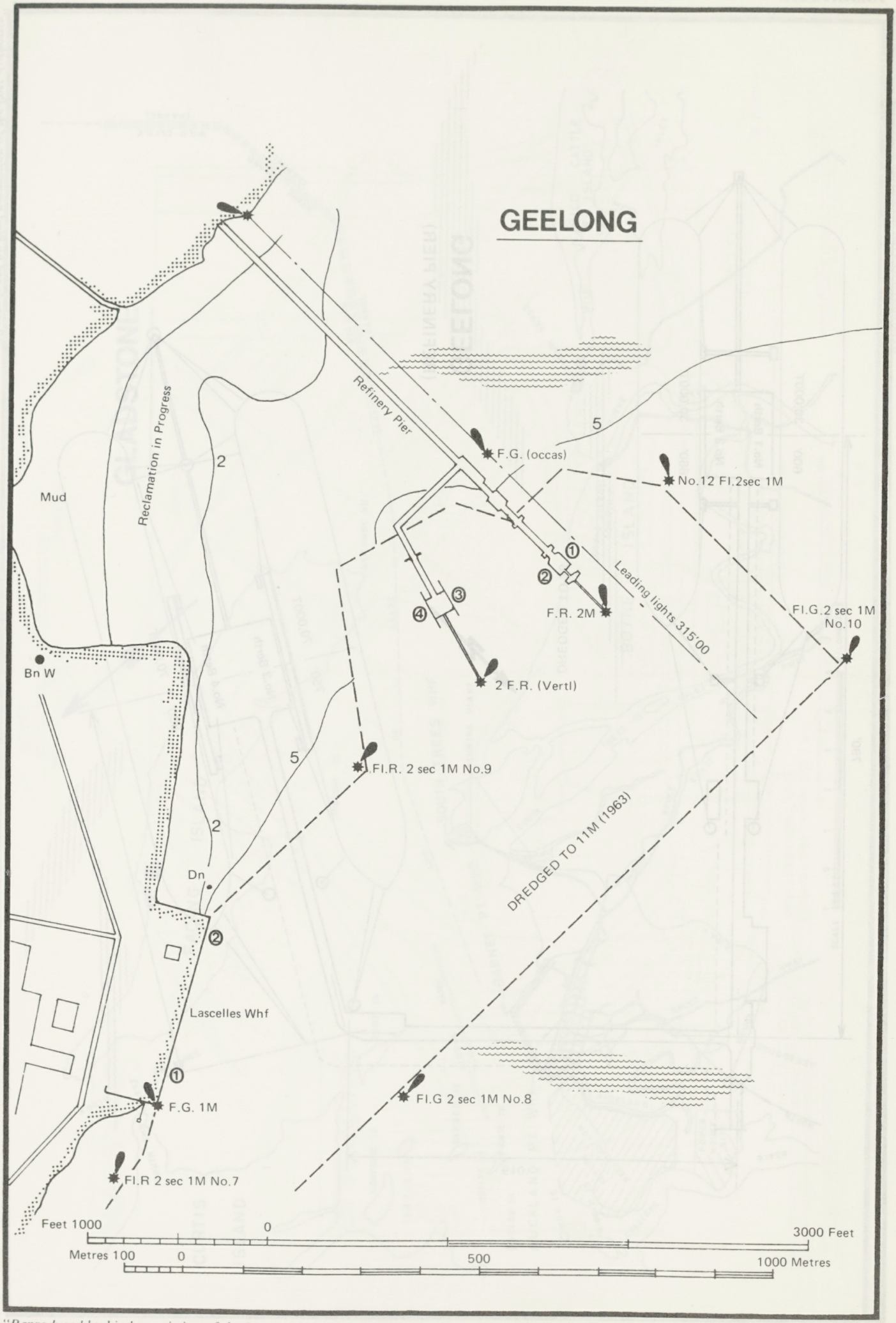

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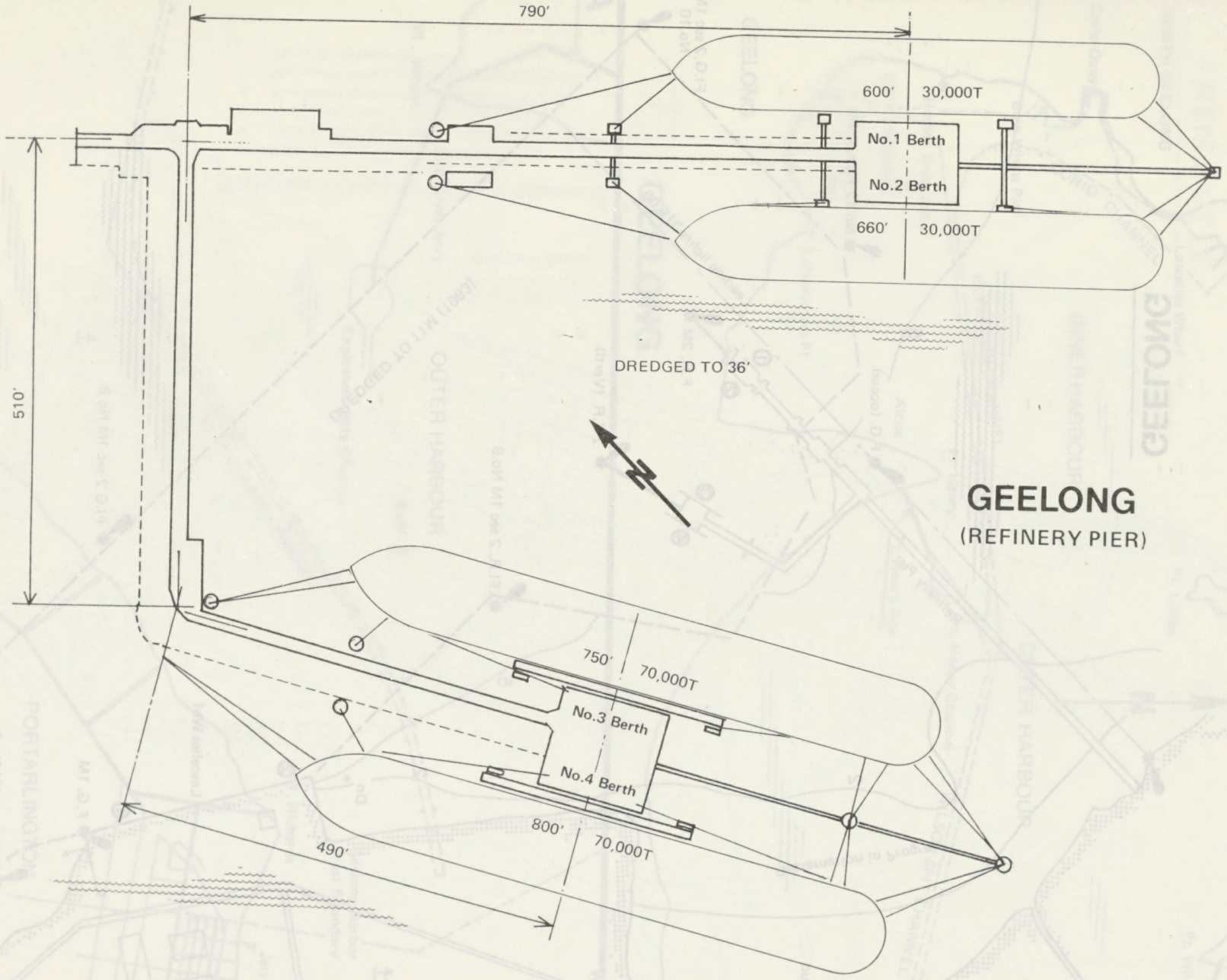

GEELONG
(REFINERY PIER)

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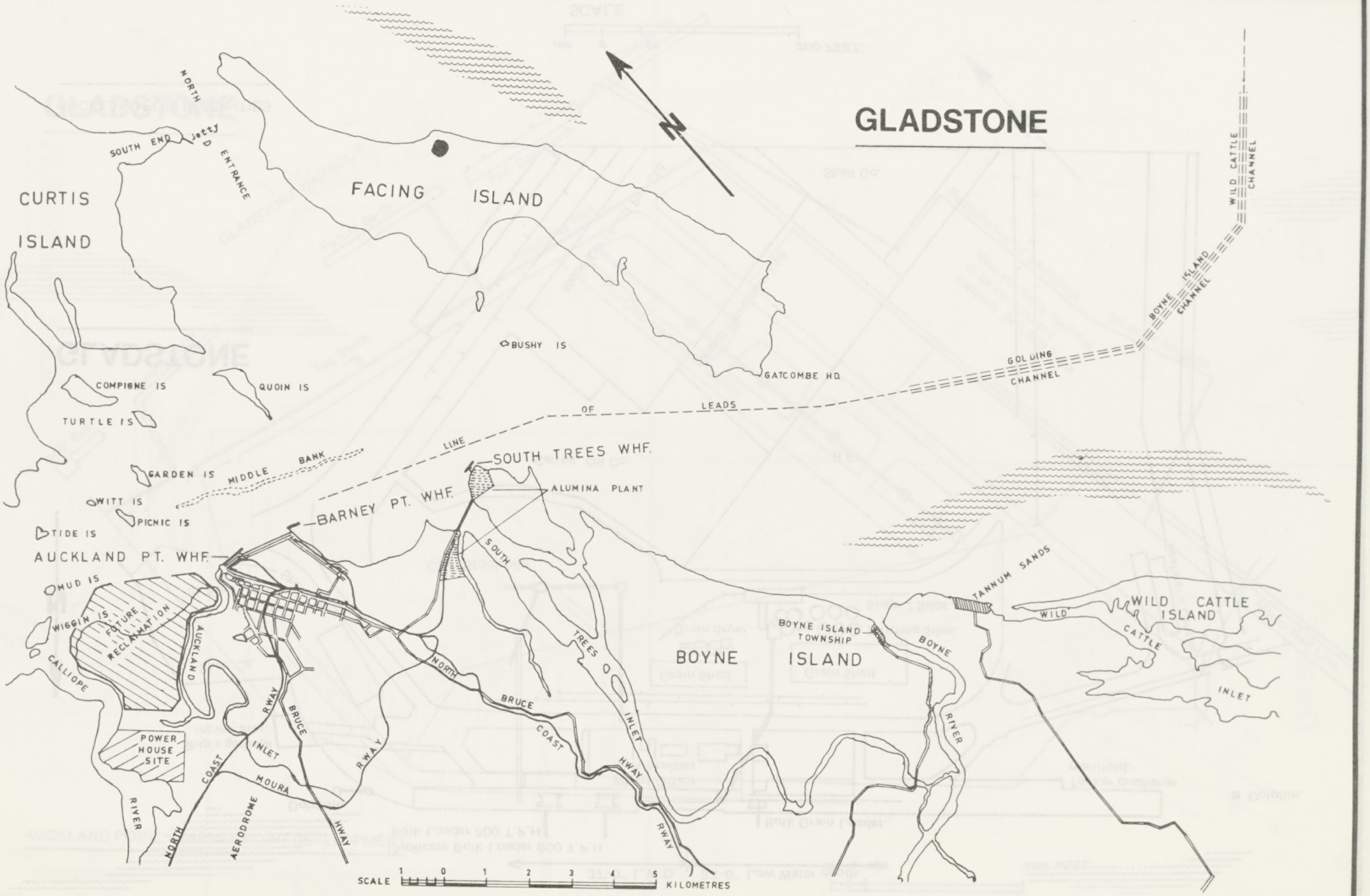

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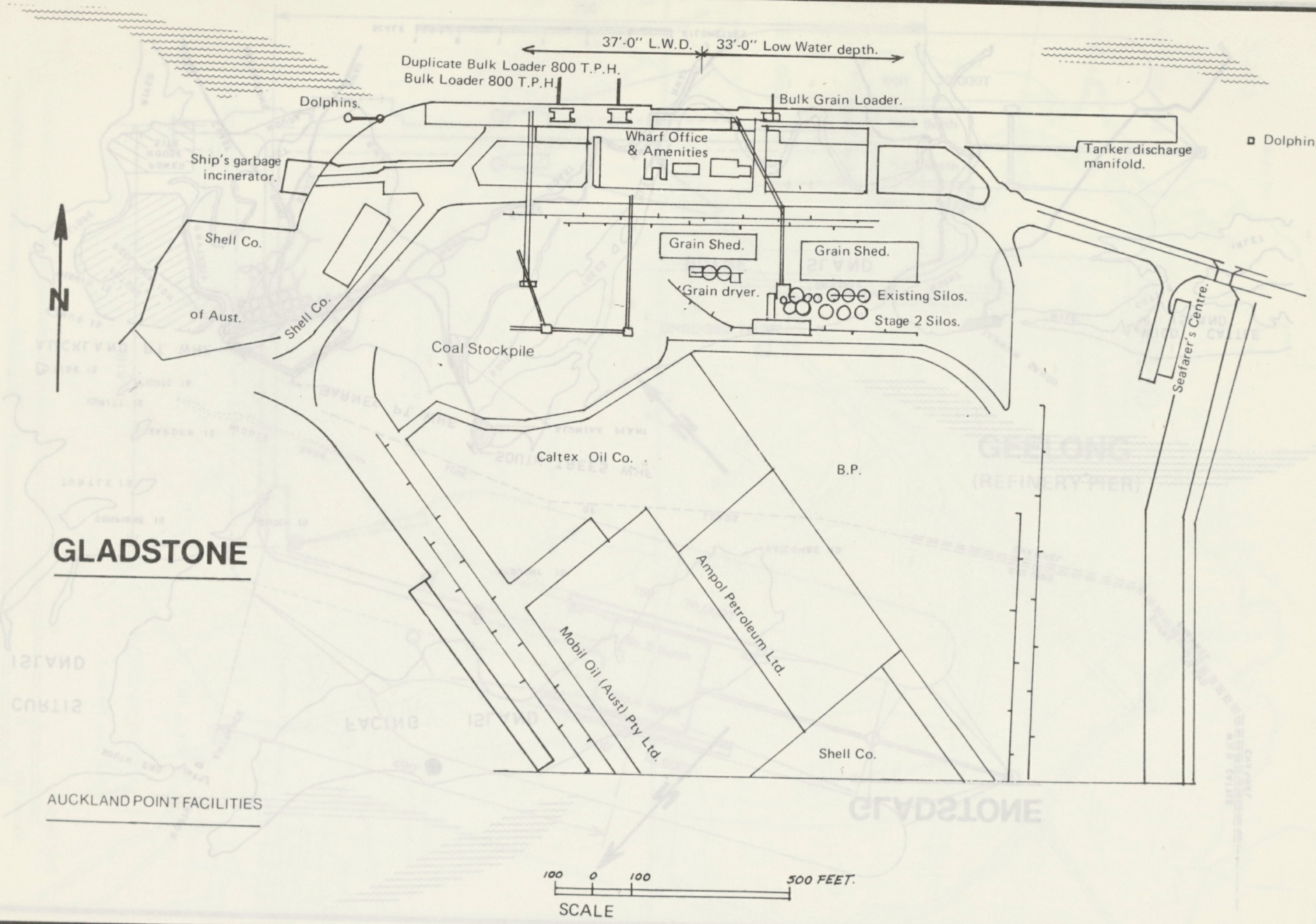

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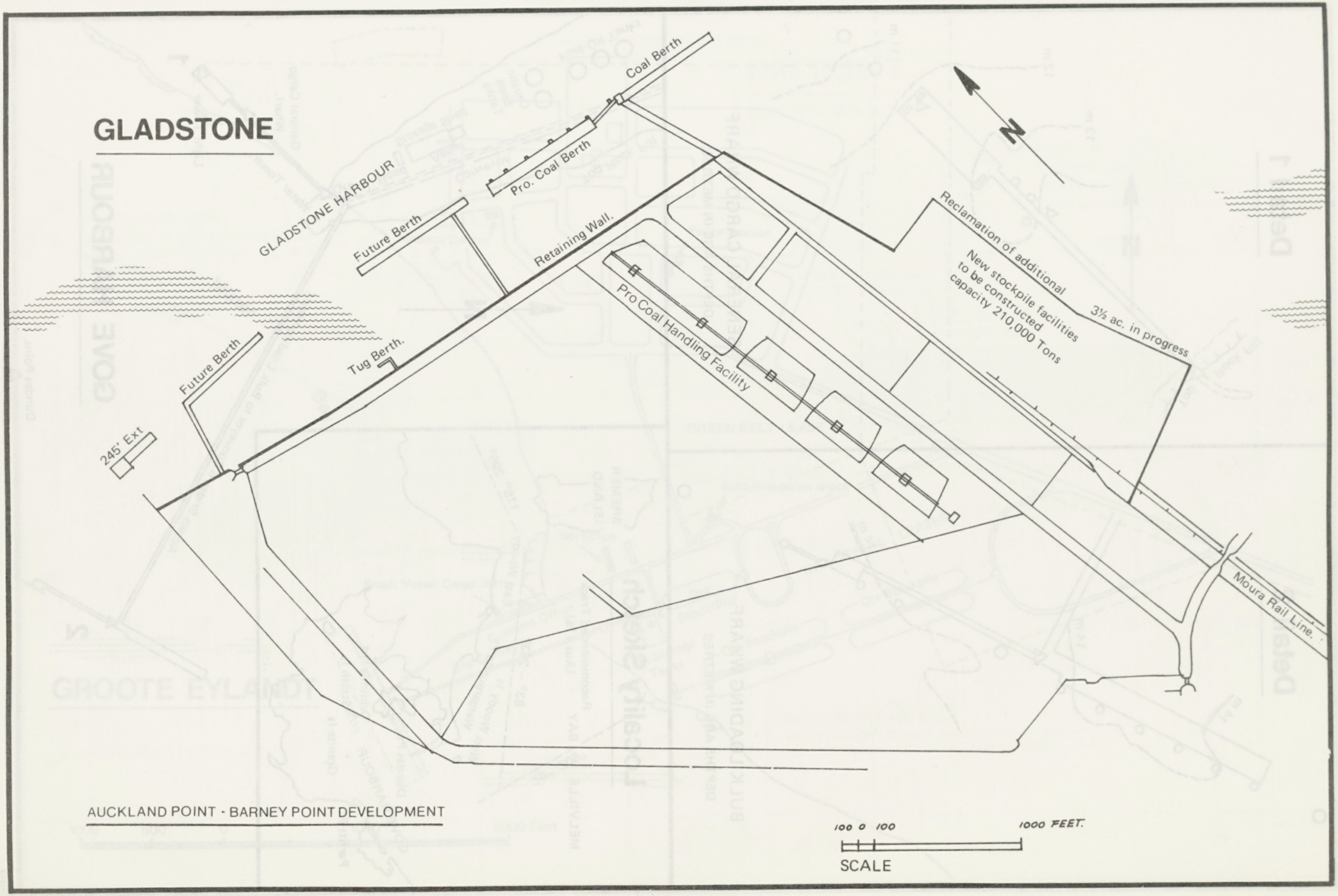

AUCKLAND POINT - BARNEY POINT DEVELOPMENT

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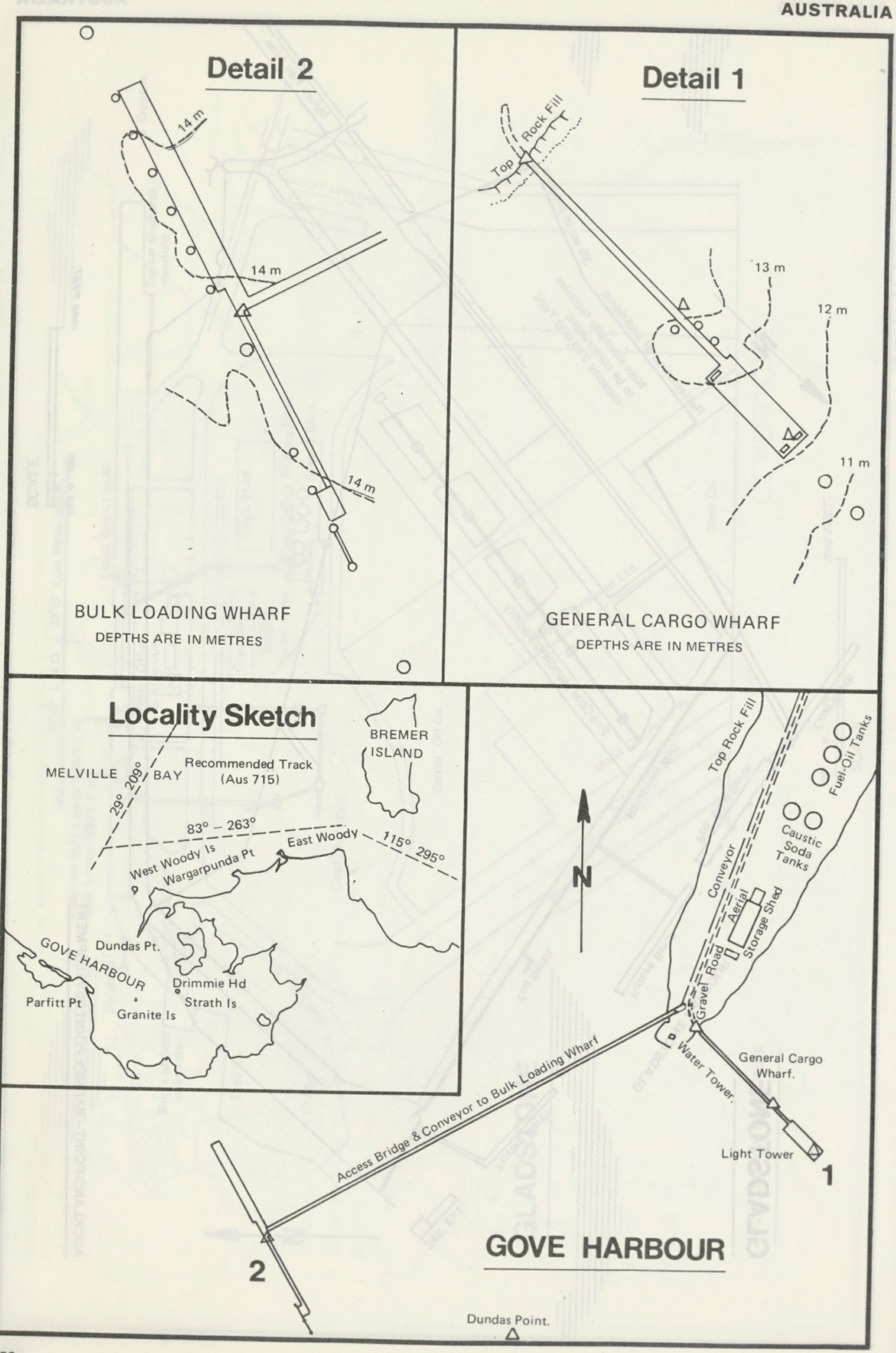

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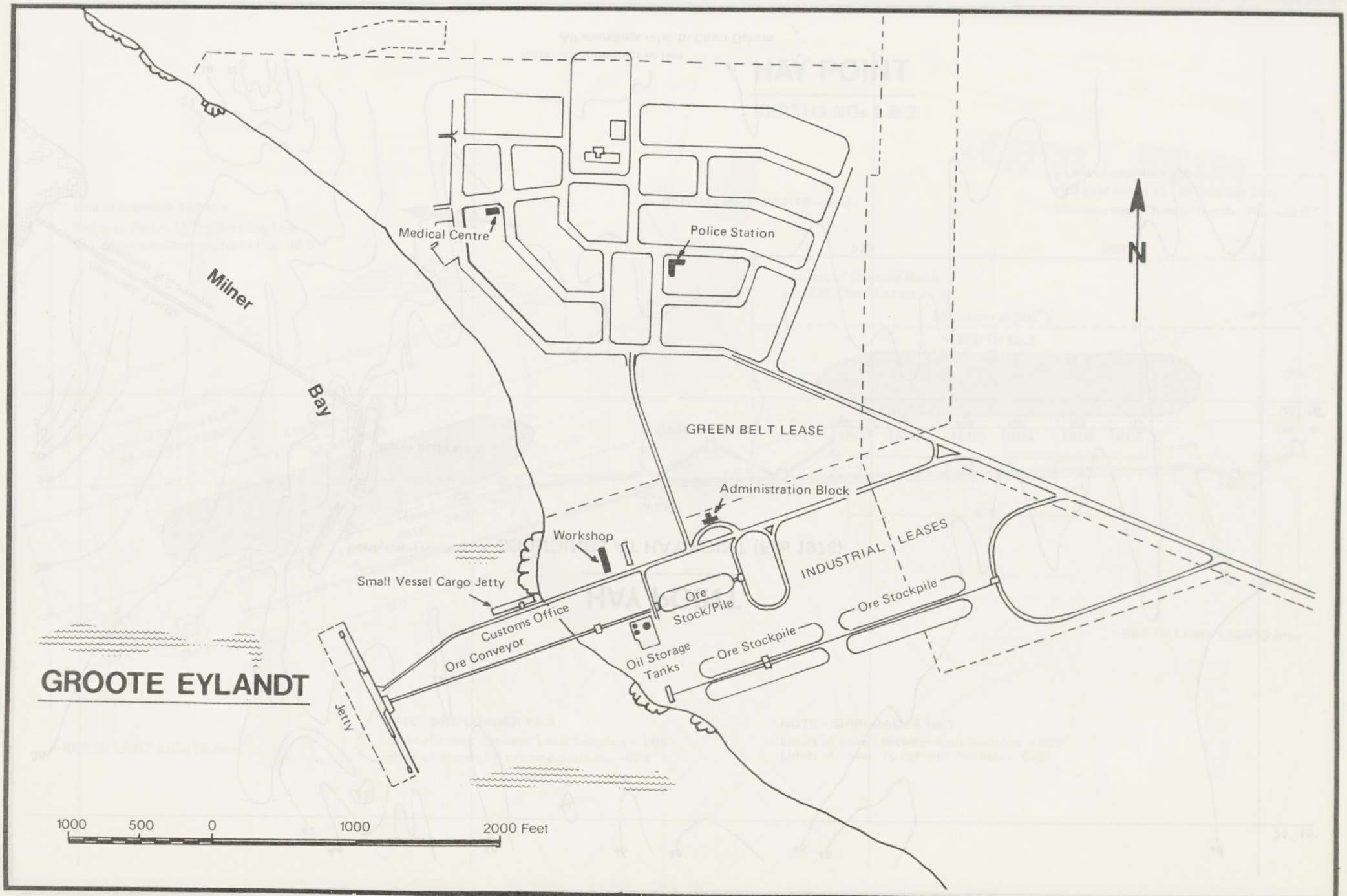

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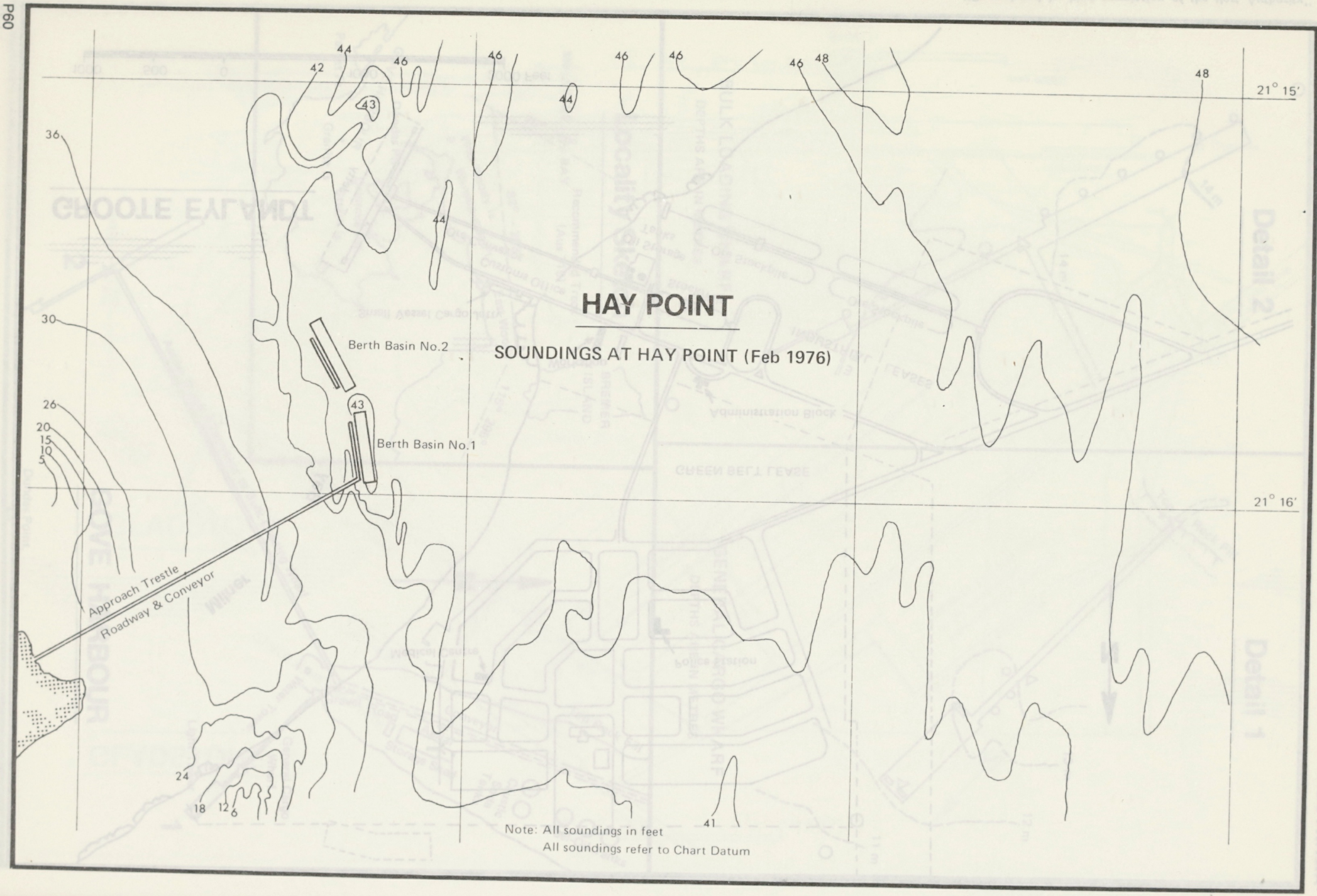

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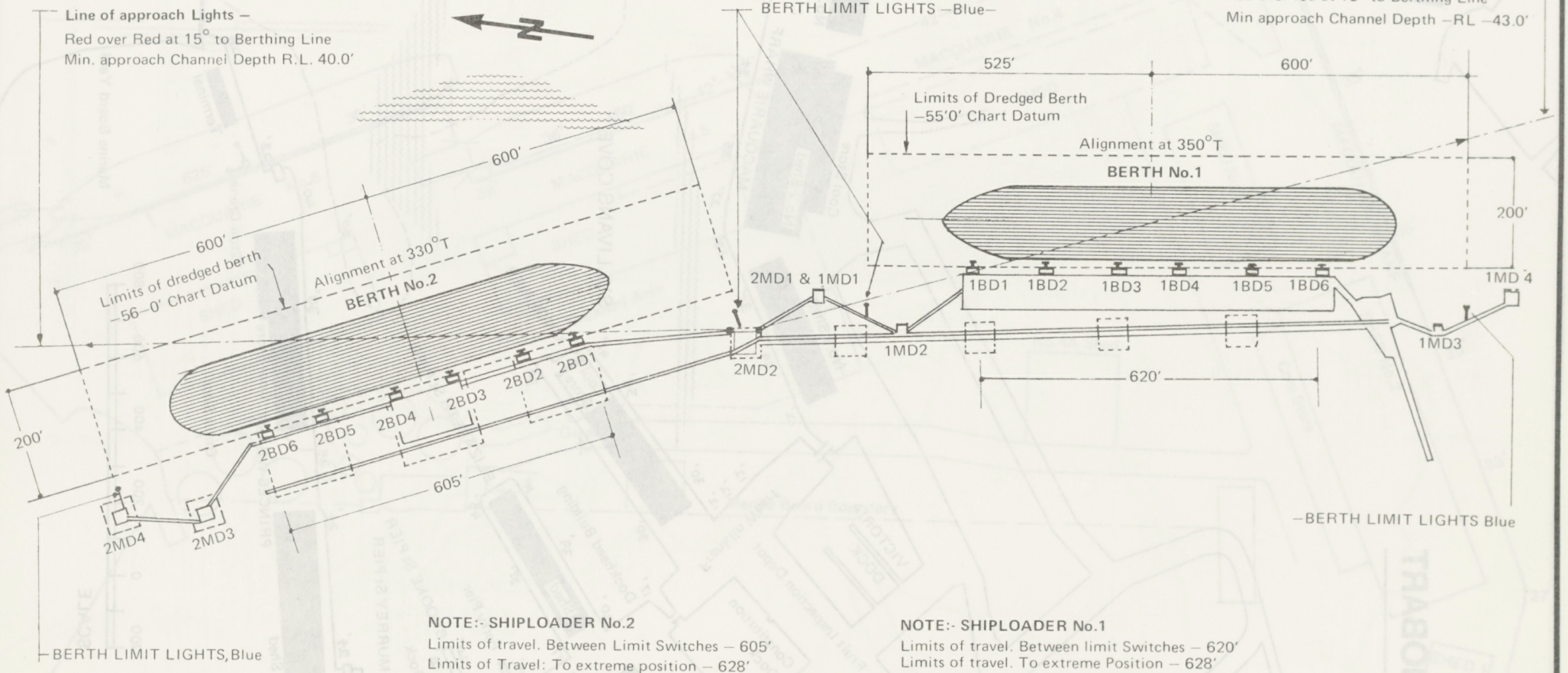
HAY POINT

BERTHS NOs 1 & 2



NOTE:- SHIPLOADER No.2
Limits of travel. Between Limit Switches – 605'
Limits of Travel: To extreme position – 628'

NOTE:- SHIPLOADER No.1
Limits of travel. Between limit Switches – 620'
Limits of travel. To extreme Position – 628'

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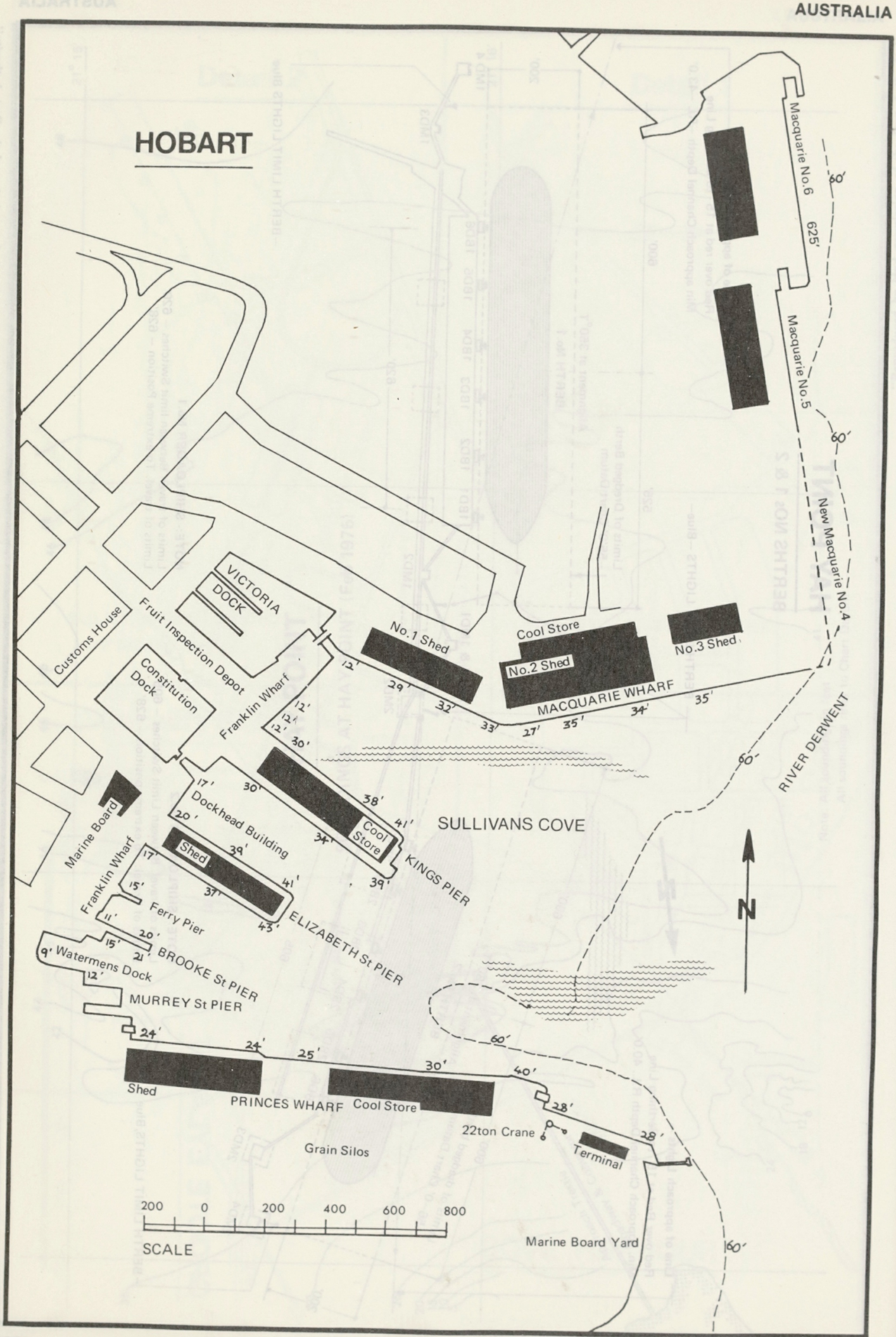

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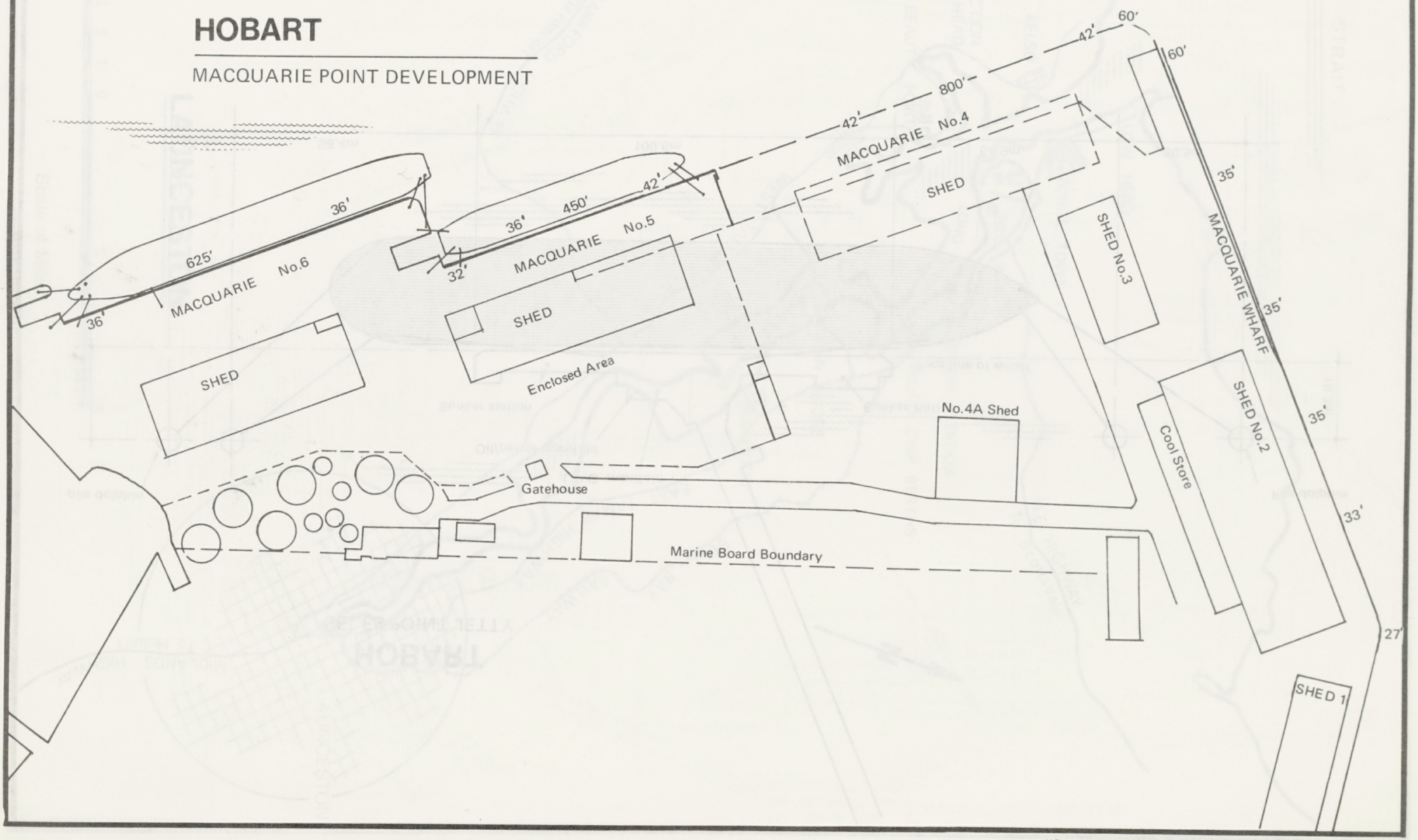
HOBART

MACQUARIE POINT DEVELOPMENT



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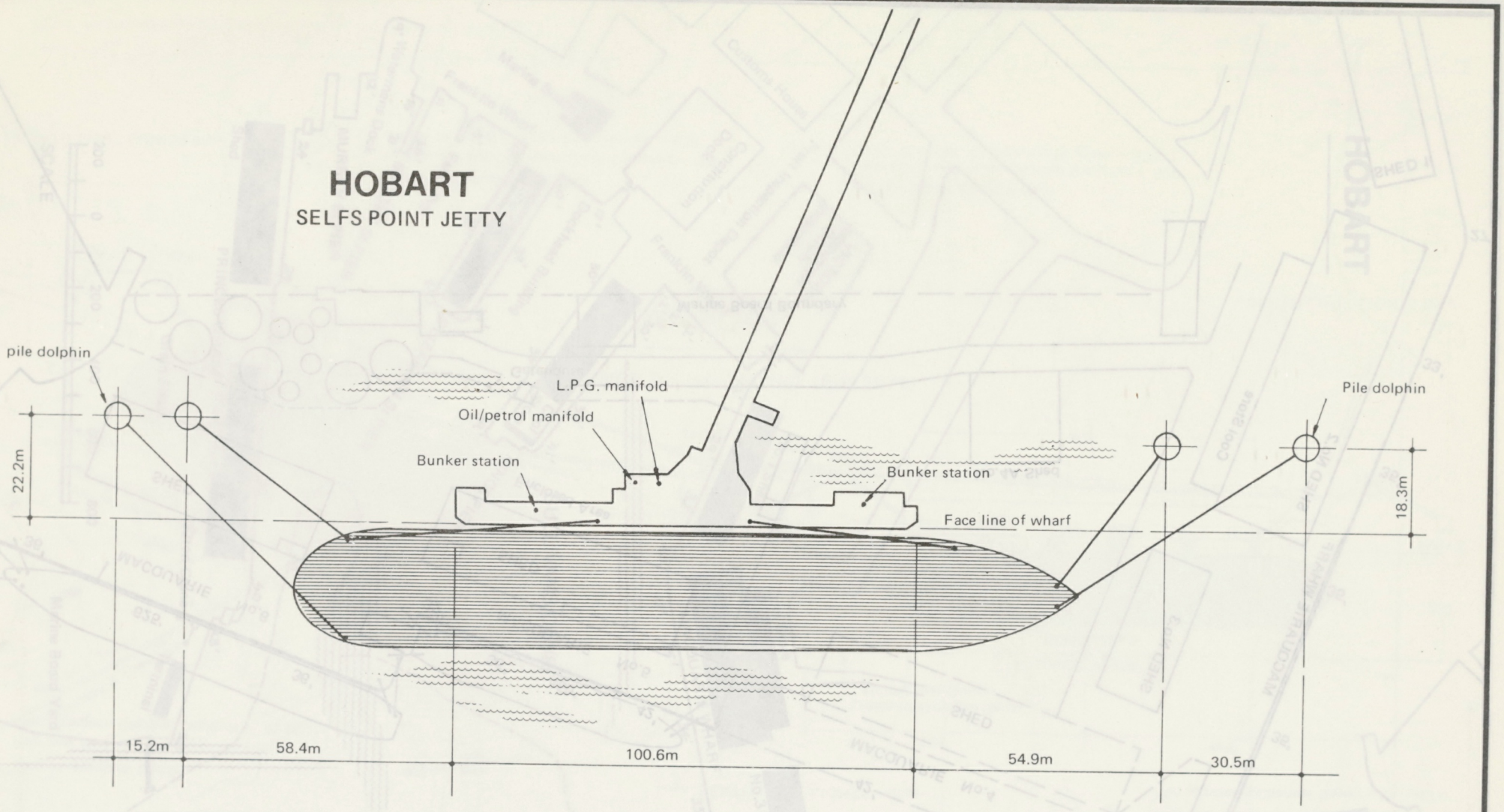
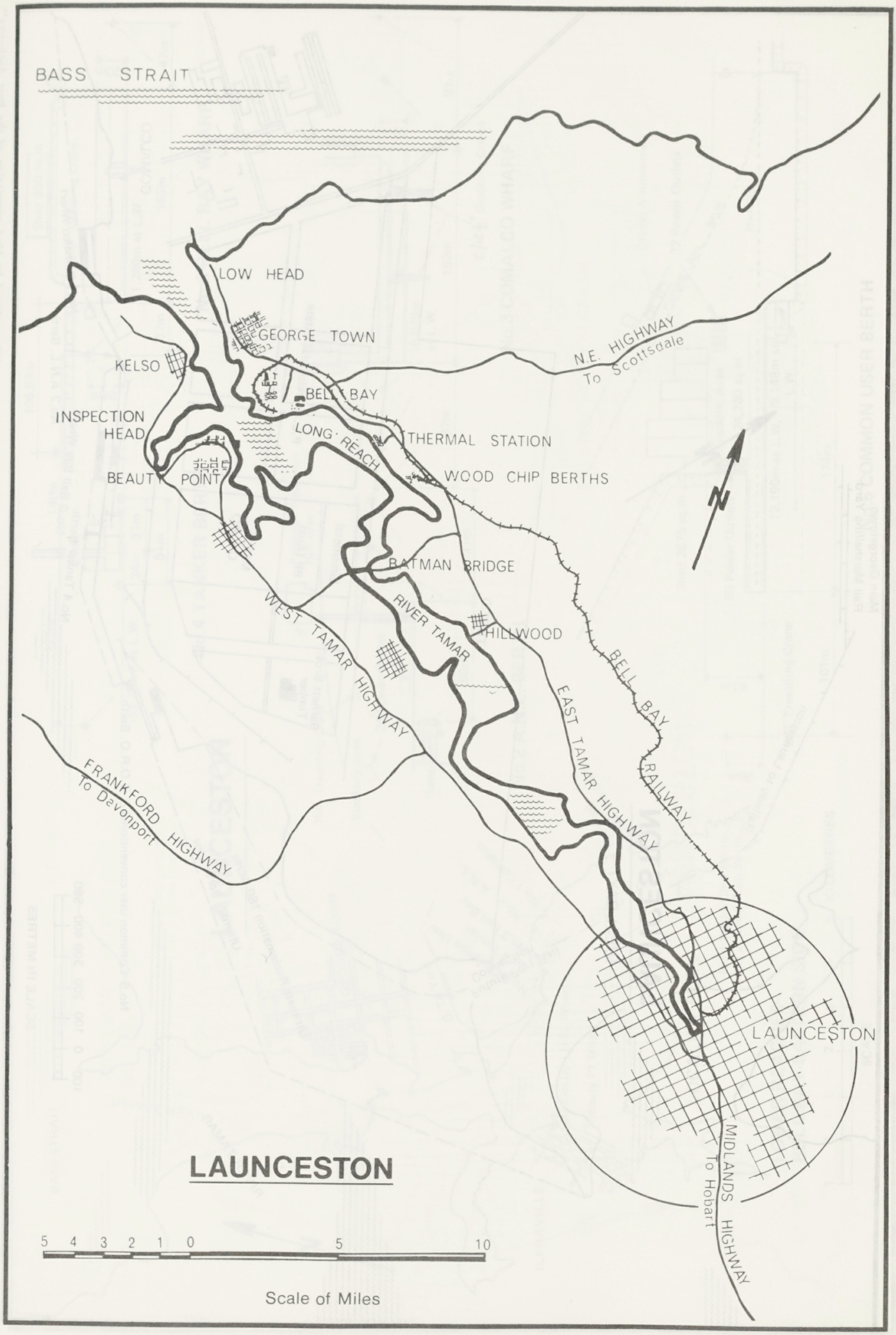
HOBART

SELFS POINT JETTY





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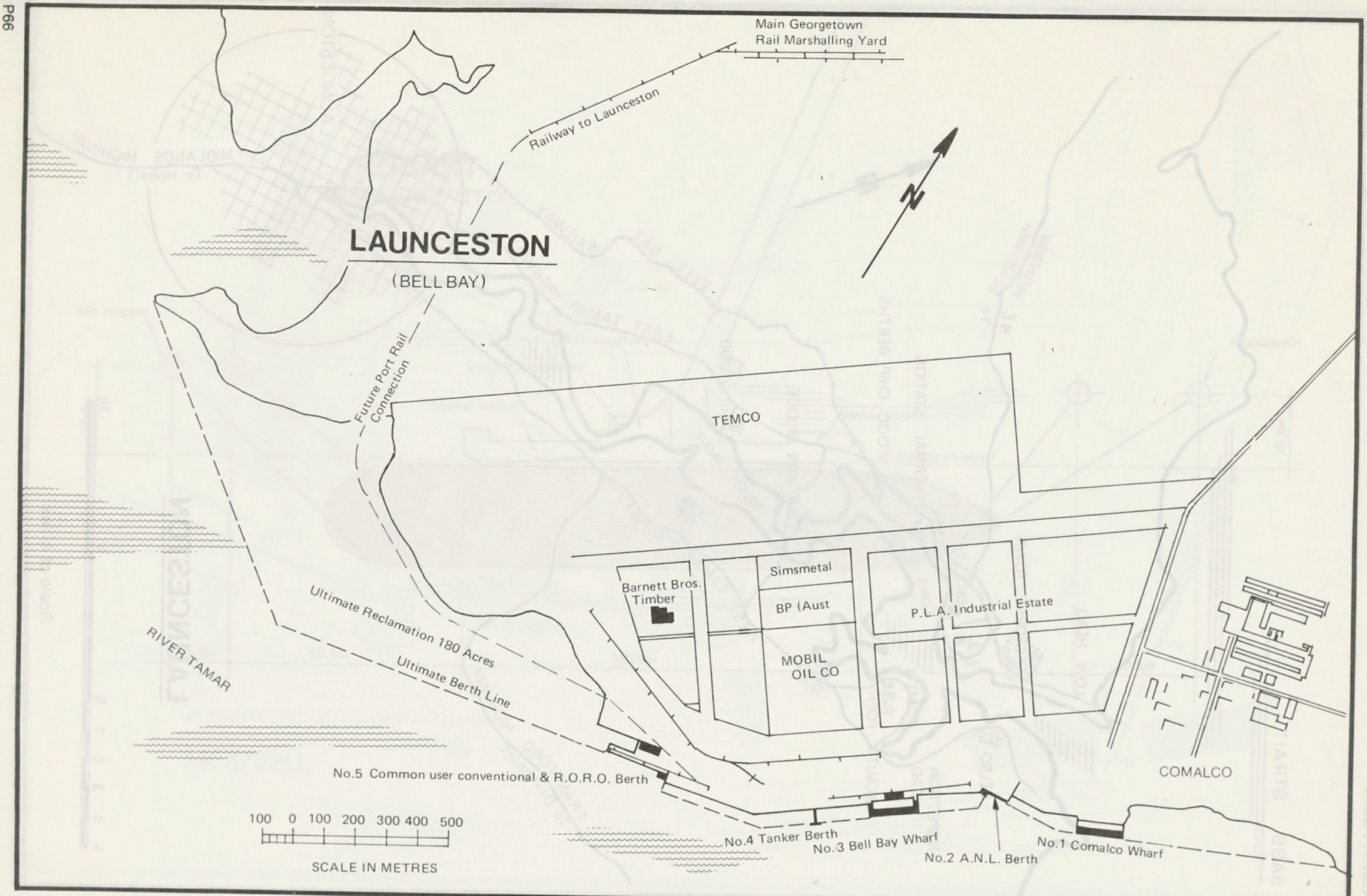
Main Georgetown
Rail Marshalling Yard
Railway to Launceston
LAUNCESTON
(BELL BAY)
Future Port Rail
Connection
TEMCO
Barnett Bros.
Timber
Simsmetal
BP (Aust
MOBIL
OIL CO
P.L.A. Industrial Estate
COMALCO
Ultimate Reclamation 180 Acres
Ultimate Berth Line
RIVER TAMAR
No.5 Common user conventional & R.O.R.O. Berth
No.4 Tanker Berth
No.3 Bell Bay Wharf
No.2 A.N.L. Berth
No.1 Comalco Wharf
100 0 100 200 300 400 500
SCALE IN METRES

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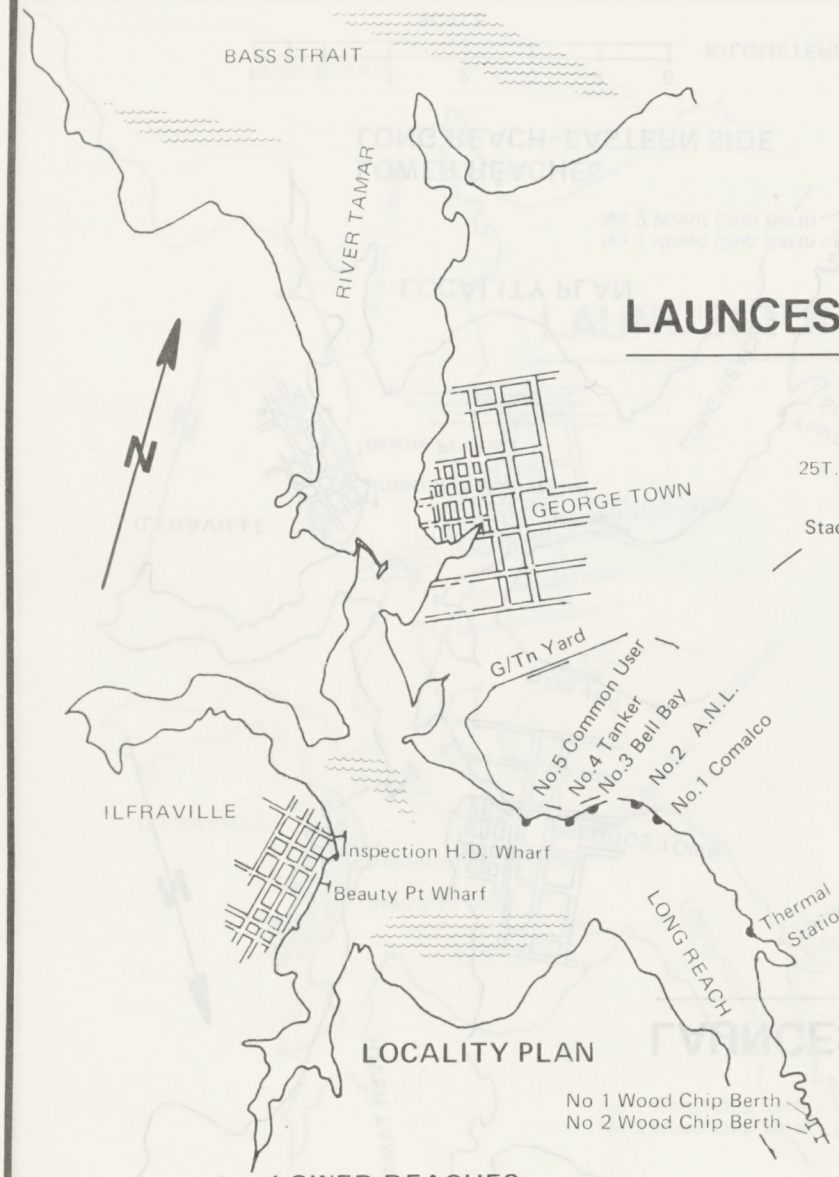
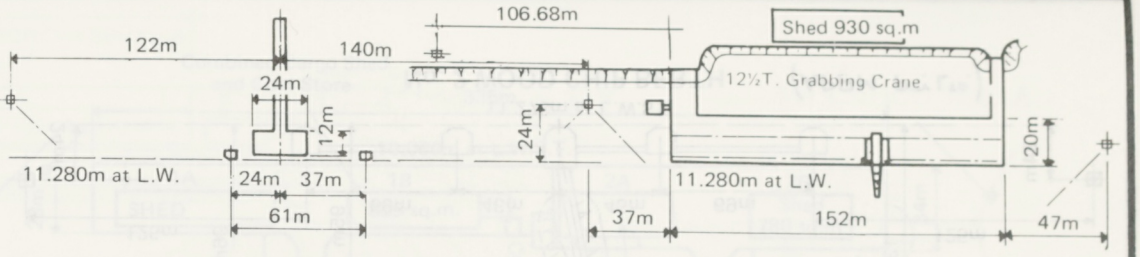
LAUNCESTON



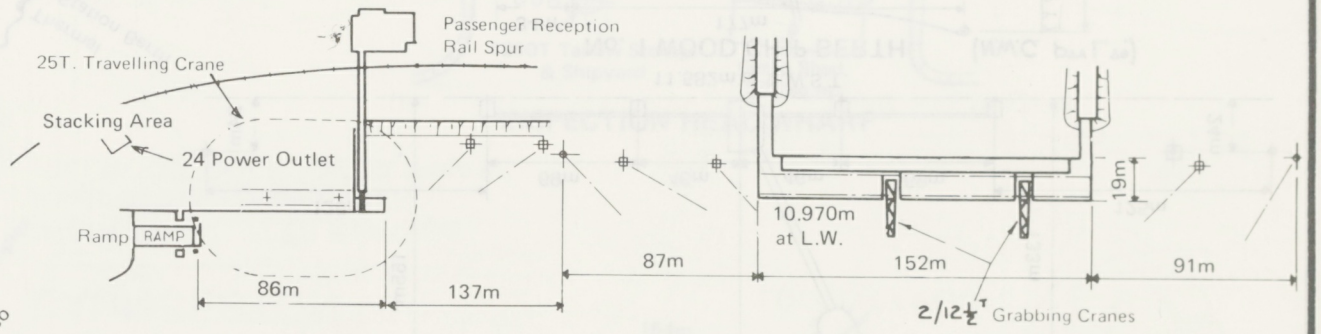
LOCALITY PLAN

LOWER REACHES-
BELL BAY-EASTERN SIDE



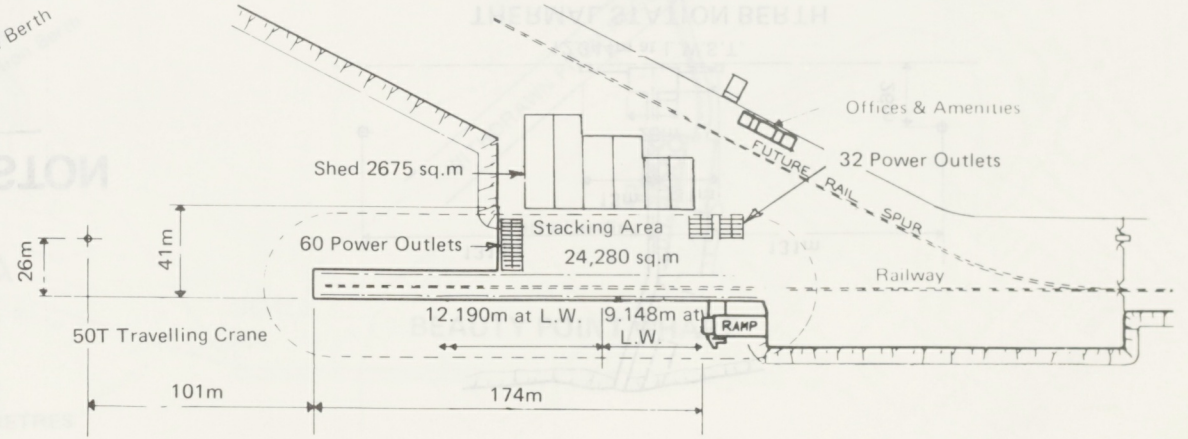
No.4 TANKER BERTH

No.3 BELL BAY WHARF



No.2 A.N.L. BERTH

No.3 COMALCO WHARF



No.5 COMMON USER BERTH

AUSTRALIA

P67

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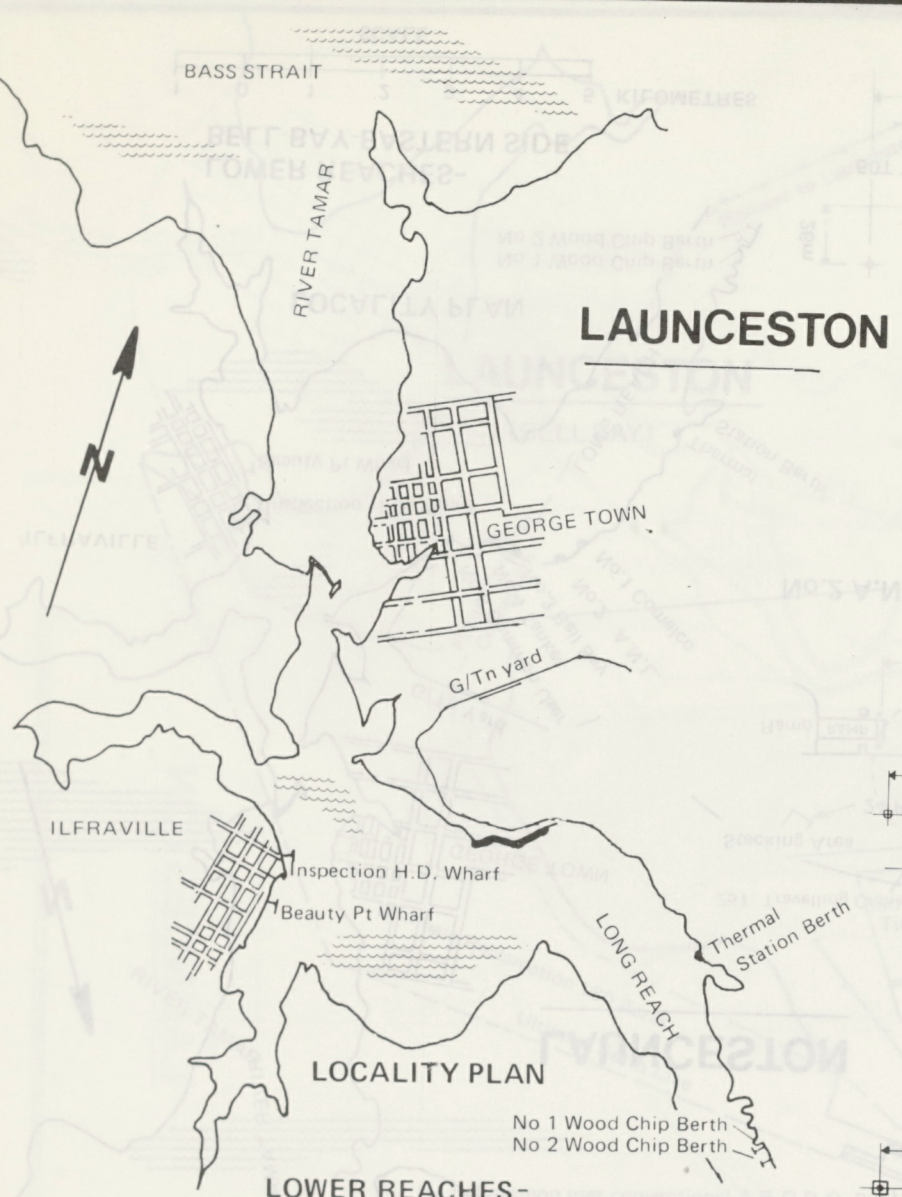
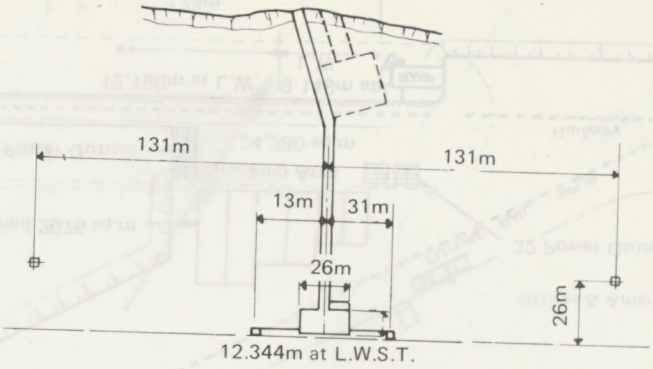
LAUNCESTON

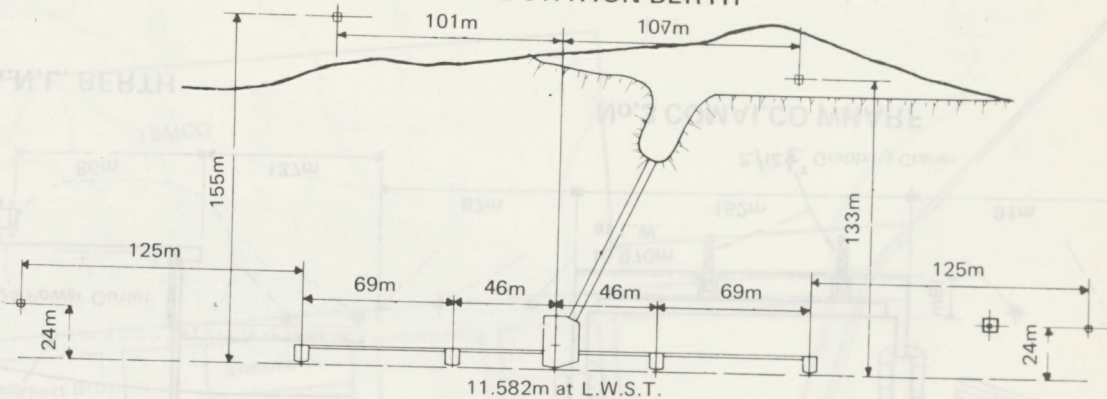


LOCALITY PLAN

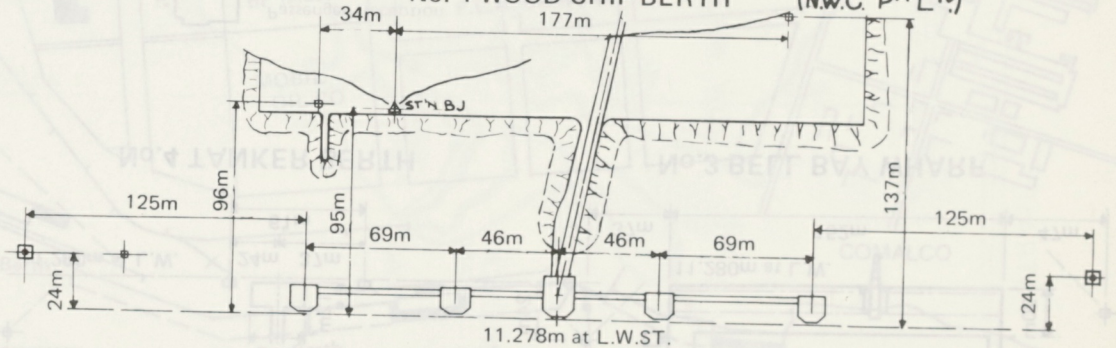
LOWER REACHES-
LONG REACH-EASTERN SIDE



THERMAL STATION BERTH



No. 1 WOOD CHIP BERTH (N.W.C. PTY LTD)



No. 2 WOOD CHIP BERTH (APPM. PTY LTD.)

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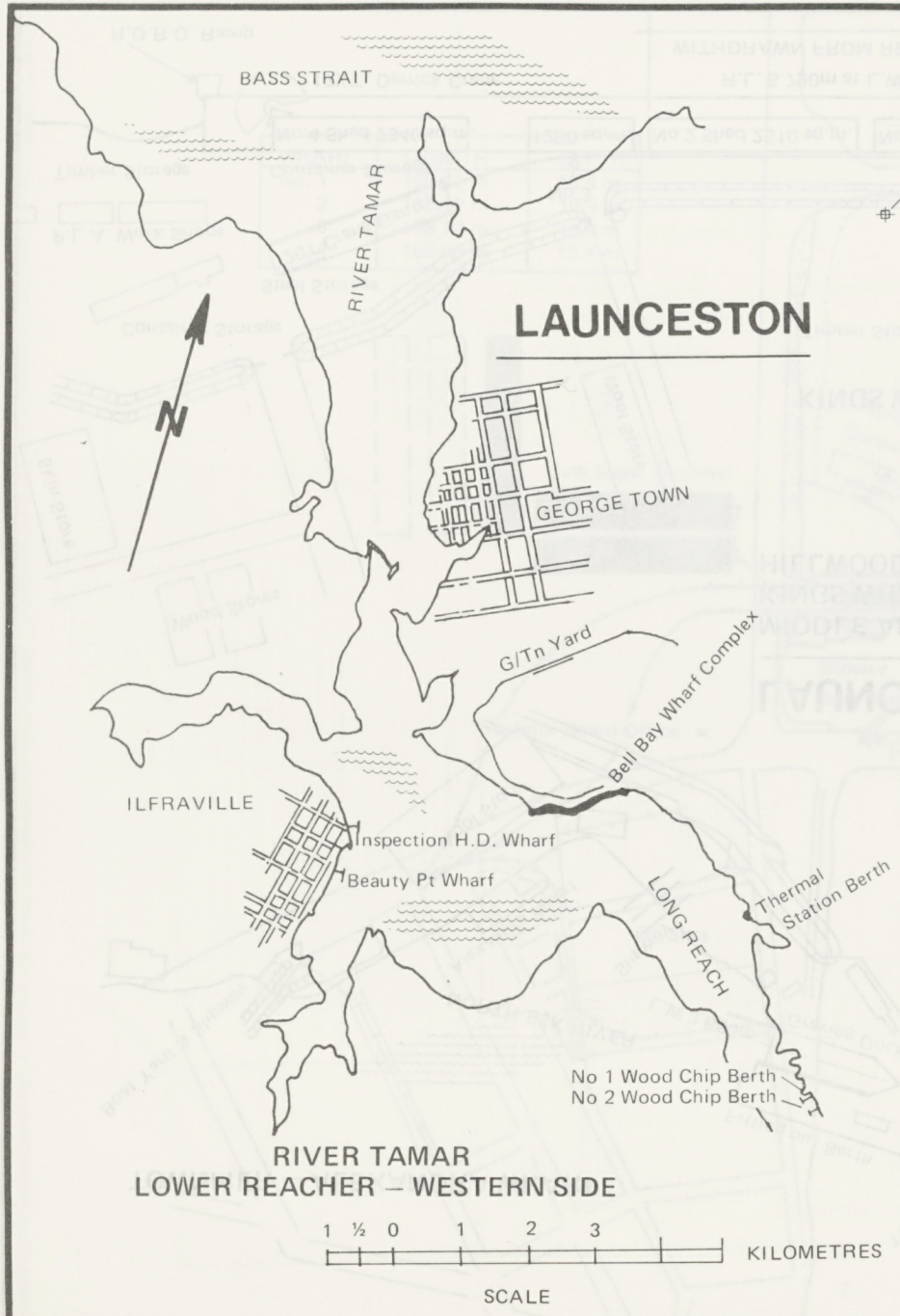
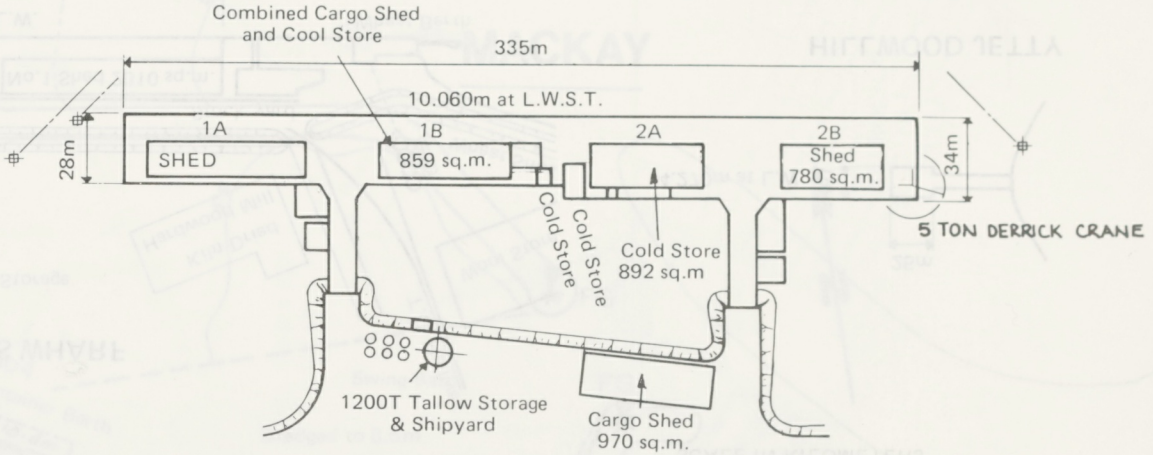
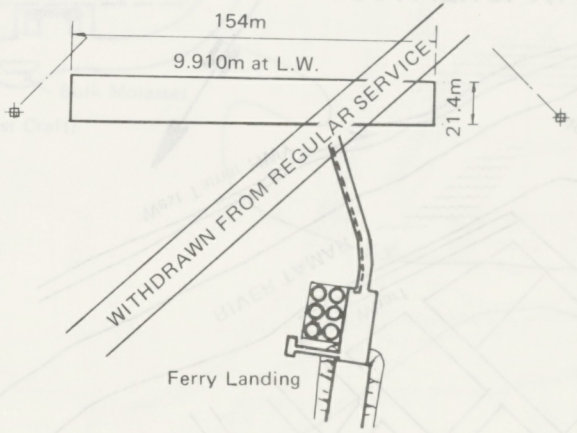


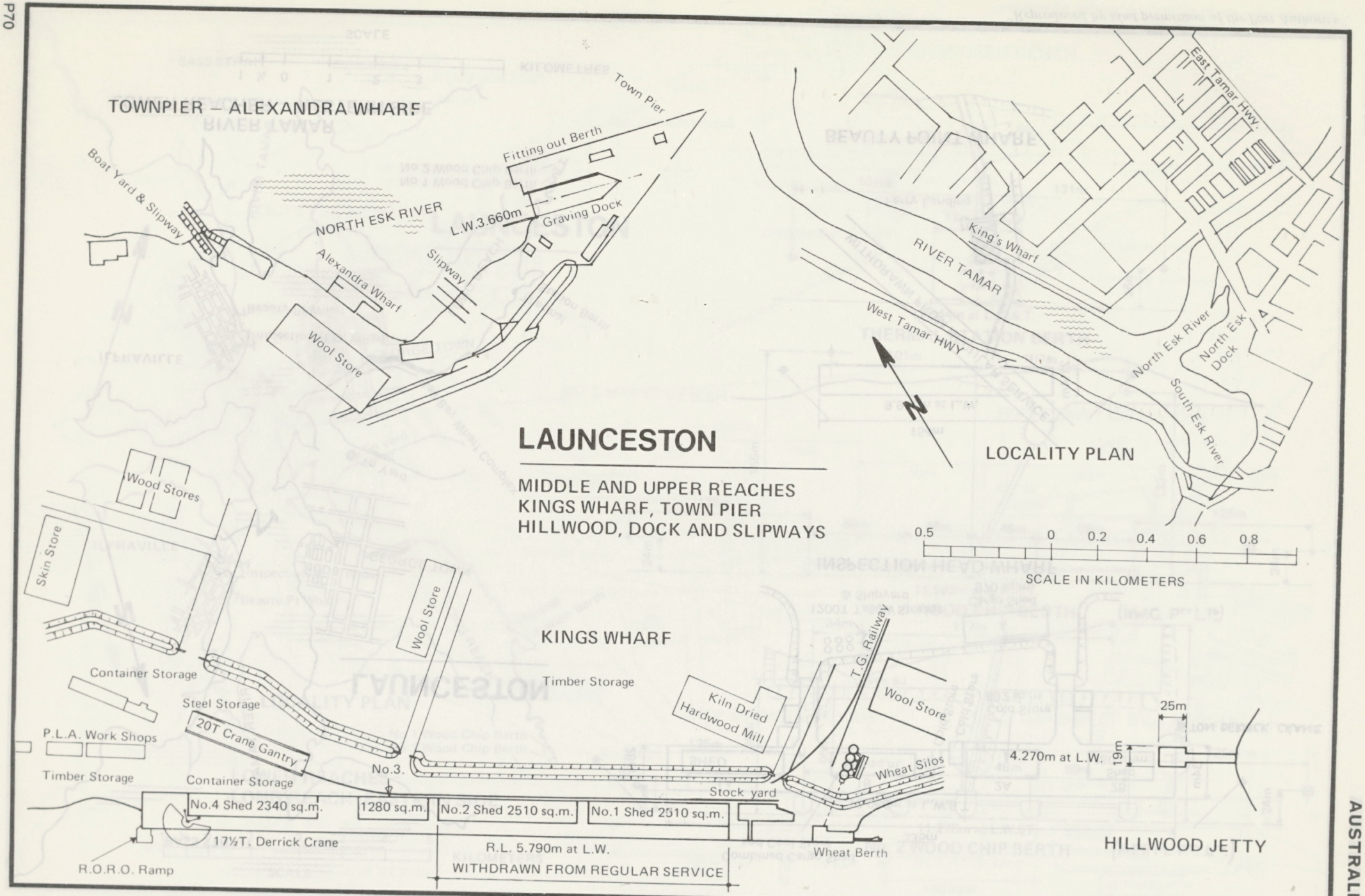
RIVER TAMAR
LOWER REACHER – WESTERN SIDE



INSPECTION HEAD WHARF



BEAUTY POINT WHARF


TOWNPIER – ALEXANDRA WHARF
Town Pier
Fitting out Berth
Boat Yard & Slipway
NORTH ESK RIVER
L.W.3.660m
Graving Dock
Alexandra Wharf
Slipway
Wool Store
East Tamar Hwy.
King's Wharf
RIVER TAMAR
West Tamar HWY
North Esk River
North Esk Dock
South Esk River
LAUNCESTON
MIDDLE AND UPPER REACHES
KINGS WHARF, TOWN PIER
HILLWOOD, DOCK AND SLIPWAYS
LOCALITY PLAN
0.5 0 0.2 0.4 0.6 0.8
SCALE IN KILOMETERS
Wood Stores
Skin Store
Wool Store
KINGS WHARF
Container Storage
Timber Storage
T.G. Railway
Kiln Dried Hardwood Mill
Wool Store
Steel Storage
20T Crane Gantry
P.L.A. Work Shops
No.3.
Timber Storage
Container Storage
Wheat Silos
Stock yard
No.4 Shed 2340 sq.m.
1280 sq.m.
No.2 Shed 2510 sq.m.
No.1 Shed 2510 sq.m.
17½T. Derrick Crane
R.L. 5.790m at L.W.
WITHDRAWN FROM REGULAR SERVICE
Wheat Berth
R.O.R.O. Ramp
25m
19m
4.270m at L.W.
HILLWOOD JETTY

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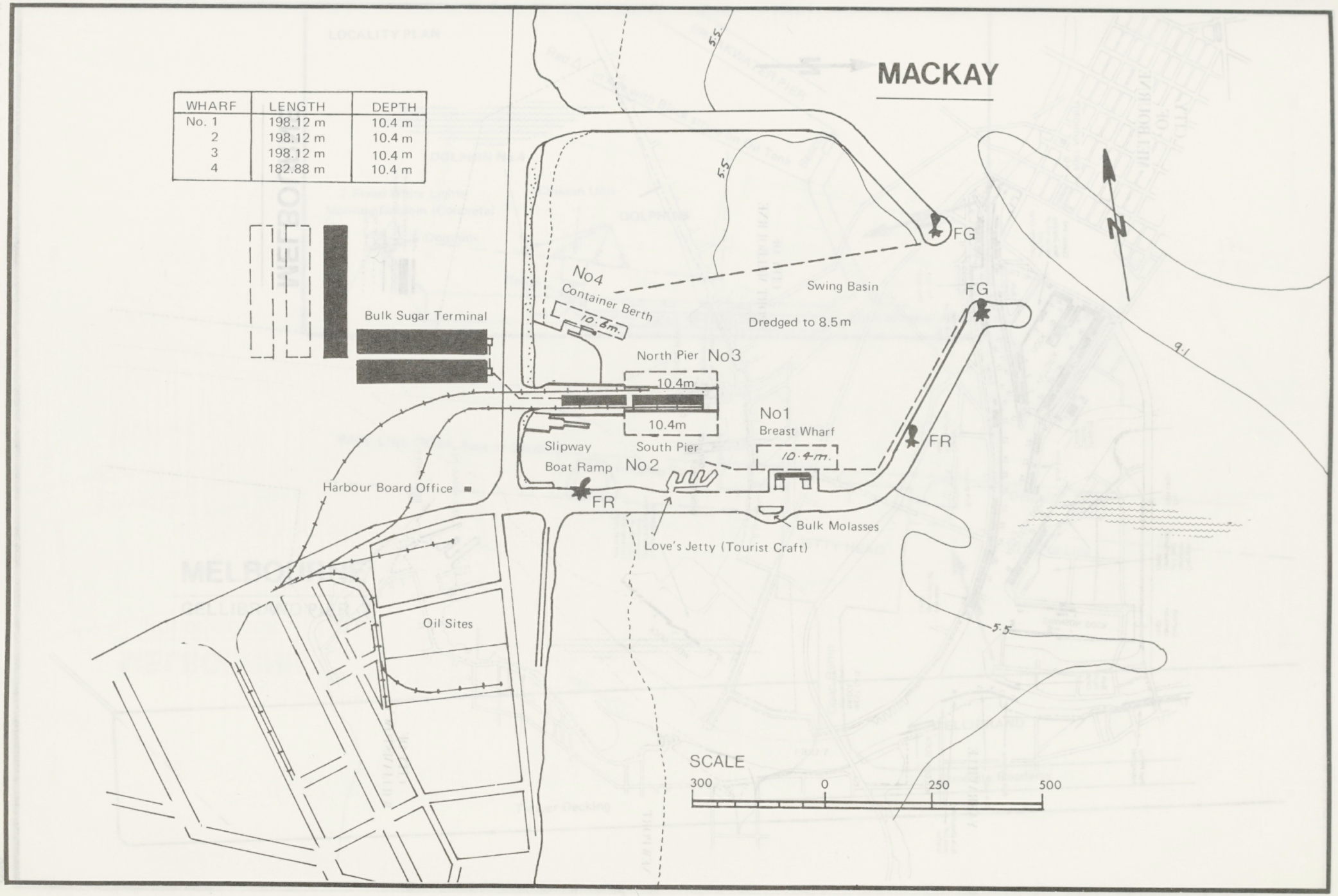

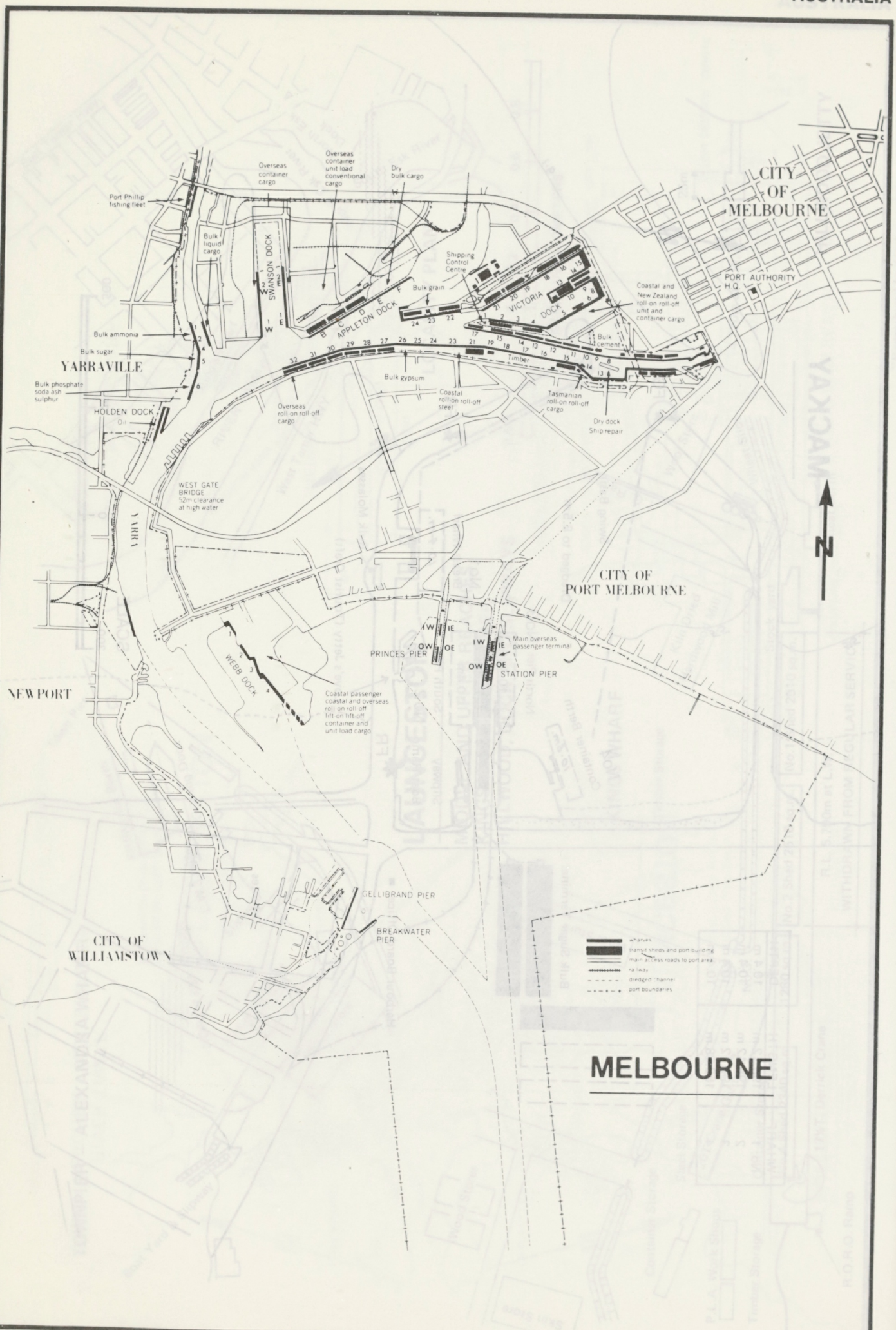

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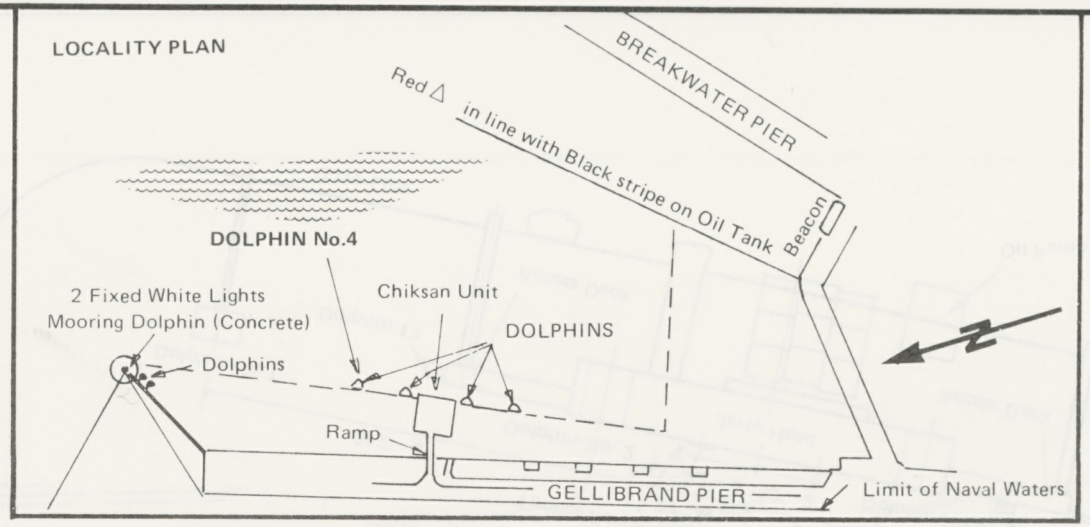

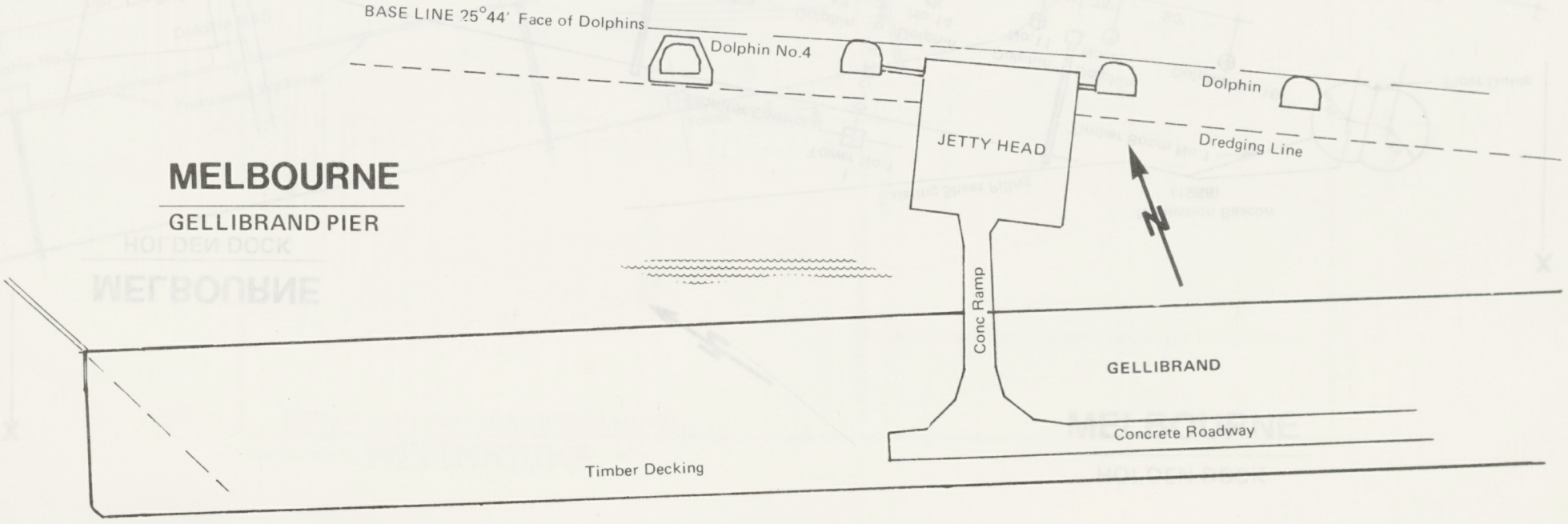

MELBOURNE

GELLIBRAND PIER

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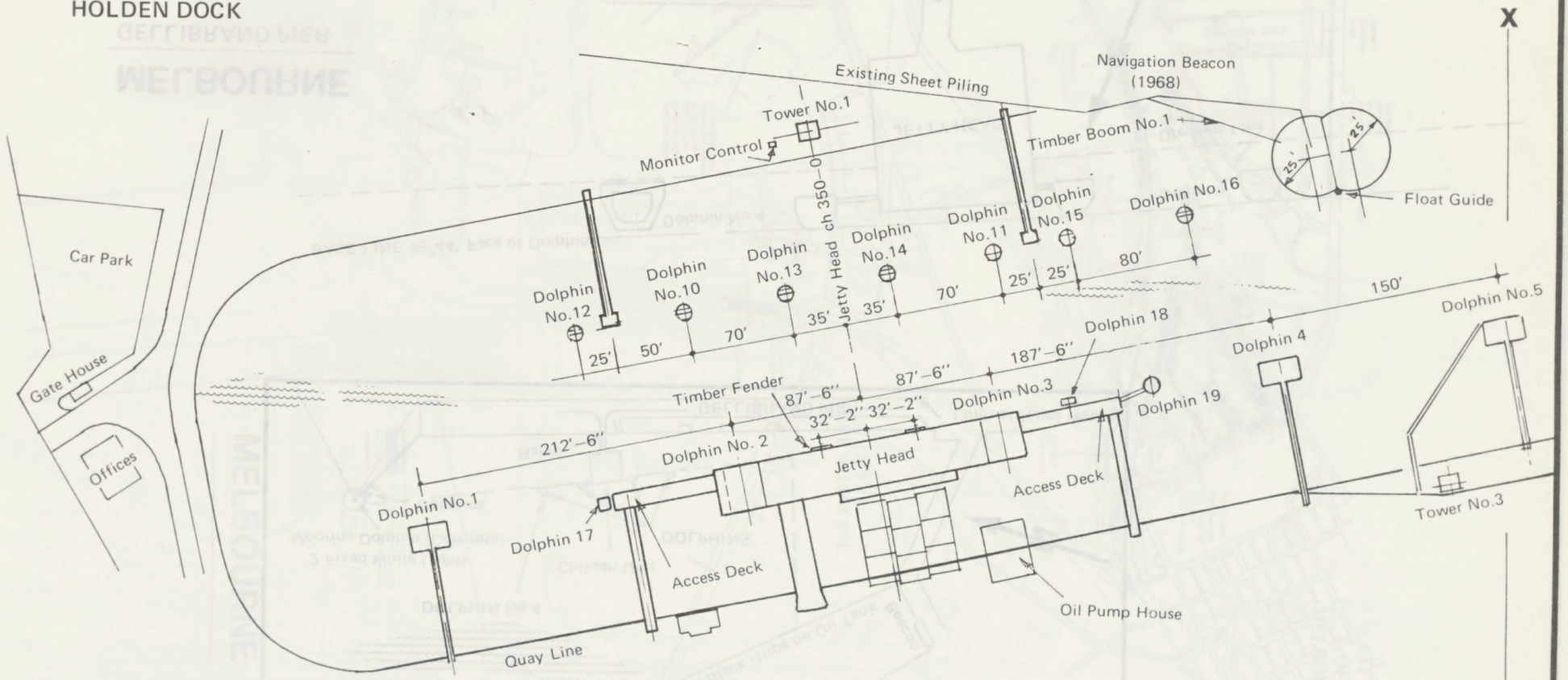
MELBOURNE

HOLDEN DOCK



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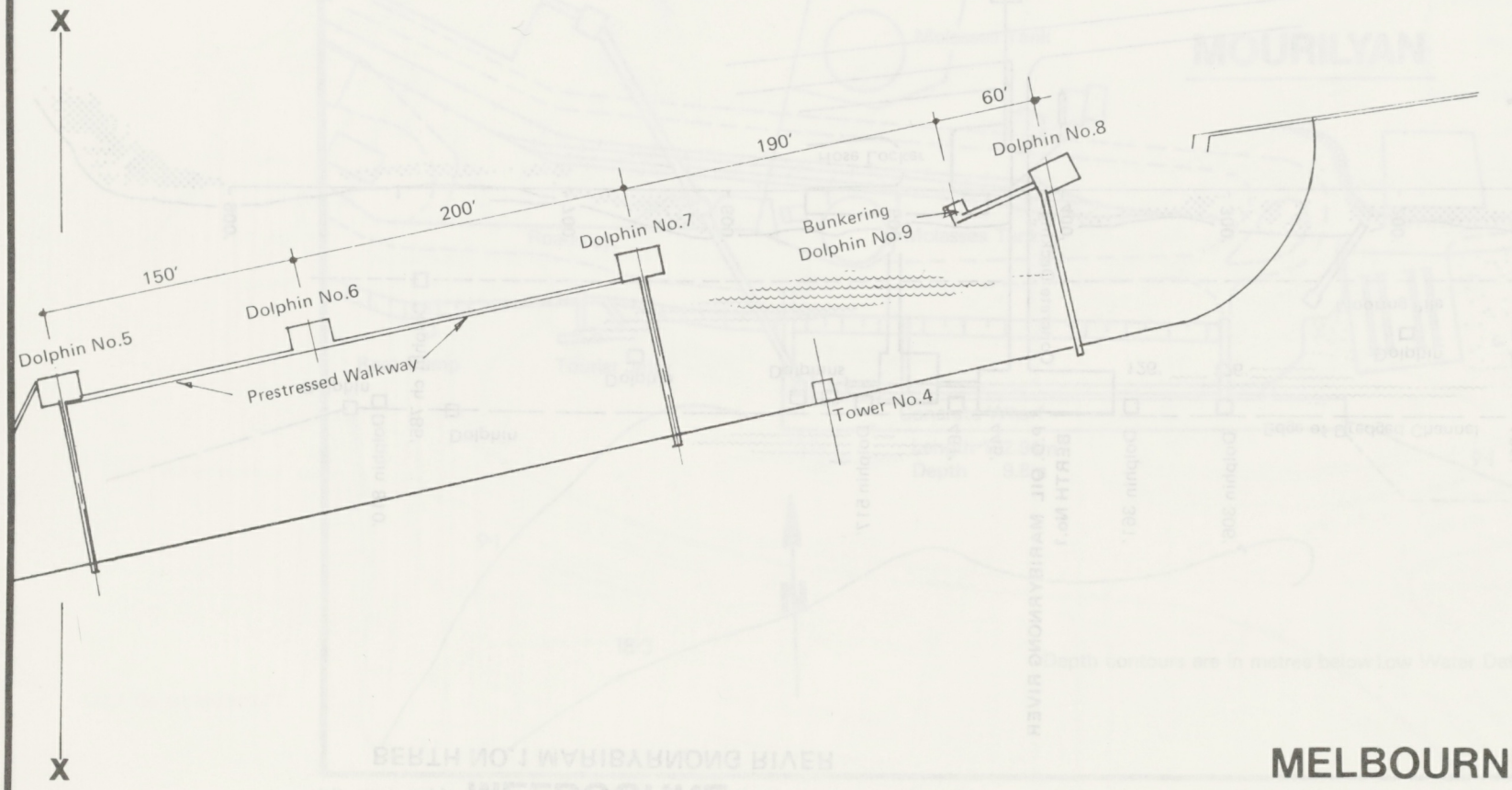

MELBOURNE

HOLDEN DOCK

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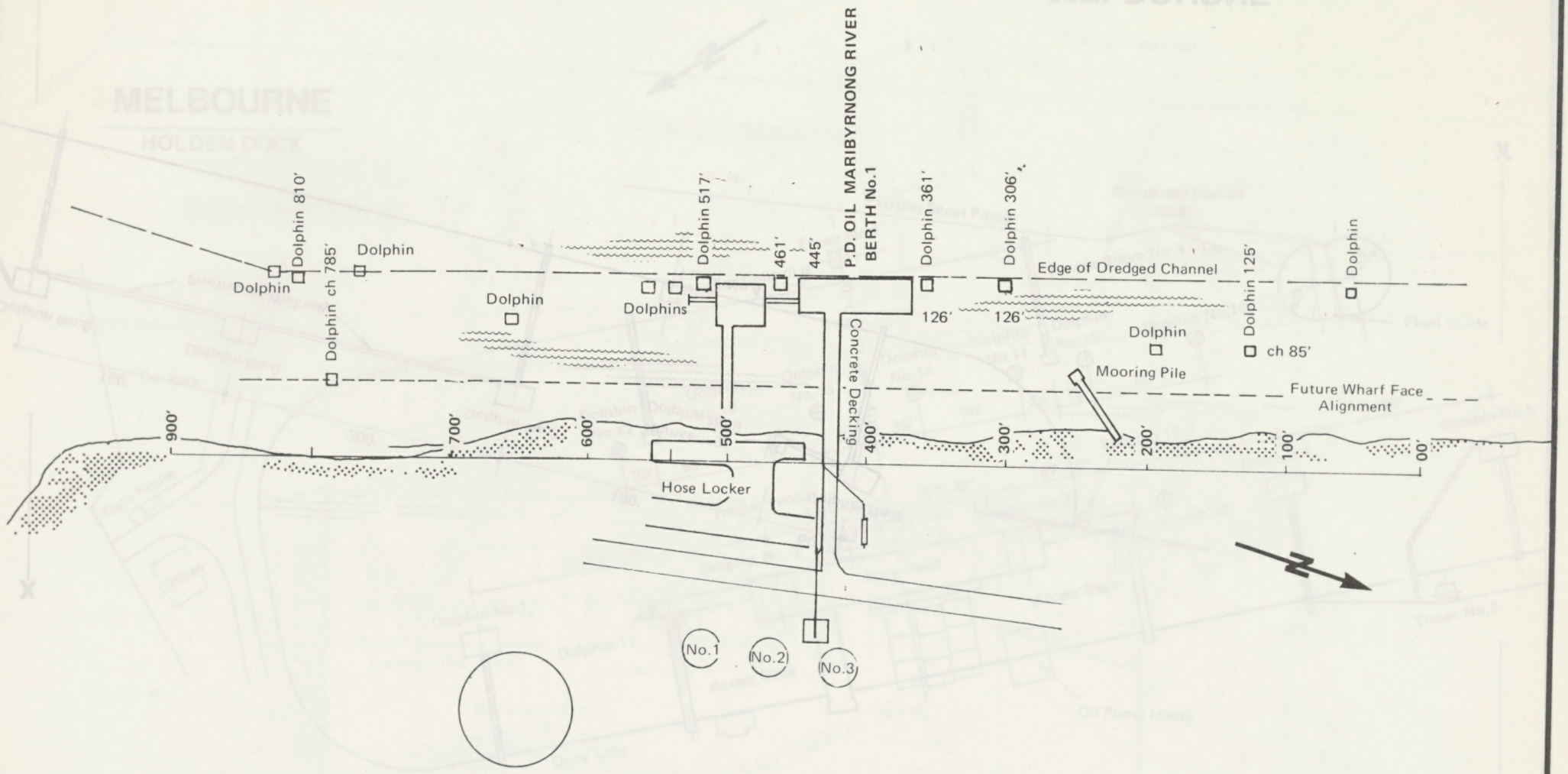
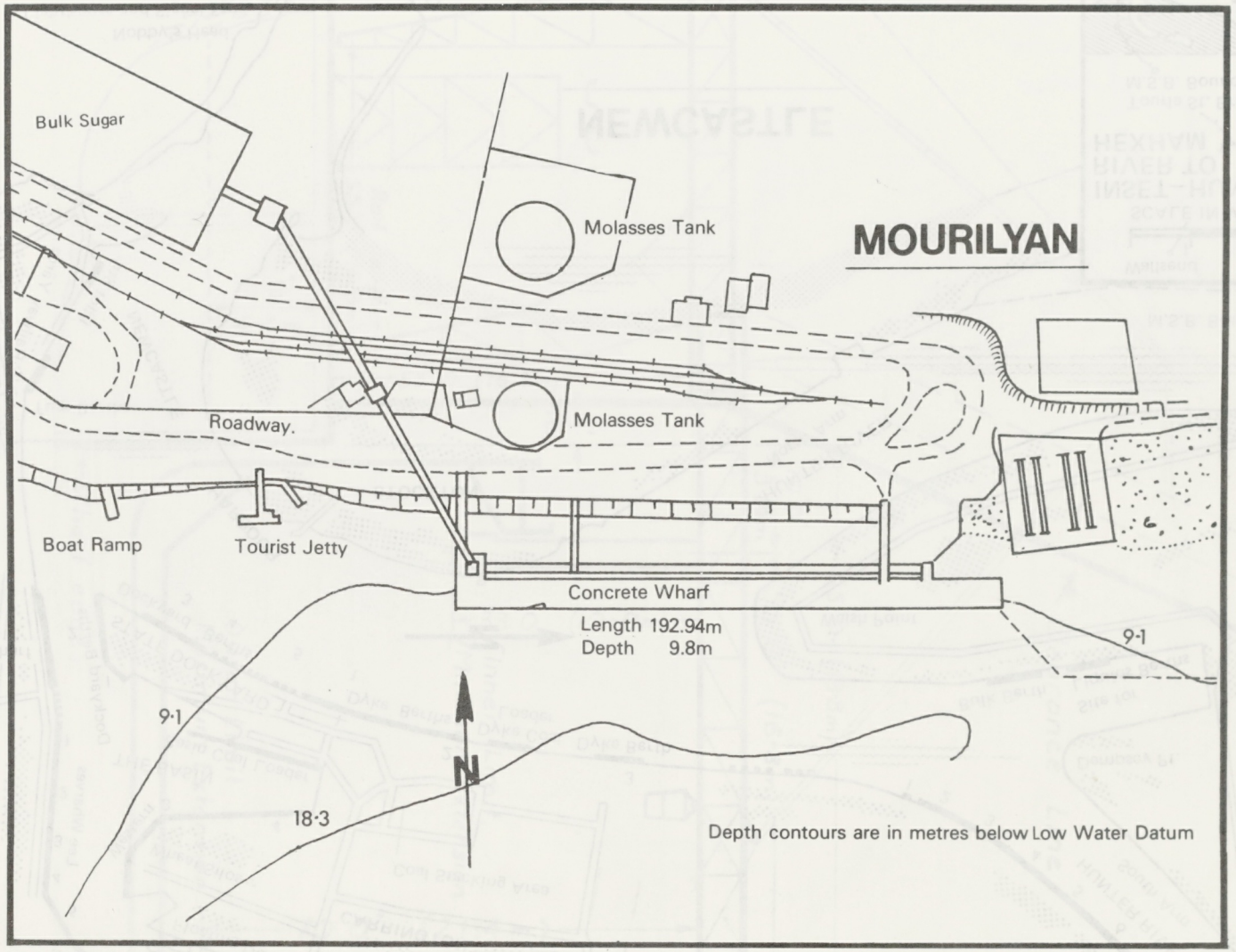
MELBOURNE

BERTH NO.1 MARIBYRNONG RIVER





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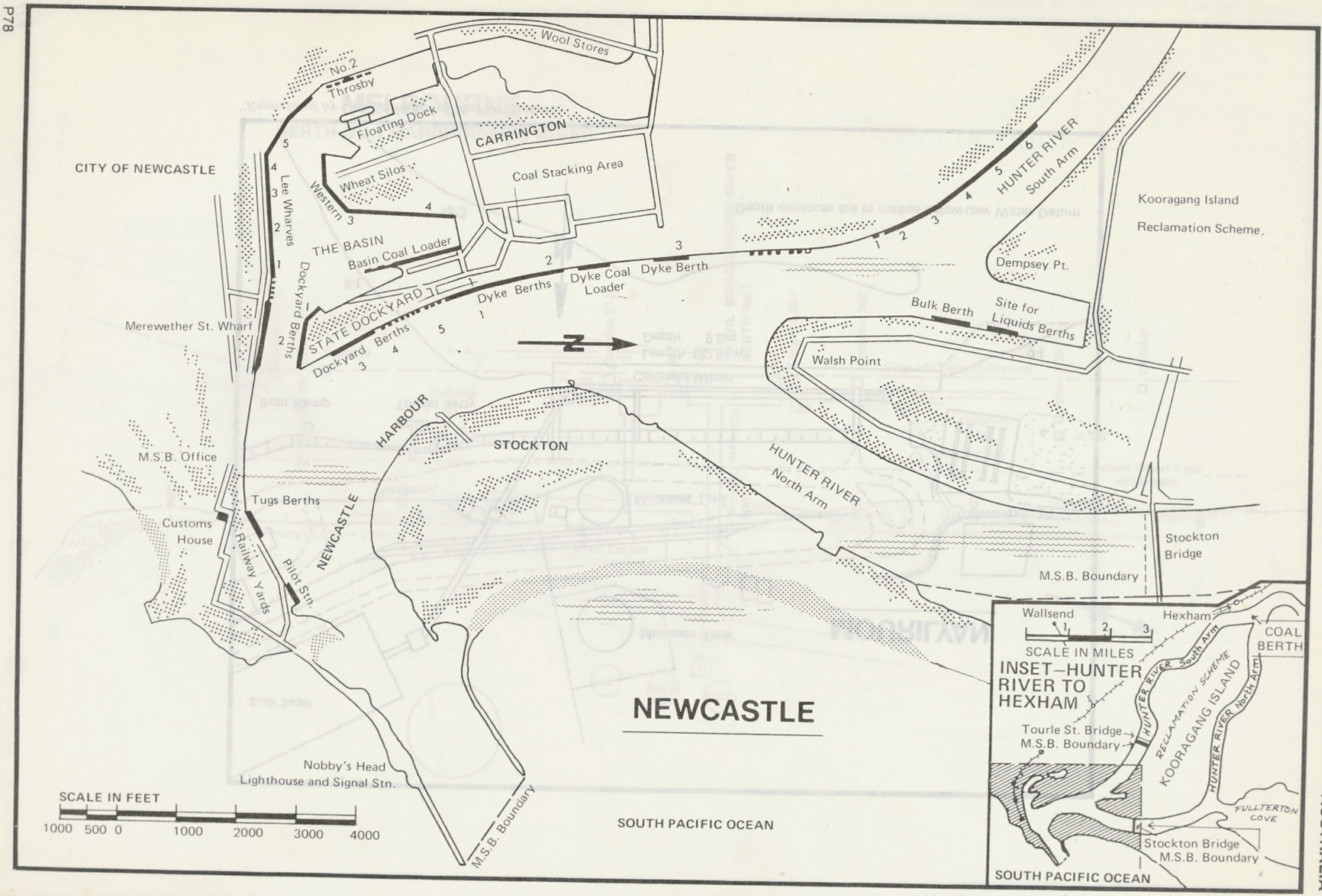

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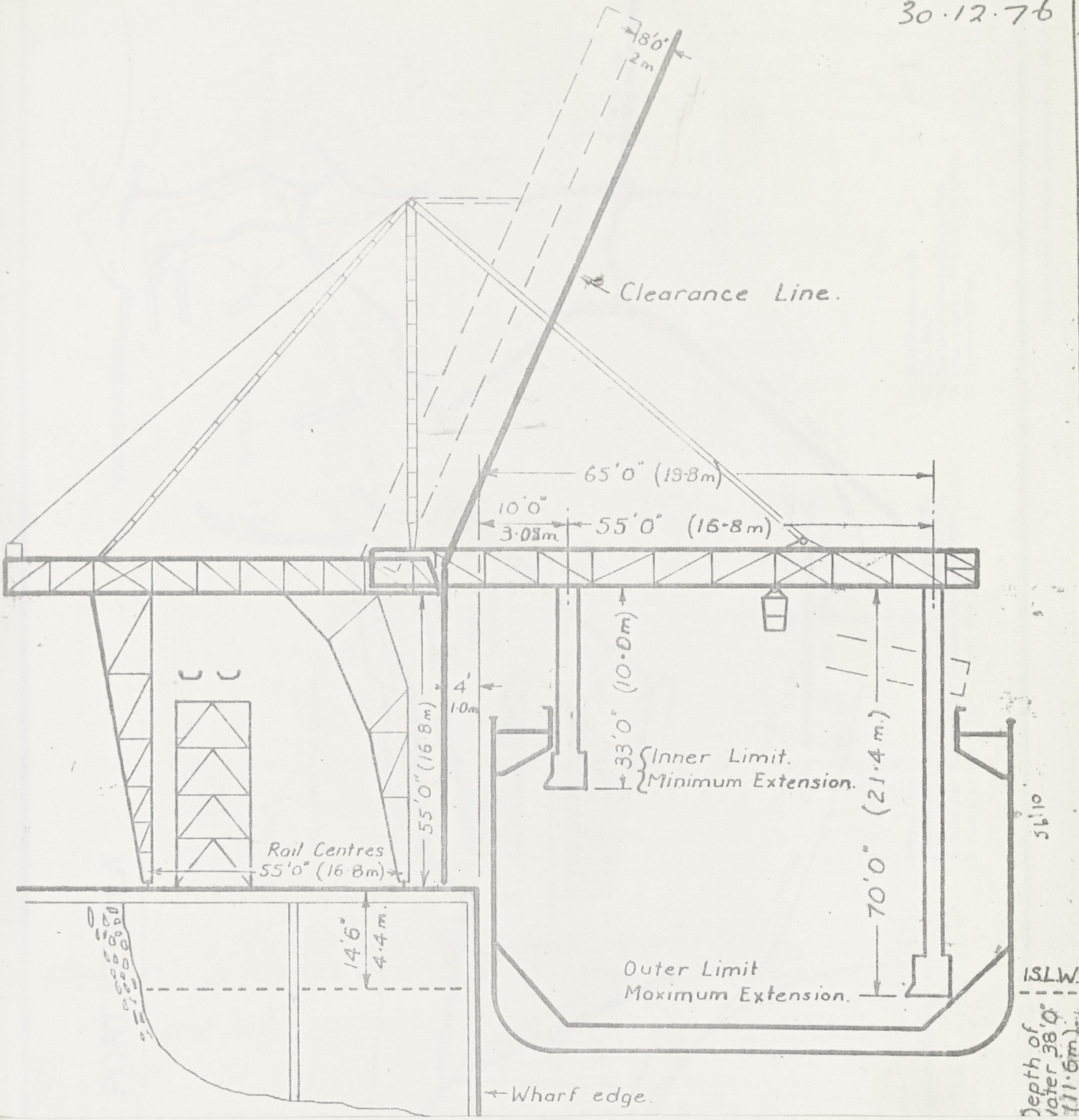
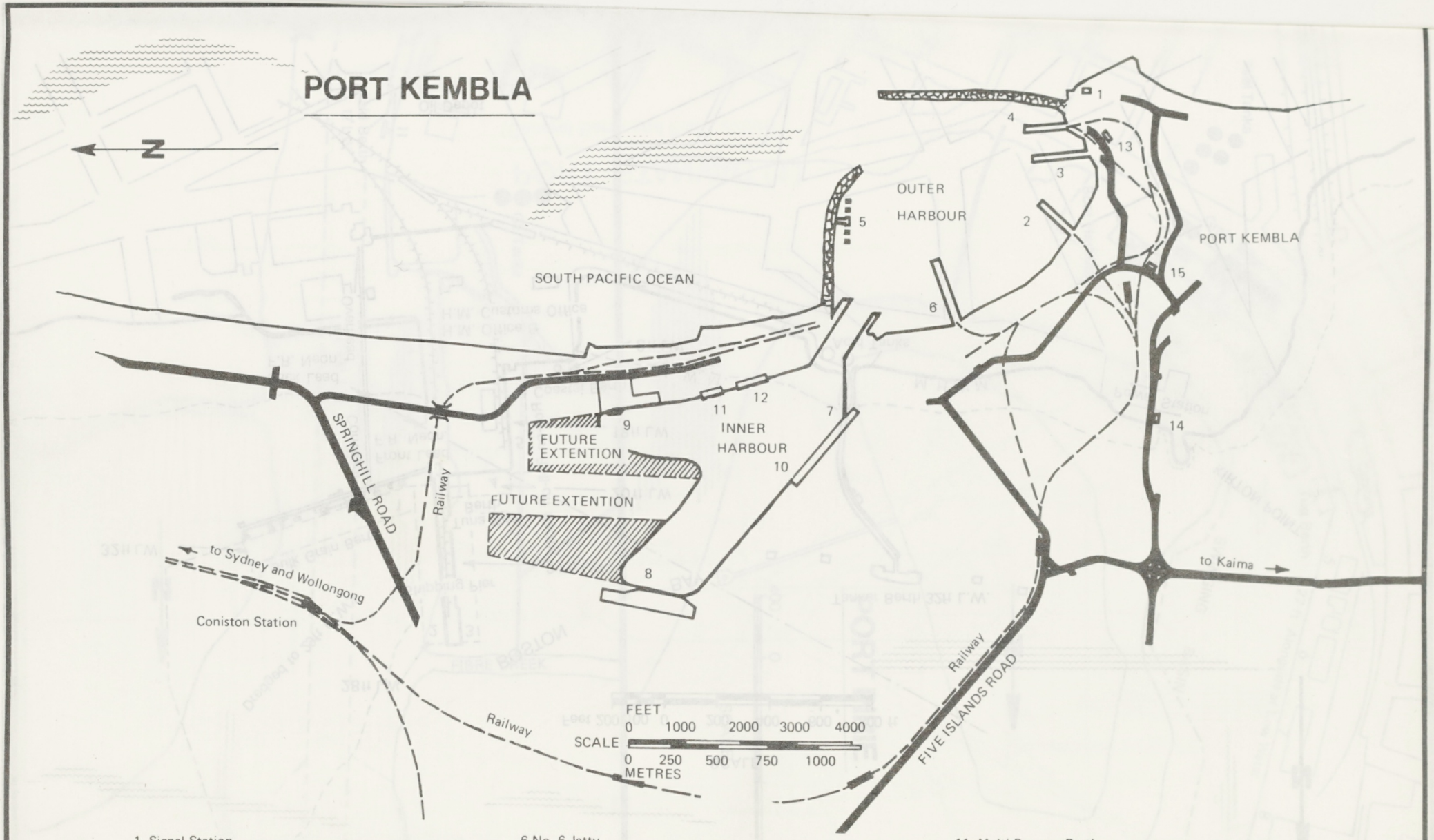
PORT KEMBLA COAL LOADER

CLEARANCE DIAGRAM.

MR. K. WINGATE
30.12.76





1. Signal Station
2. Australian Iron & Steel (private) Discharge Berth.
3. No. 3 Jetty.
4. No. 4 Jetty.
5. Inflammable Liquids Berth.
6. No. 6 Jetty
7. Australian Iron & Steel (private) No. 1 Products Berth.
8. Australian Iron & Steel (private) No. 2 Products Berth.
9. Australian National Line (private) Ro-Ro Terminal.
10. Australian Iron & Steel (private) Bulk Berth.
11. Multi Purpose Berth.
12. Coal Berth.
13. Maritime Services Board office
14. Department of Public Works office.
15. Customs Office.

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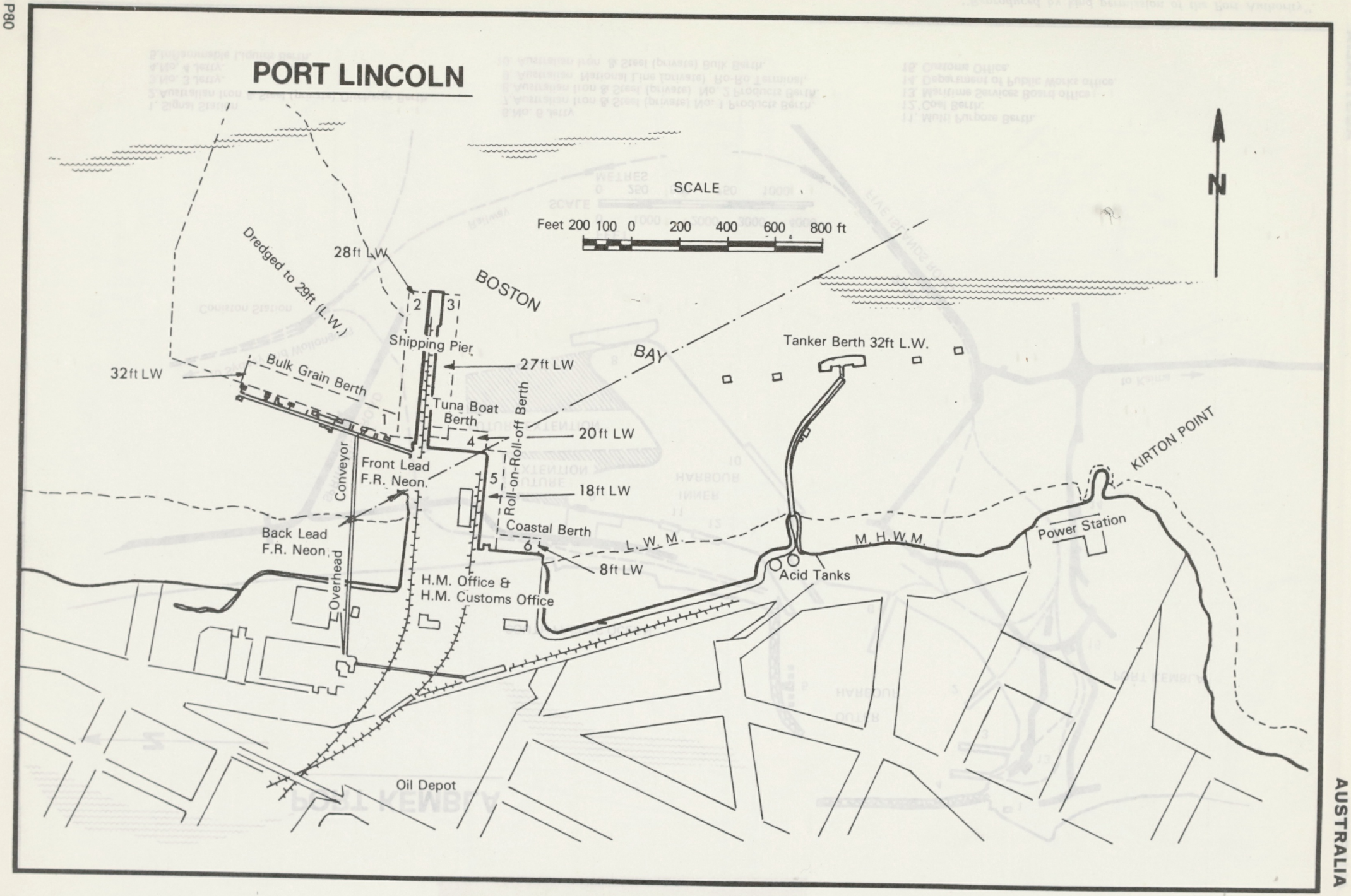
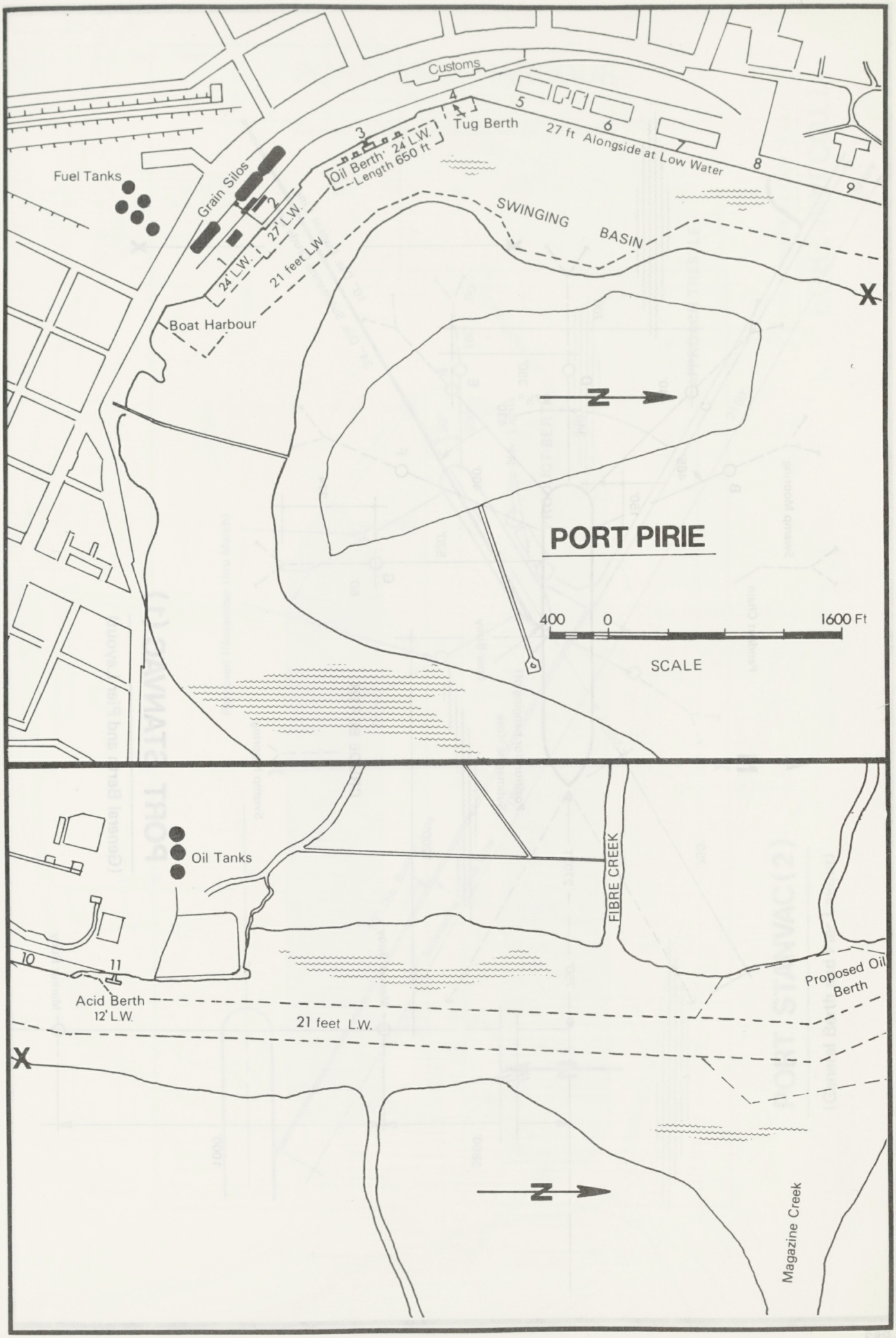

PORT LINCOLN
SCALE
Feet 200 100 0 200 400 600 800 ft
N
28ft LW
Dredged to 29ft (L.W.)
BOSTON
BAY
2
3
Shipping Pier
27ft LW
32ft LW
Bulk Grain Berth
1
Tuna Boat Berth
4
20ft LW
Roll-on-Roll-off Berth
Tanker Berth 32ft L.W.
KIRTON POINT
Front Lead F.R. Neon
Conveyor
5
18ft LW
Back Lead F.R. Neon
Coastal Berth
6
L.W.M.
M.H.W.M.
Power Station
8ft LW
Acid Tanks
Overhead
H.M. Office & H.M. Customs Office
Oil Depot



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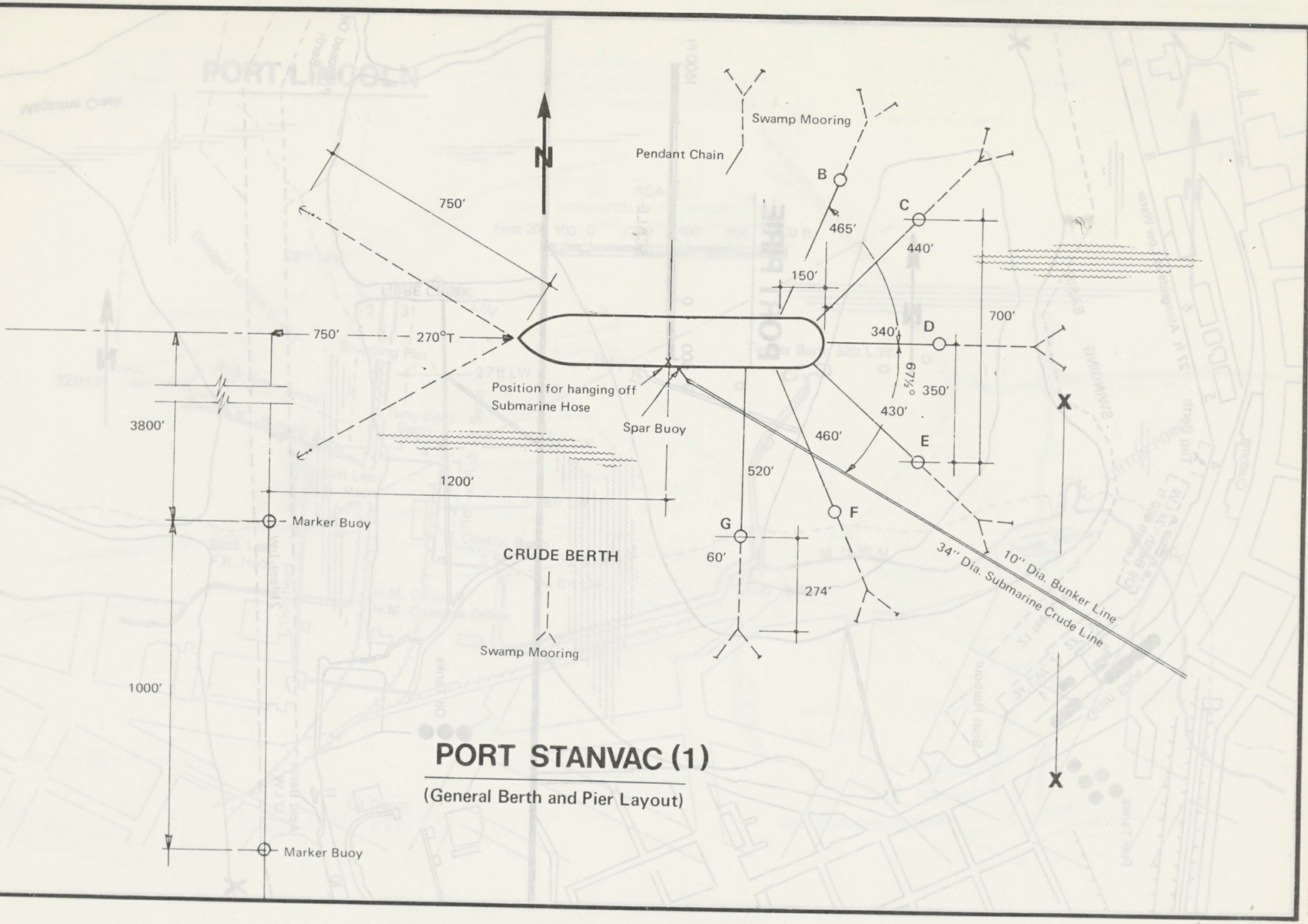

PORT STANVAC (1)

(General Berth and Pier Layout)

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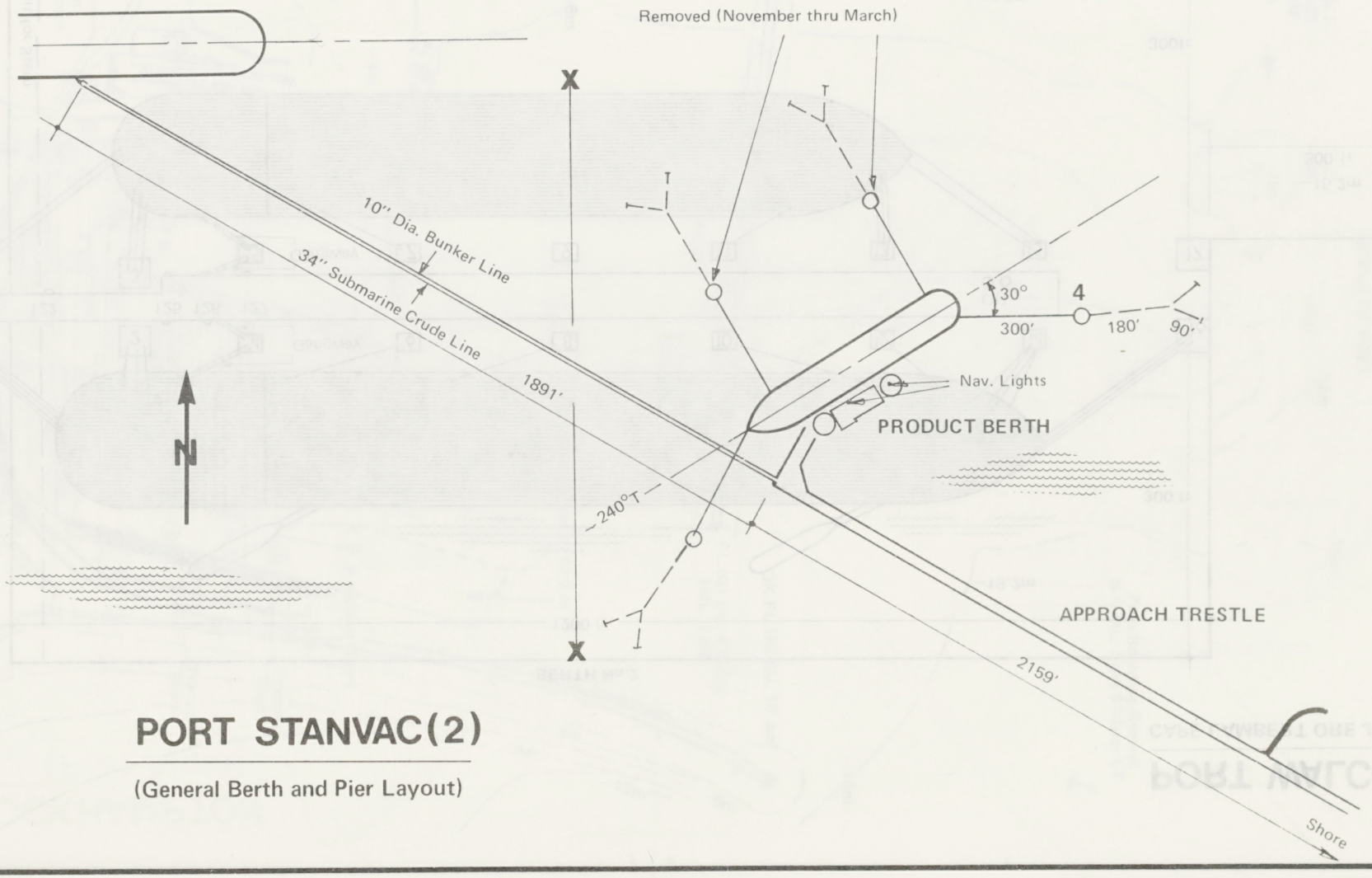

PORT STANVAC(2)

(General Berth and Pier Layout)

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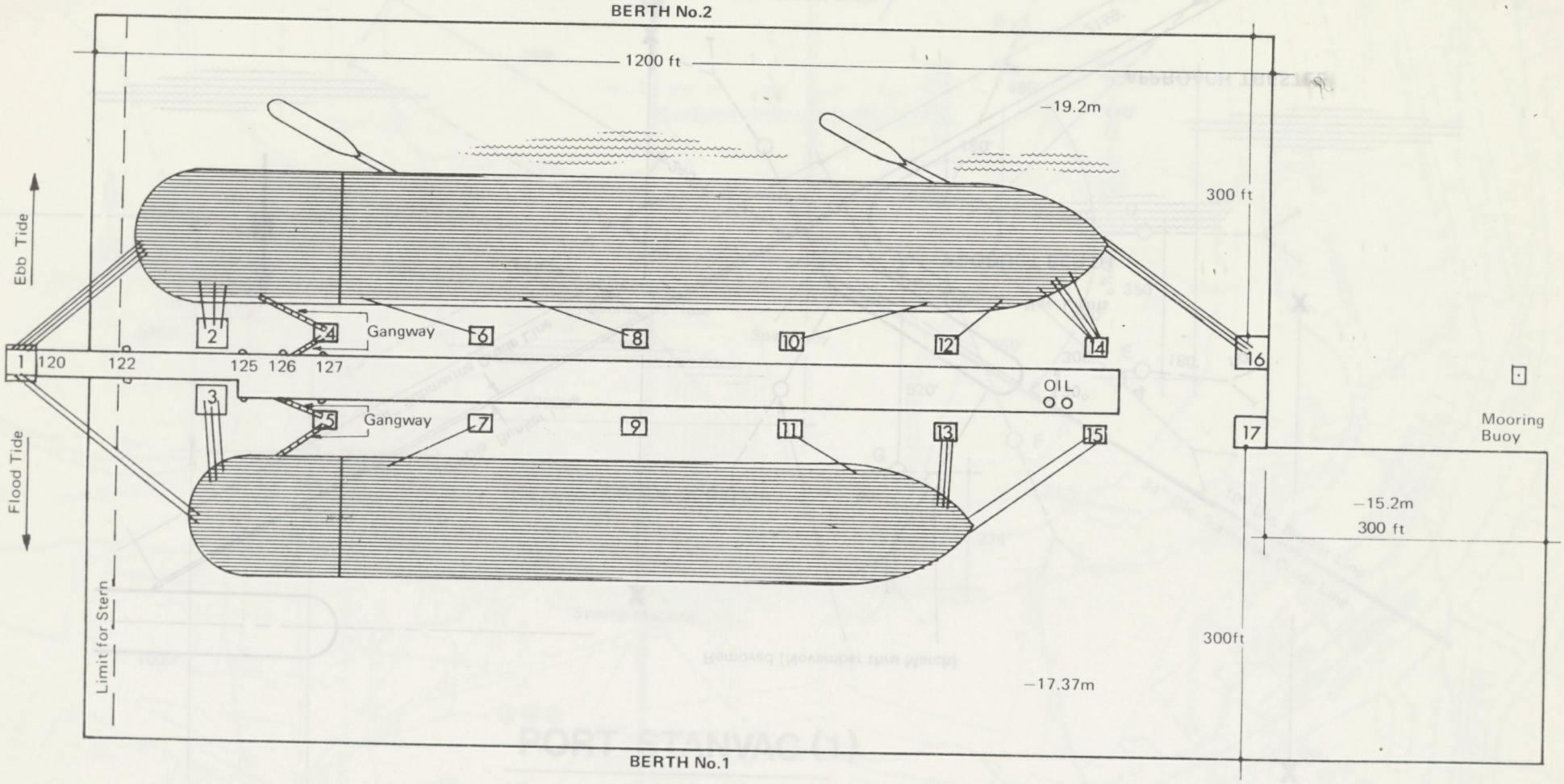
PORT WALCOTT

CAPE LAMBERT ORE JETTY



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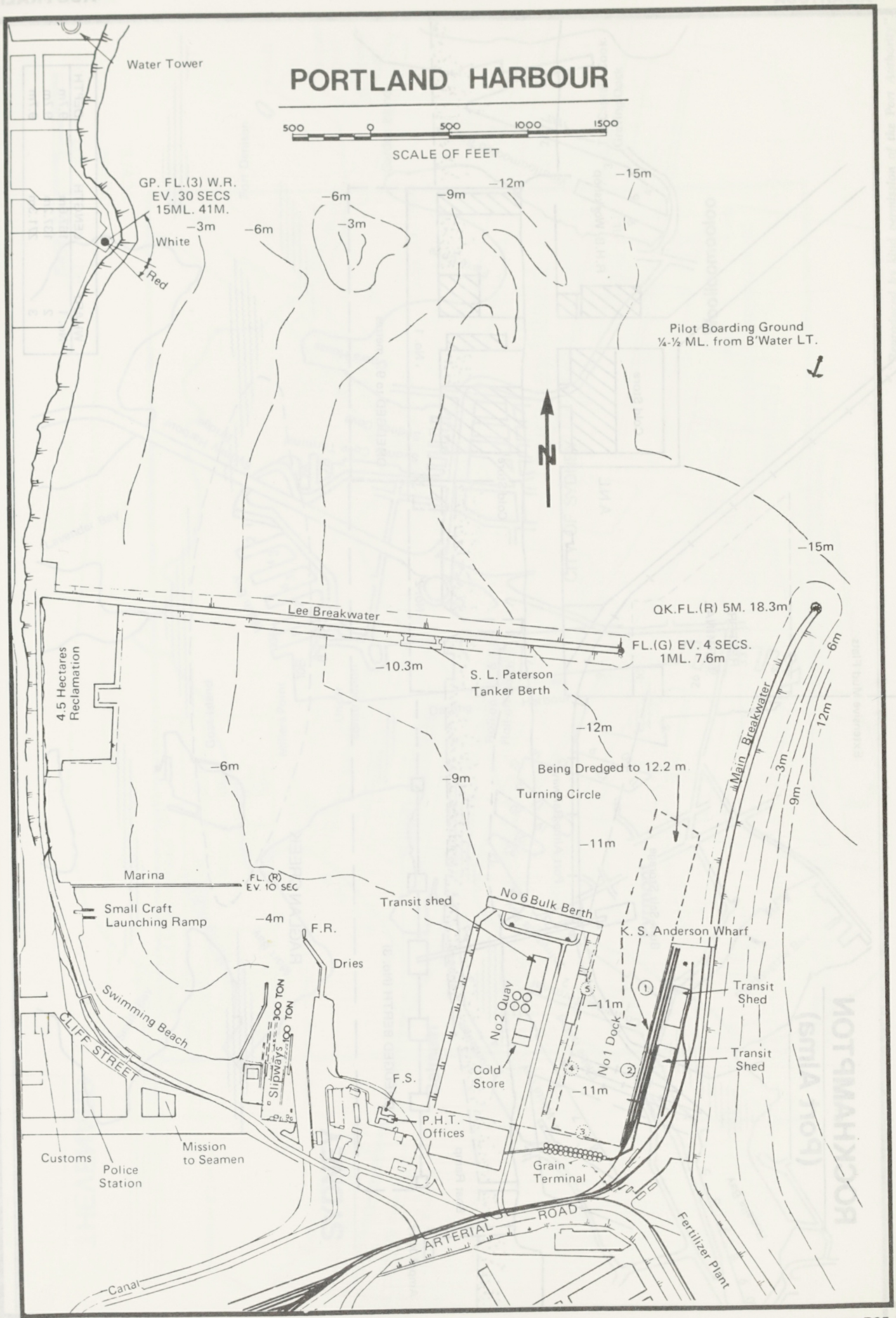

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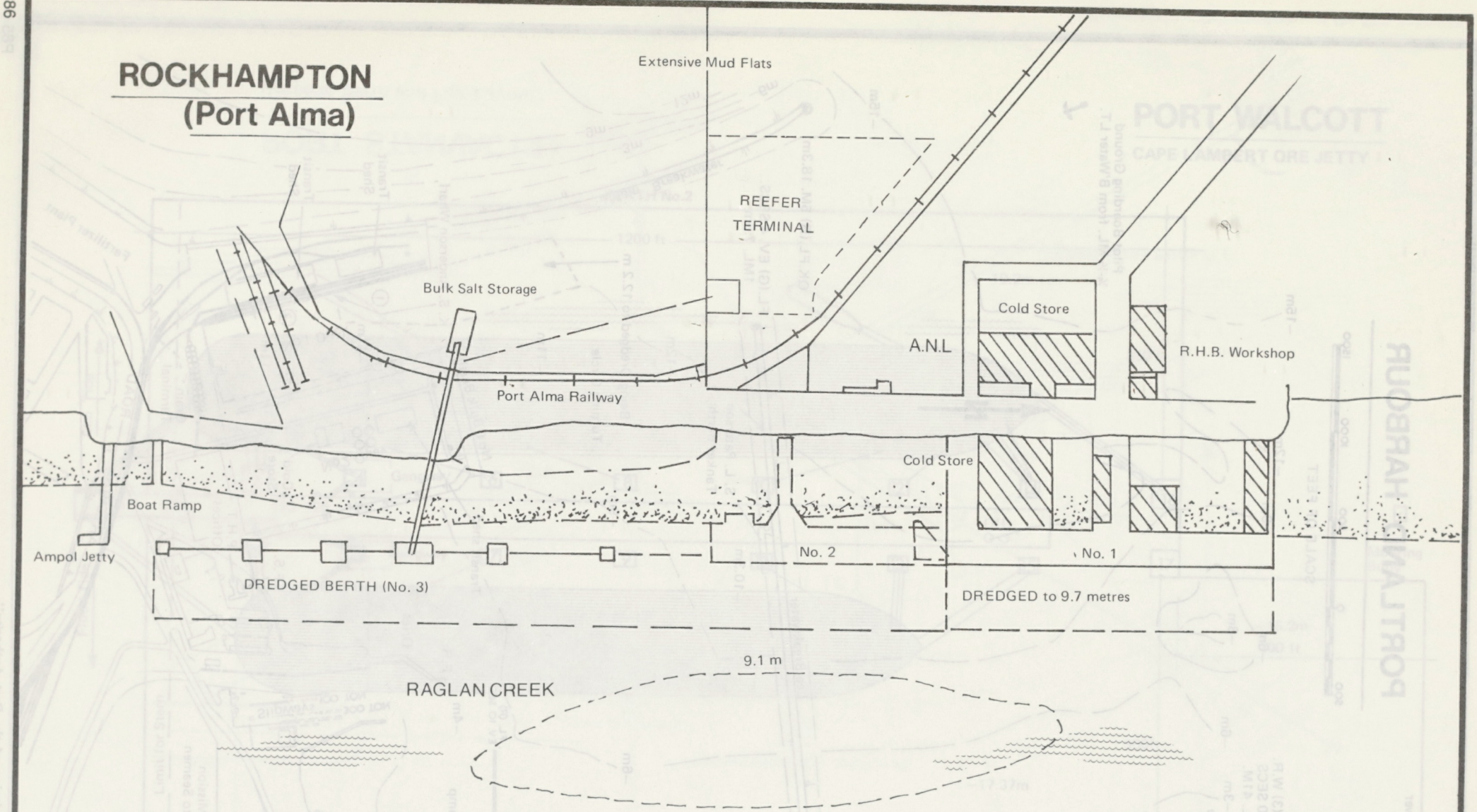
ROCKHAMPTON
(Port Alma)



WHARF	LENGTH	DEPTH
No. 1	167.6m	9.7m
2	137.2m	9.7m
3	271.3m	9.7m

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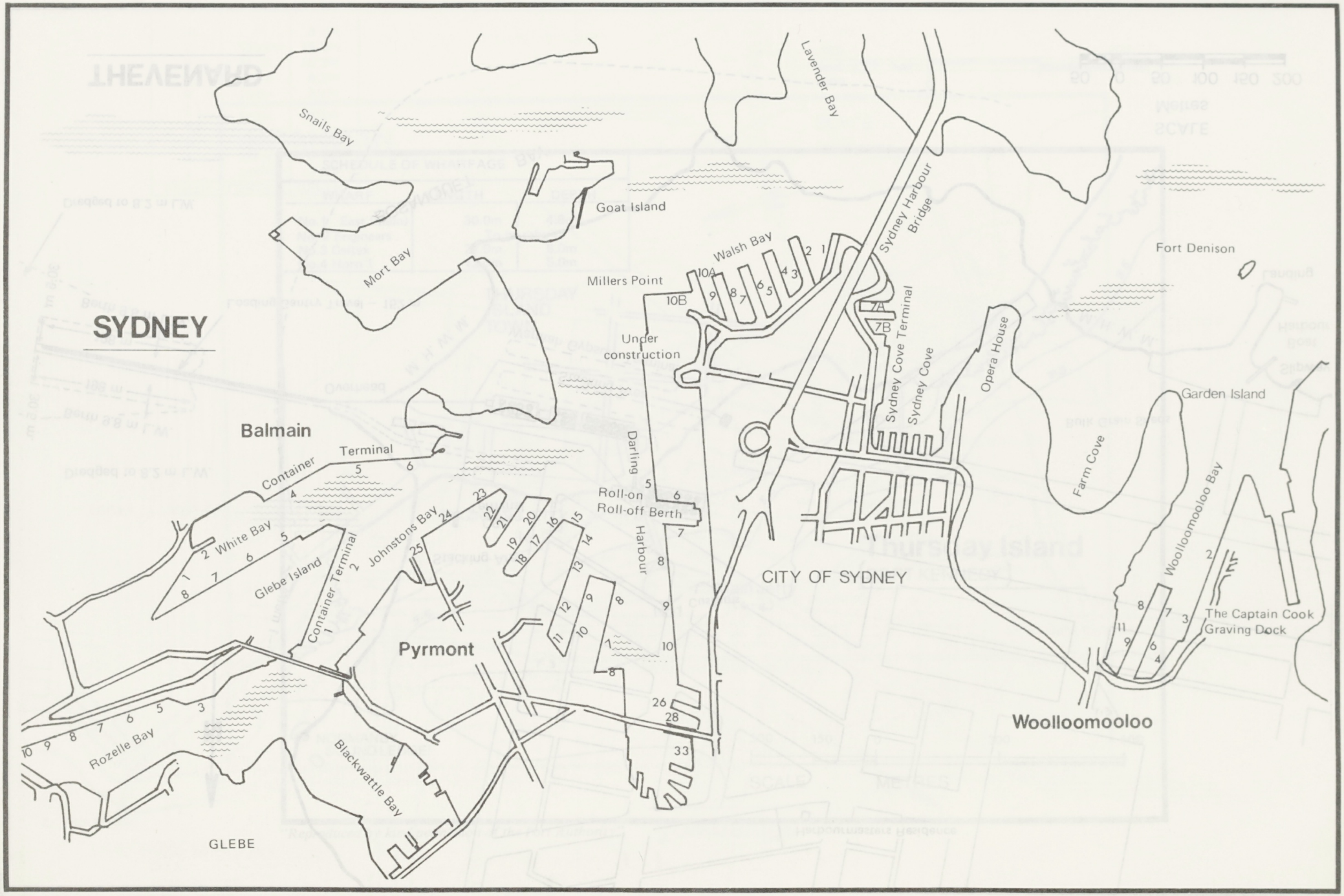

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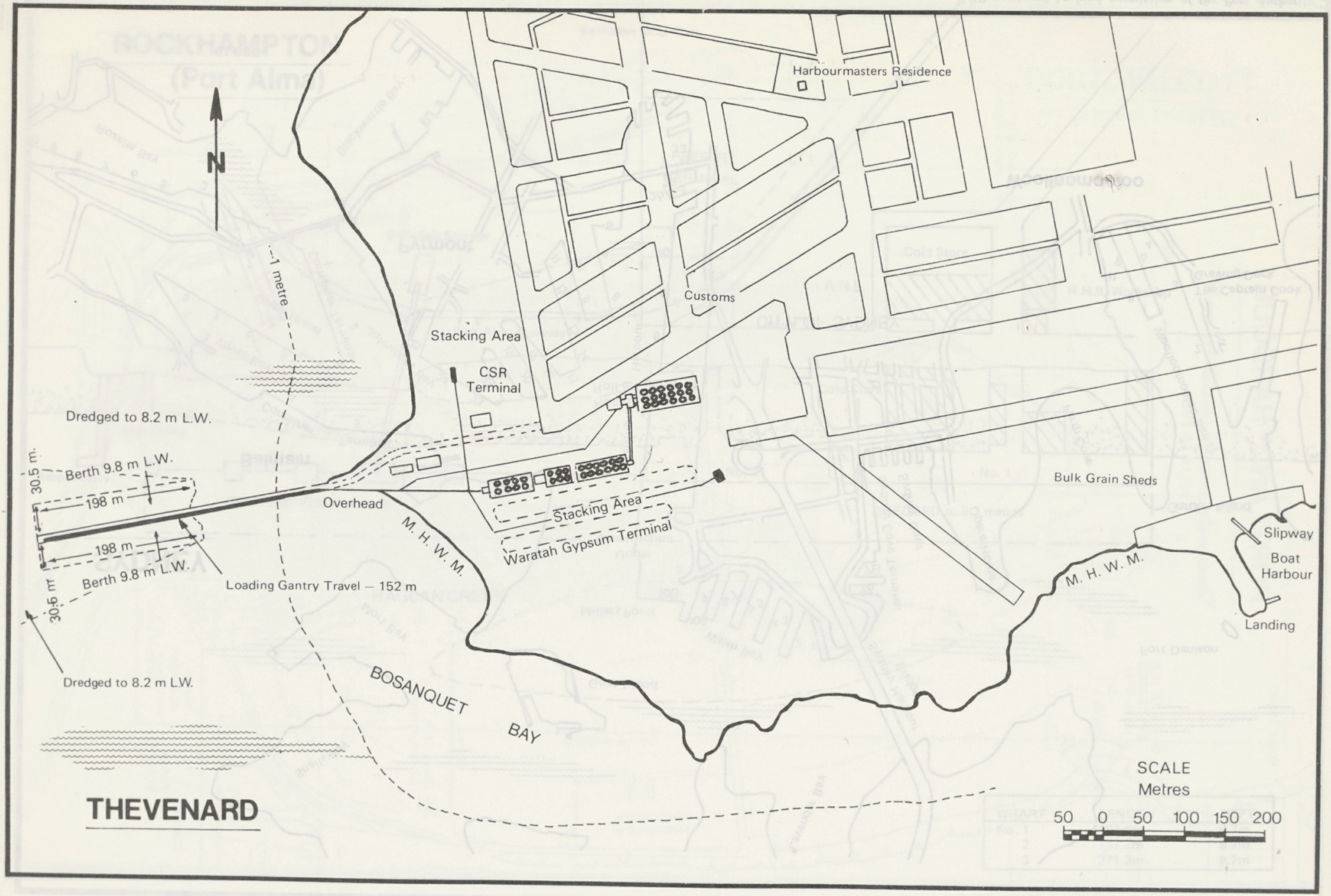

THEVENARD

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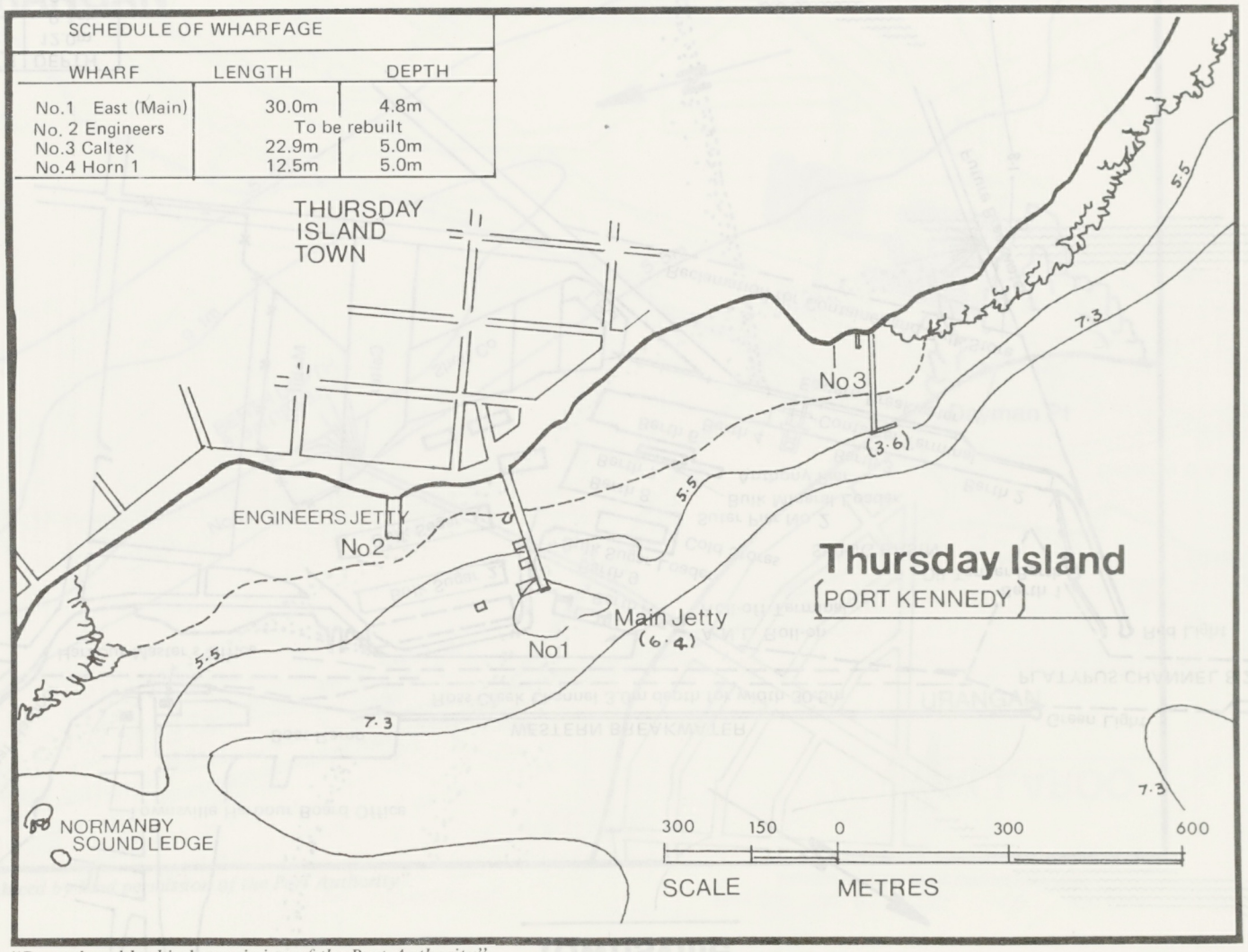

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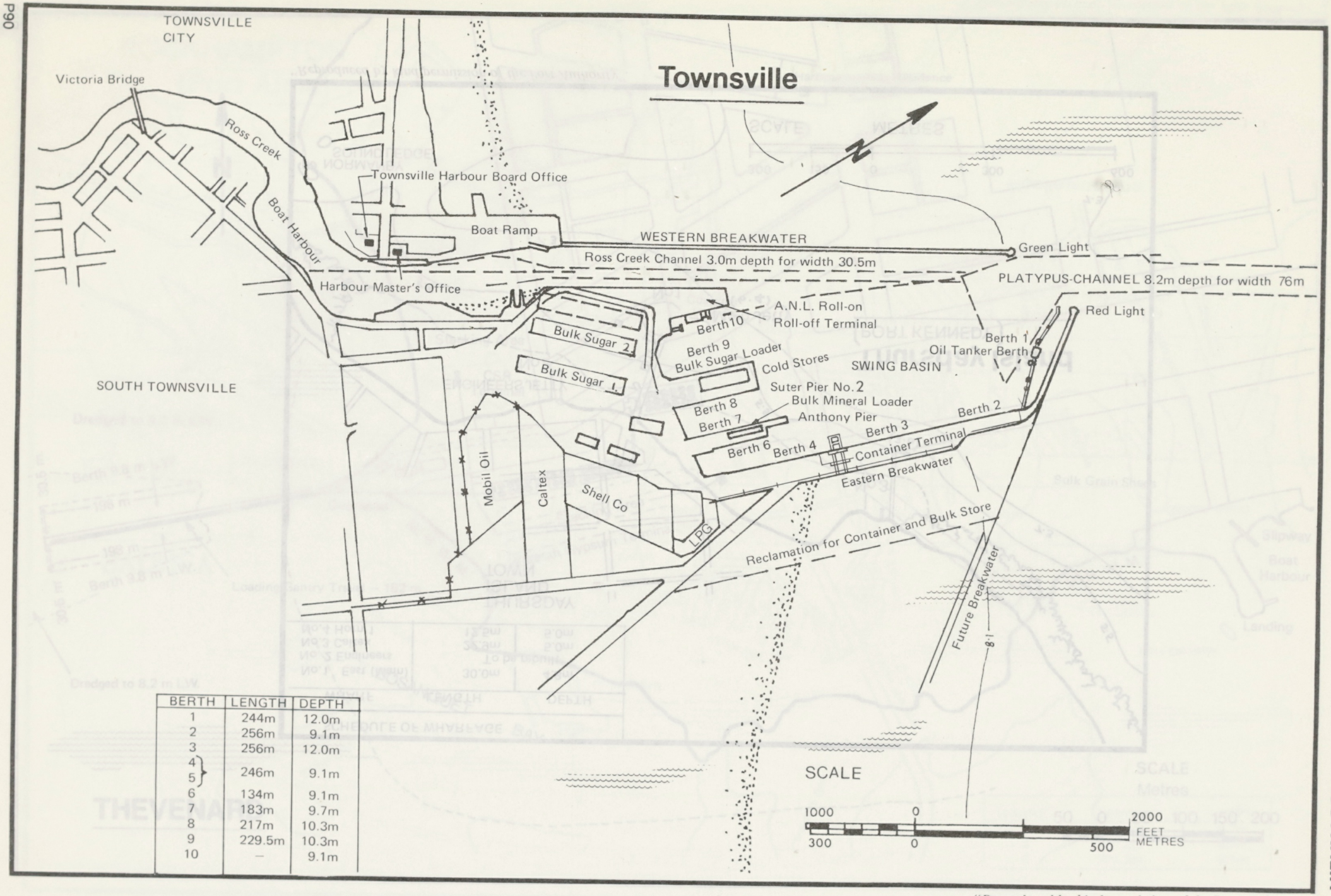

BERTH	LENGTH	DEPTH
1	244m	12.0m
2	256m	9.1m
3	256m	12.0m
4	246m	9.1m
5		
6	134m	9.1m
7	183m	9.7m
8	217m	10.3m
9	229.5m	10.3m
10	—	9.1m

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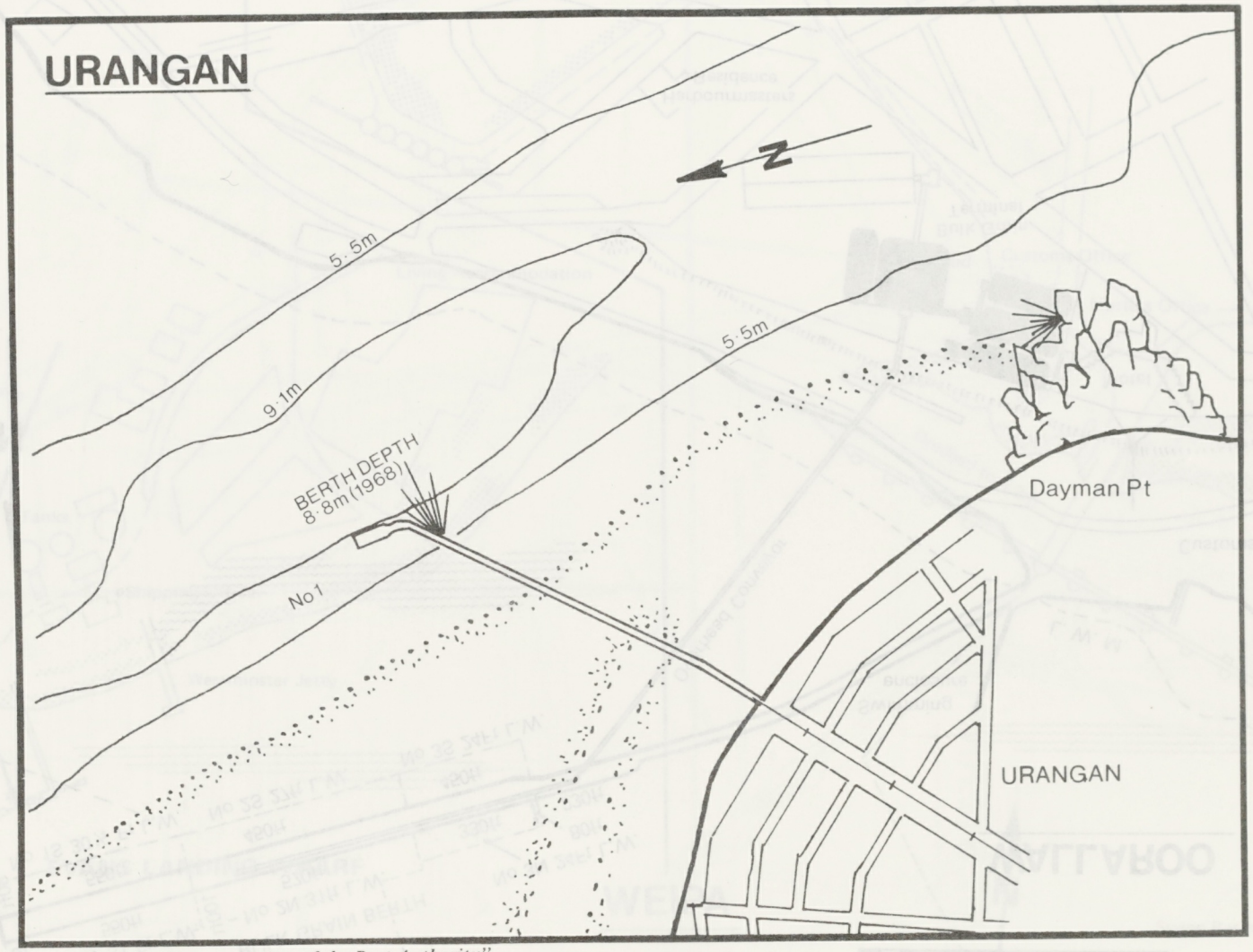

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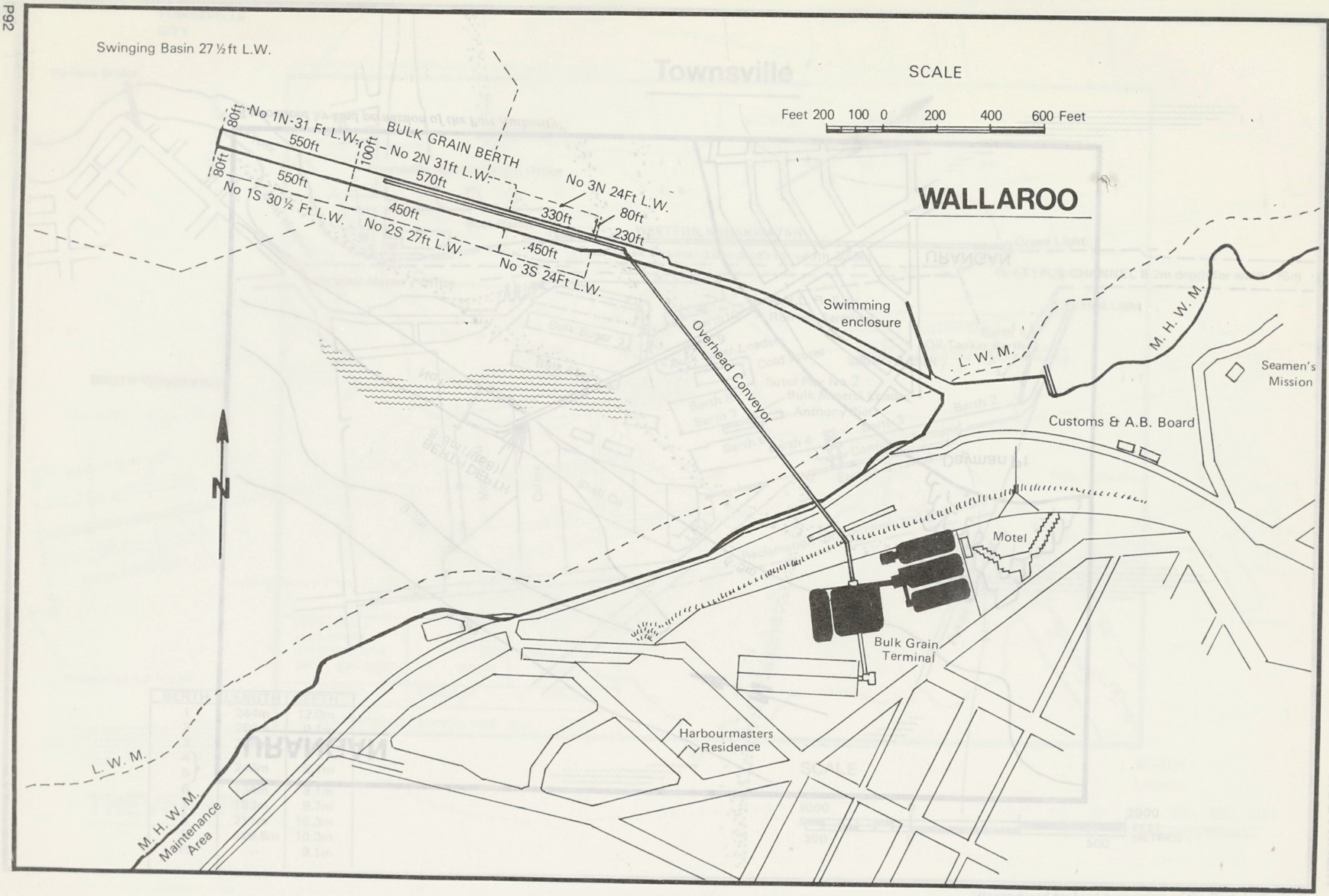

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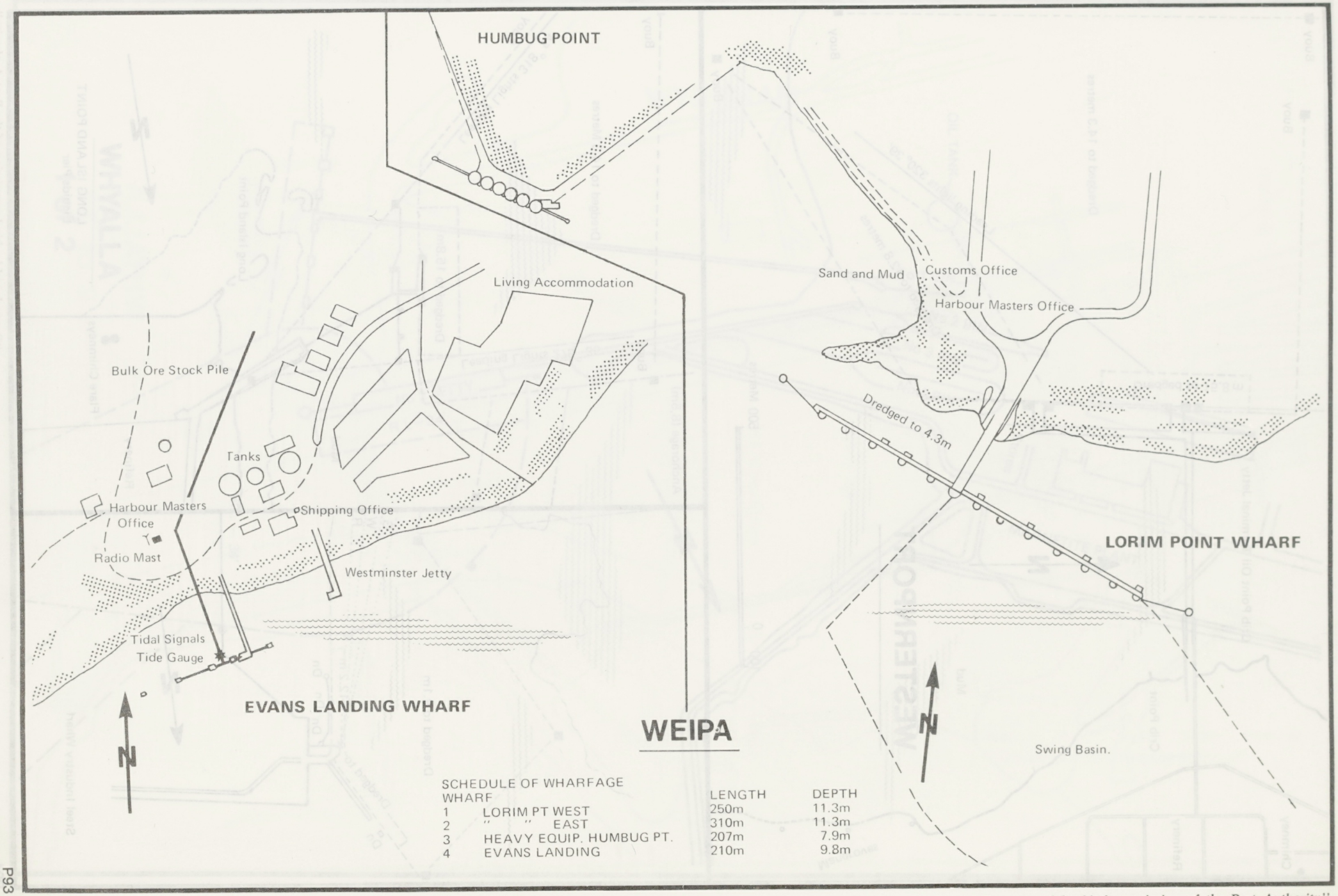

SCHEDULE OF WHARFAGE

WHARF		LENGTH	DEPTH
1	LORIM PT WEST	250m	11.3m
2	" " EAST	310m	11.3m
3	HEAVY EQUIP. HUMBUG PT.	207m	7.9m
4	EVANS LANDING	210m	9.8m

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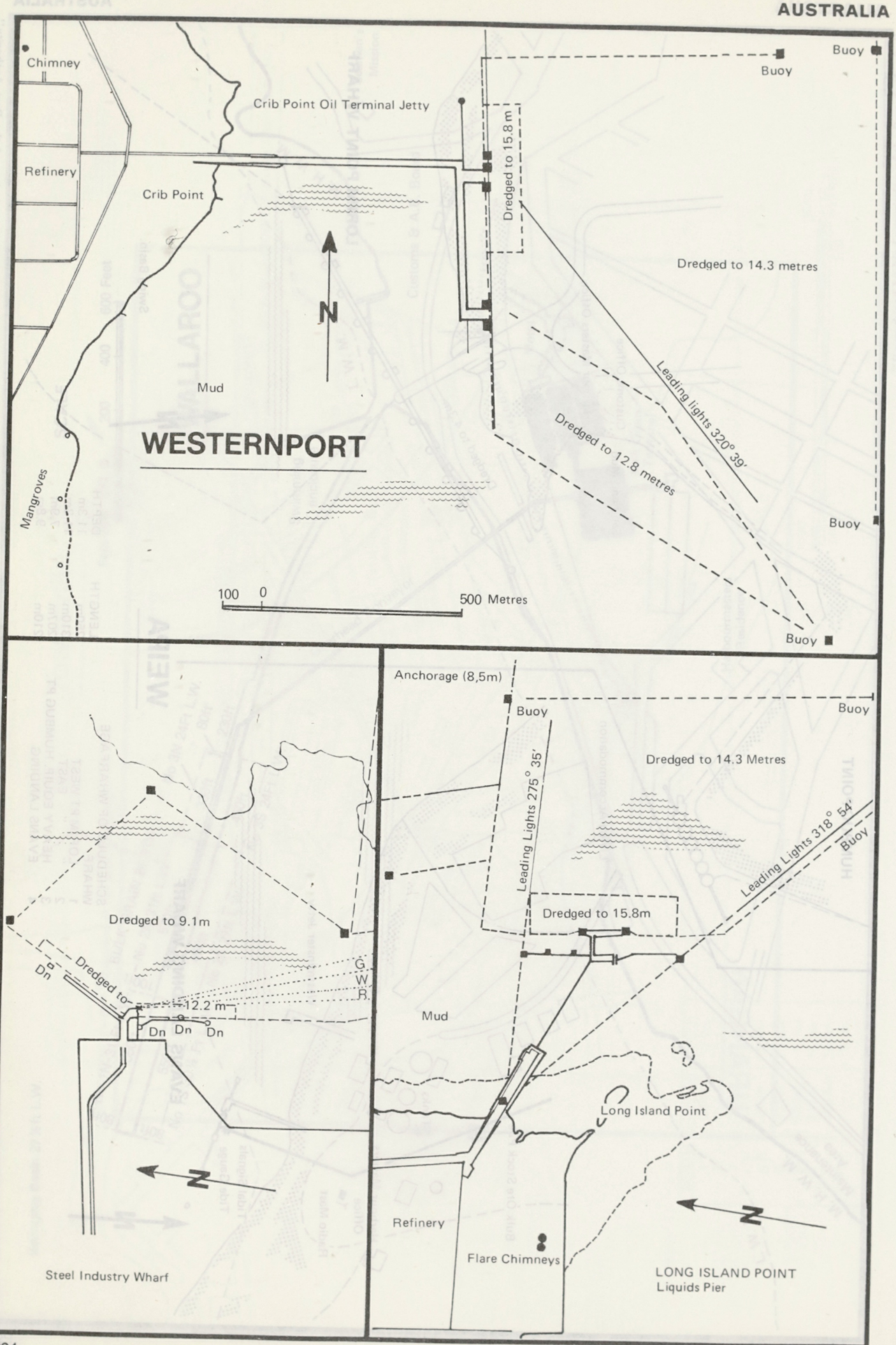

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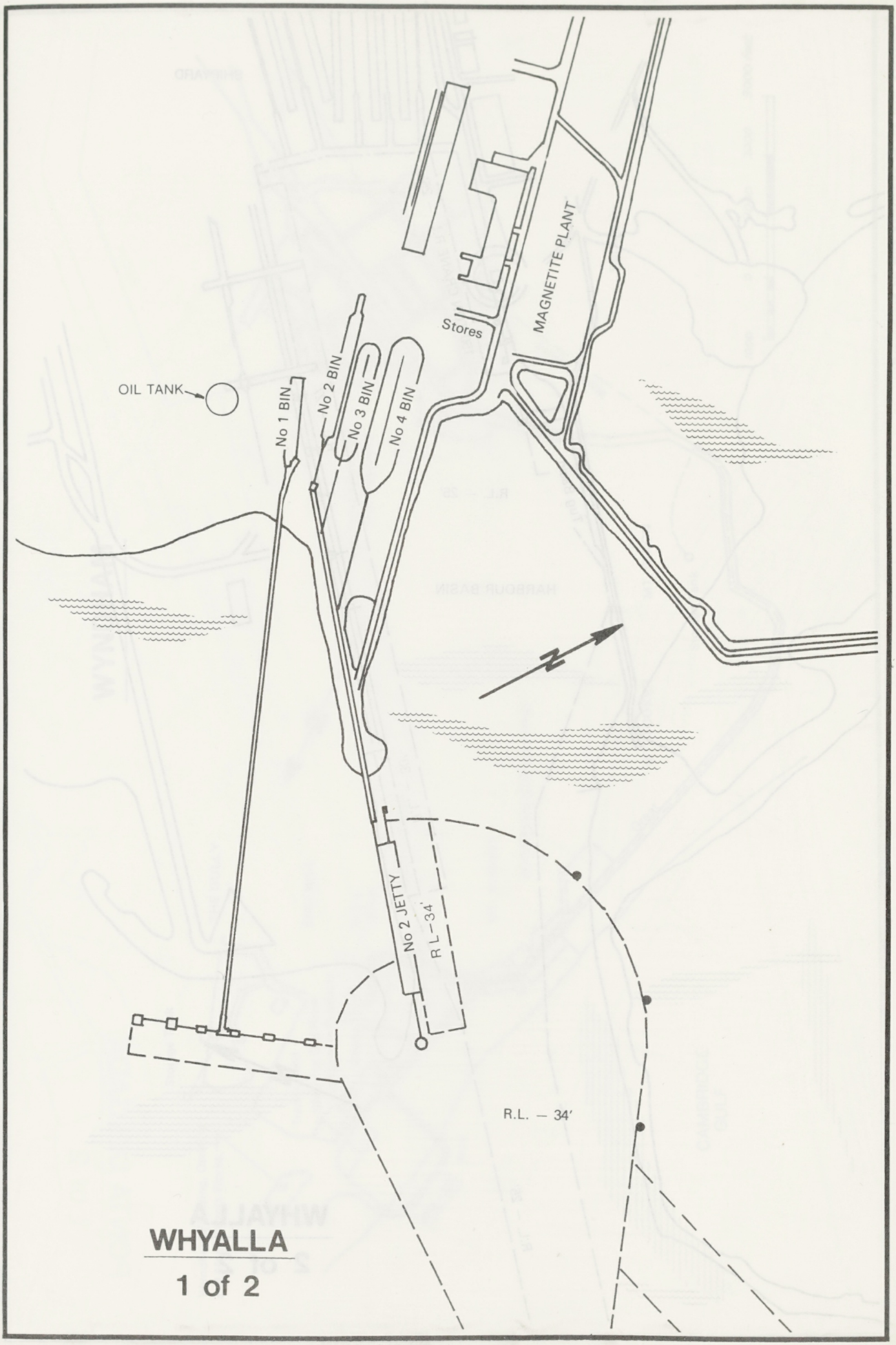

WHYALLA

1 of 2

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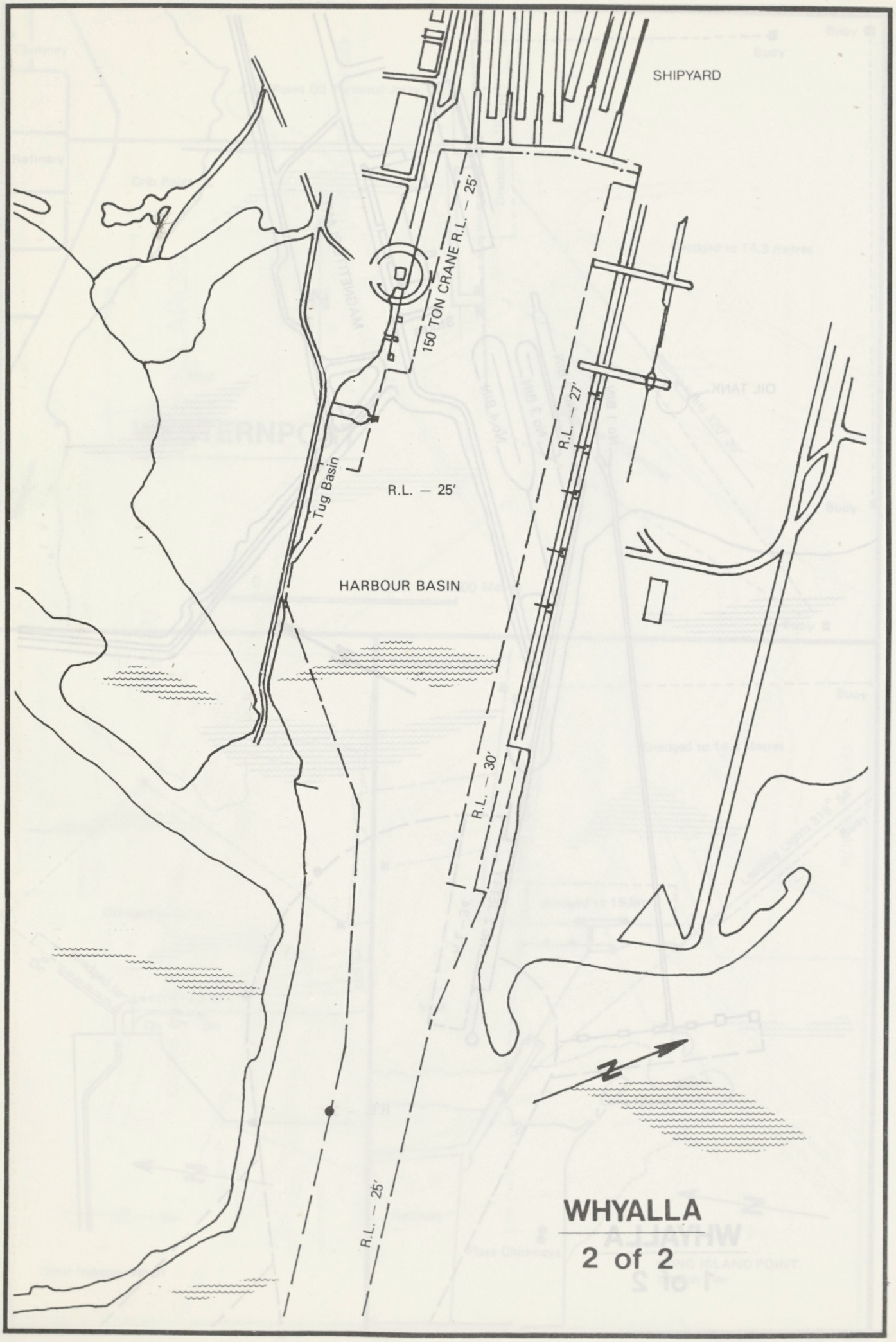

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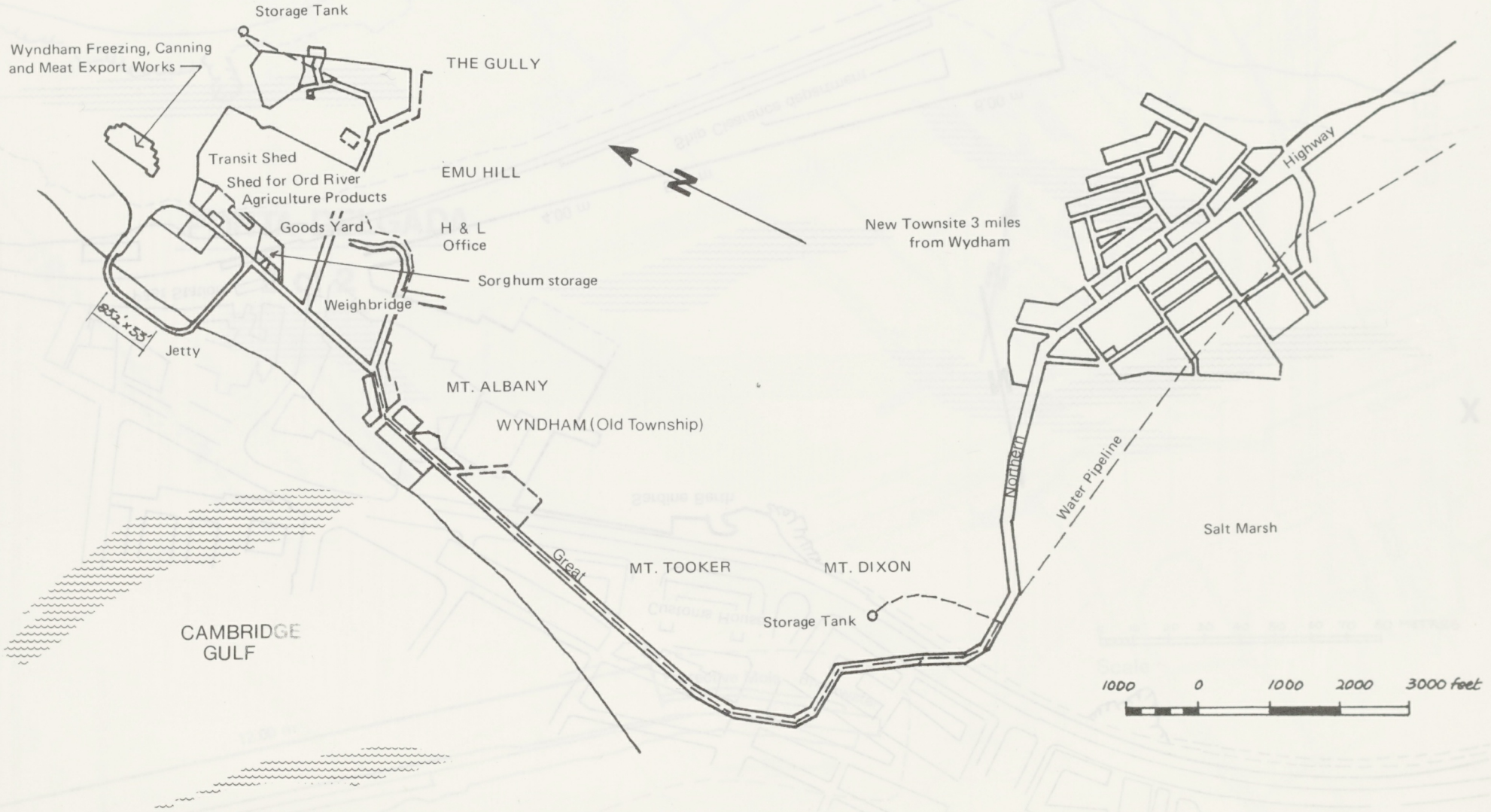
WYNDHAM



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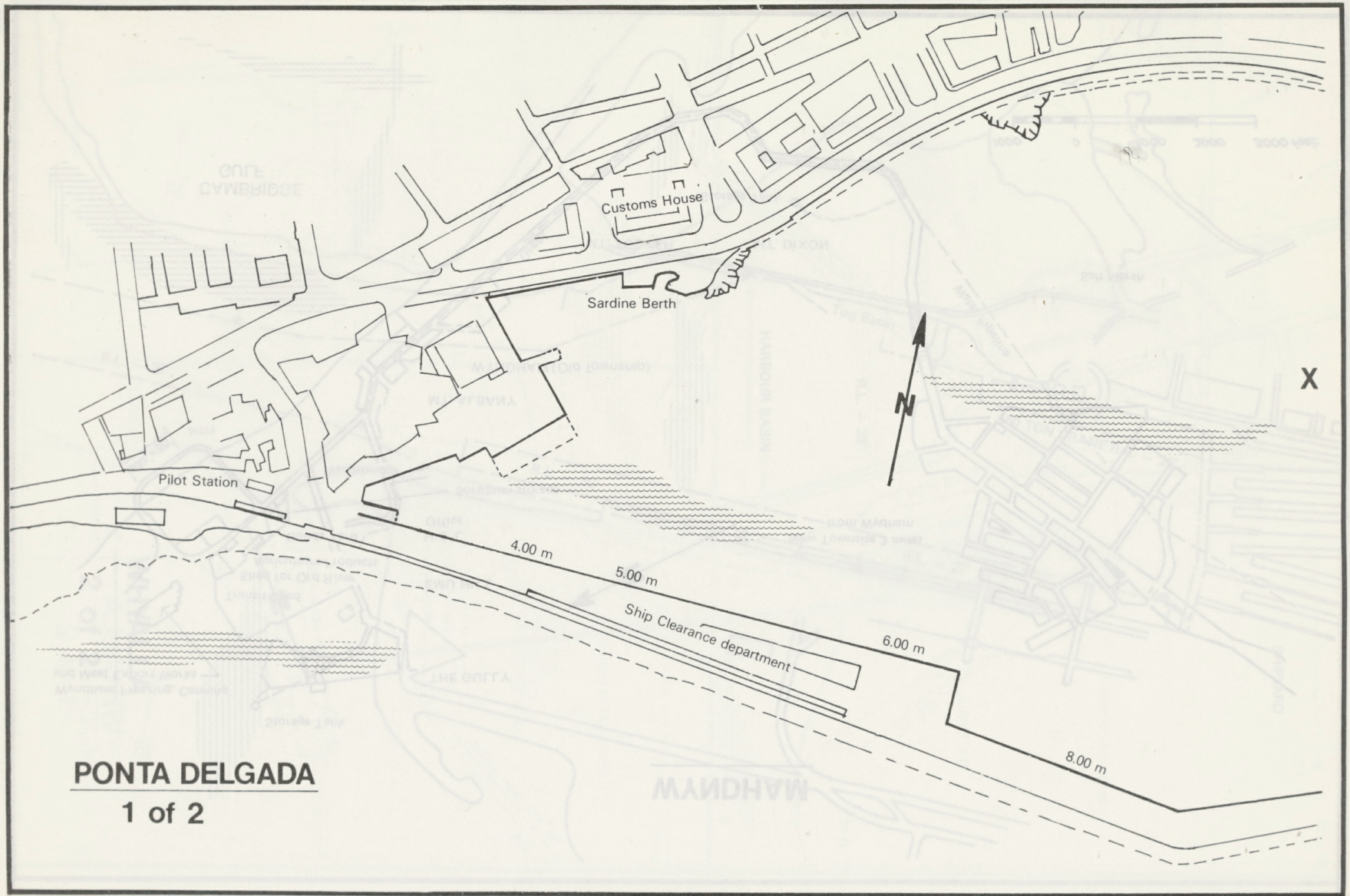

PONTA DELGADA

1 of 2

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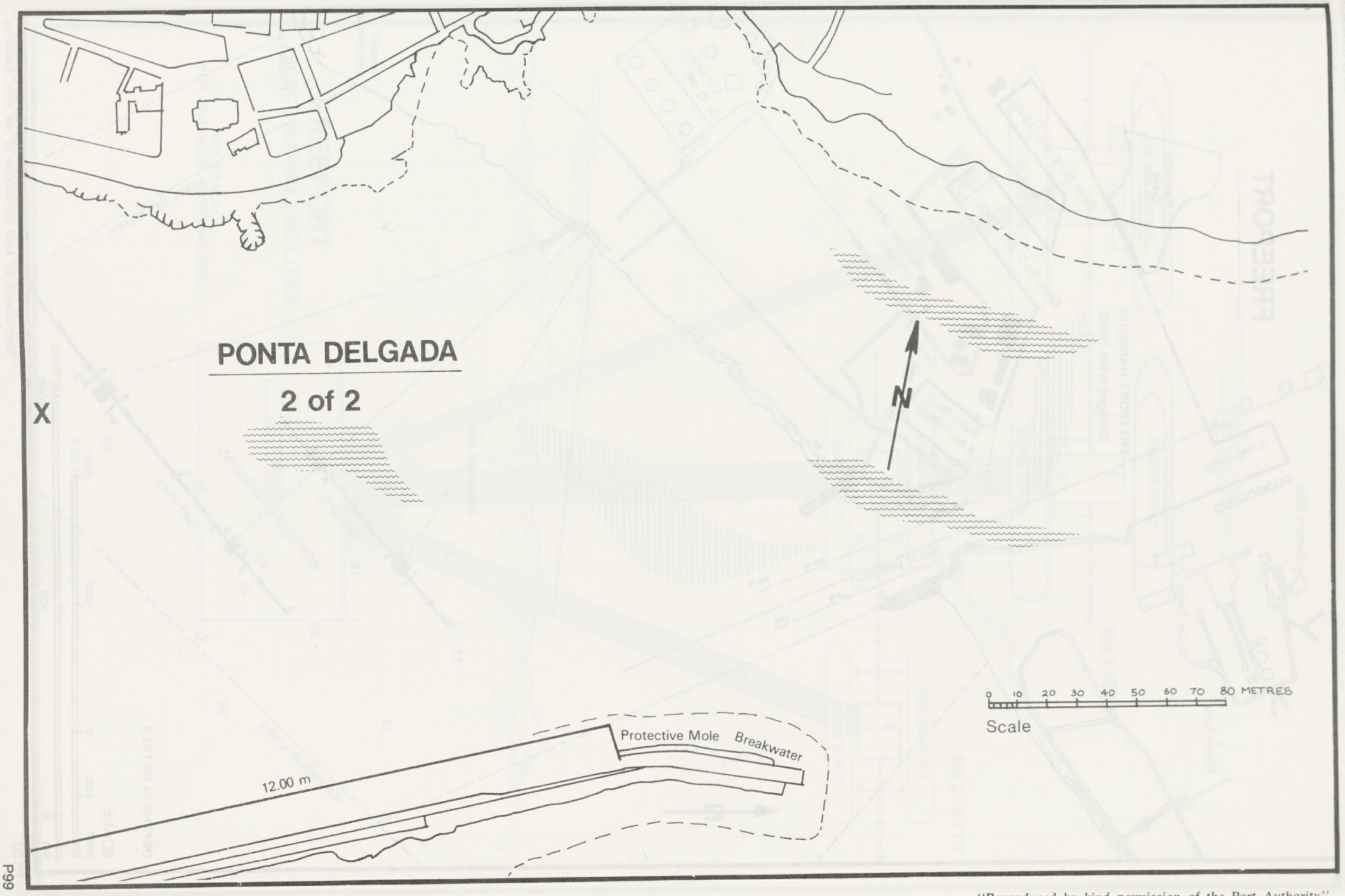

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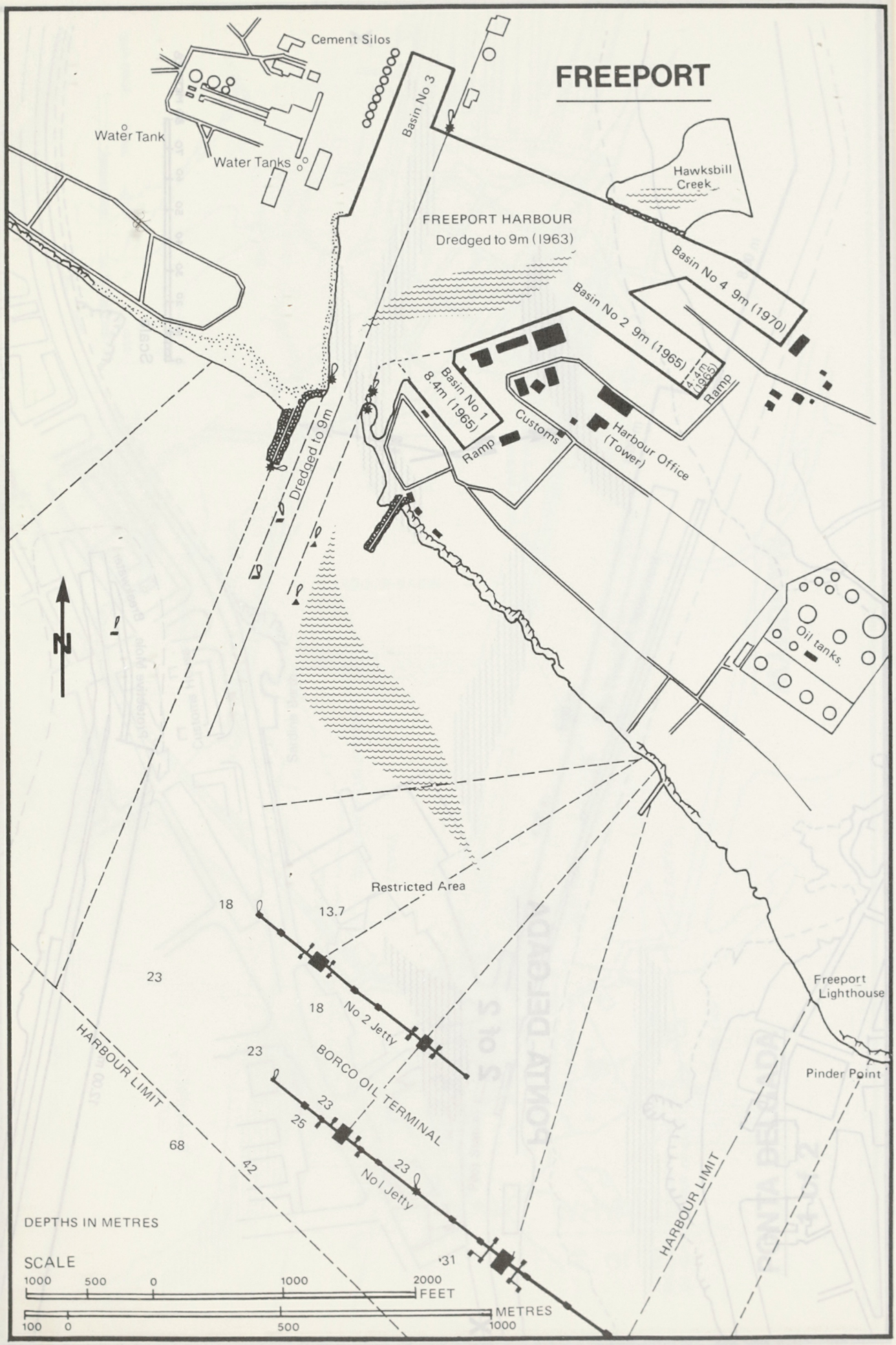

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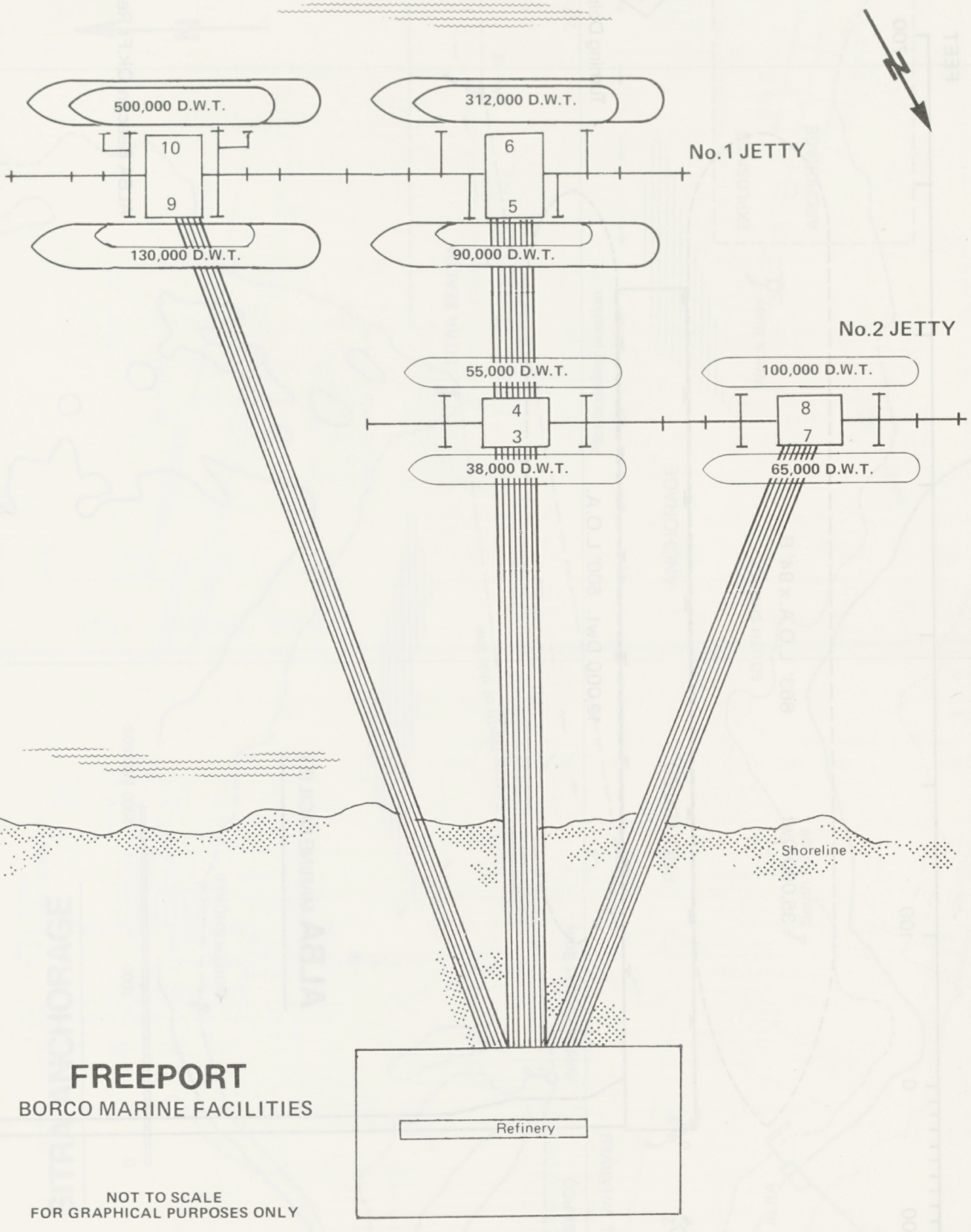

FREEPORT

BORCO MARINE FACILITIES

NOT TO SCALE
FOR GRAPHICAL PURPOSES ONLY

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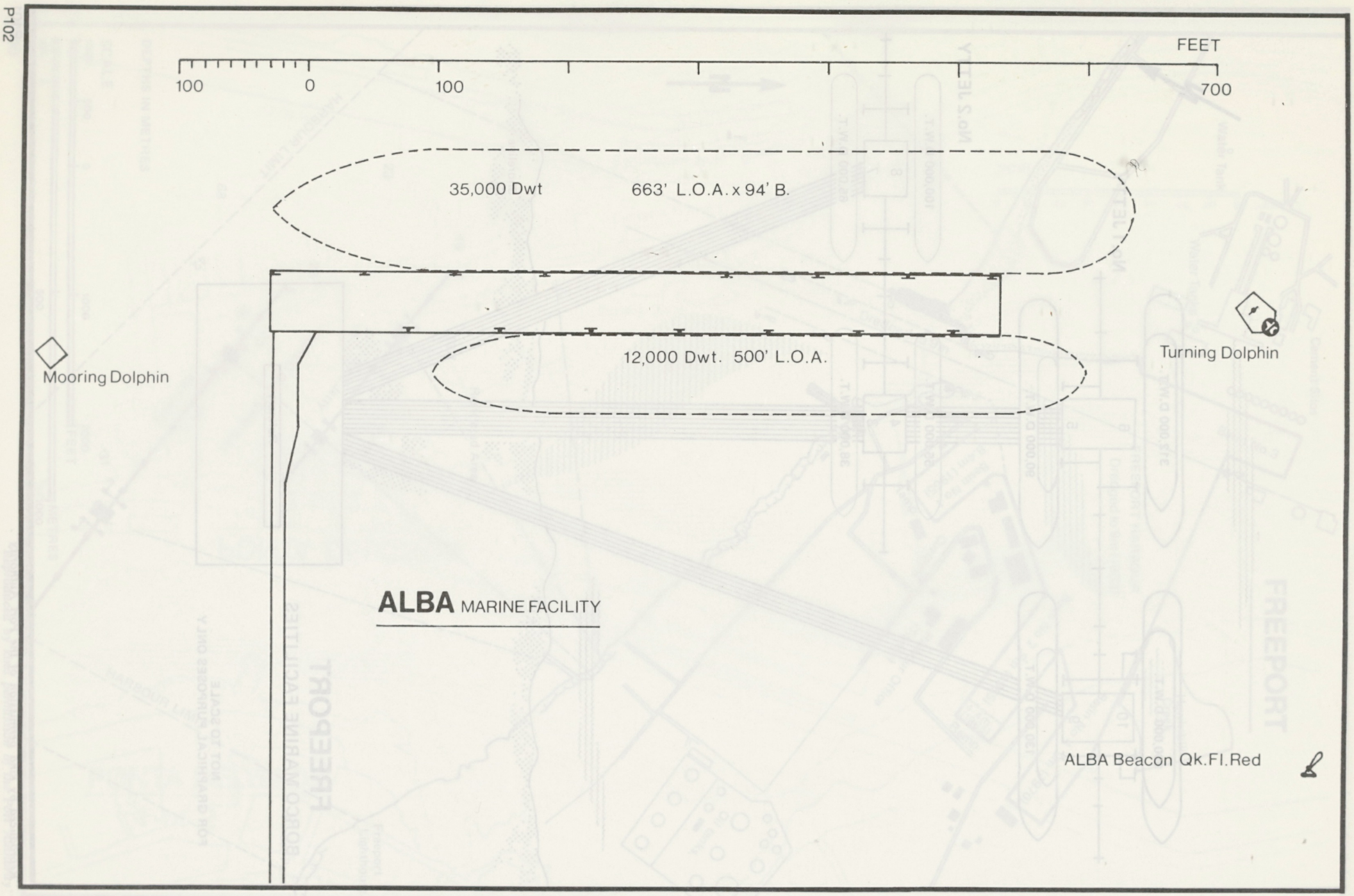

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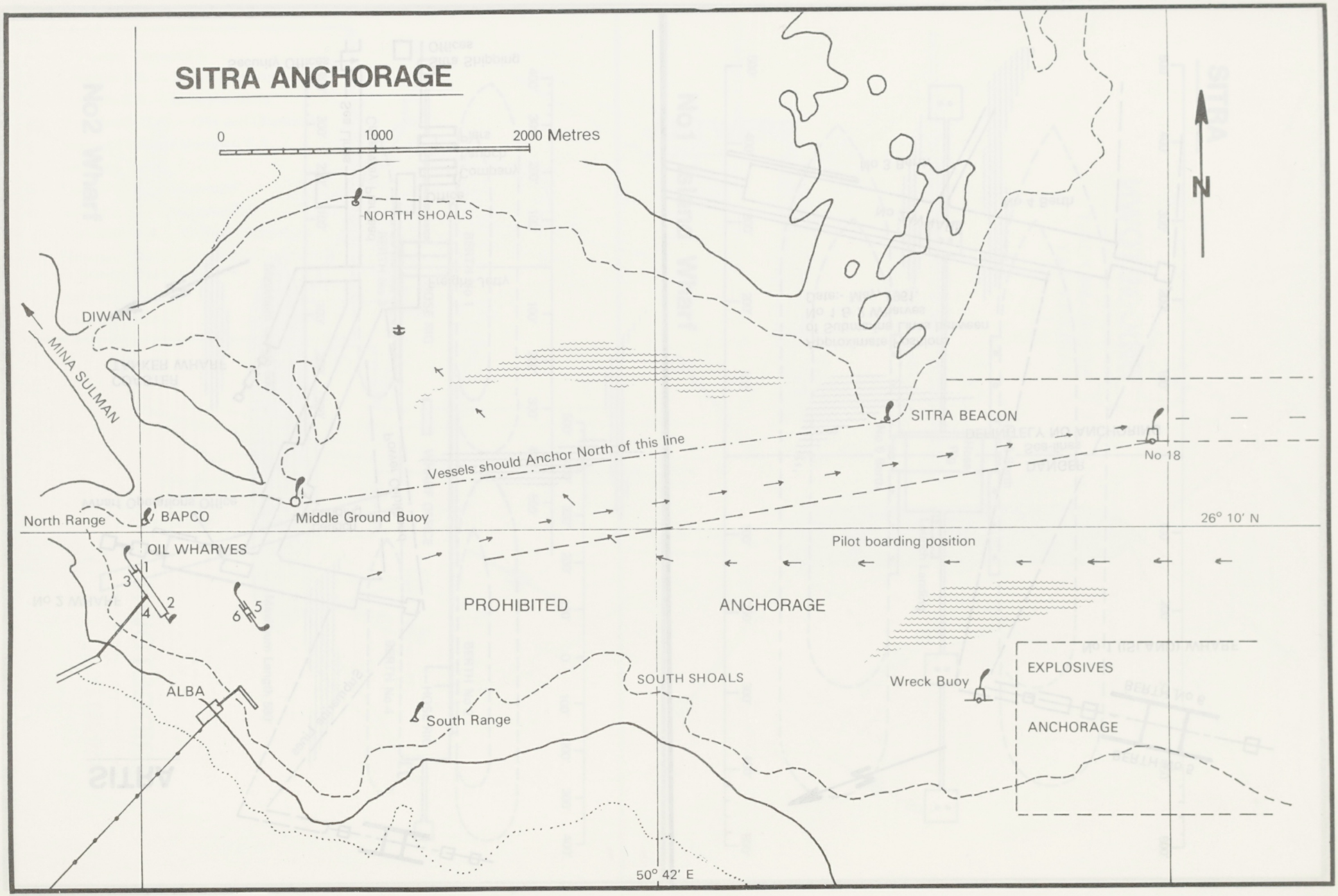

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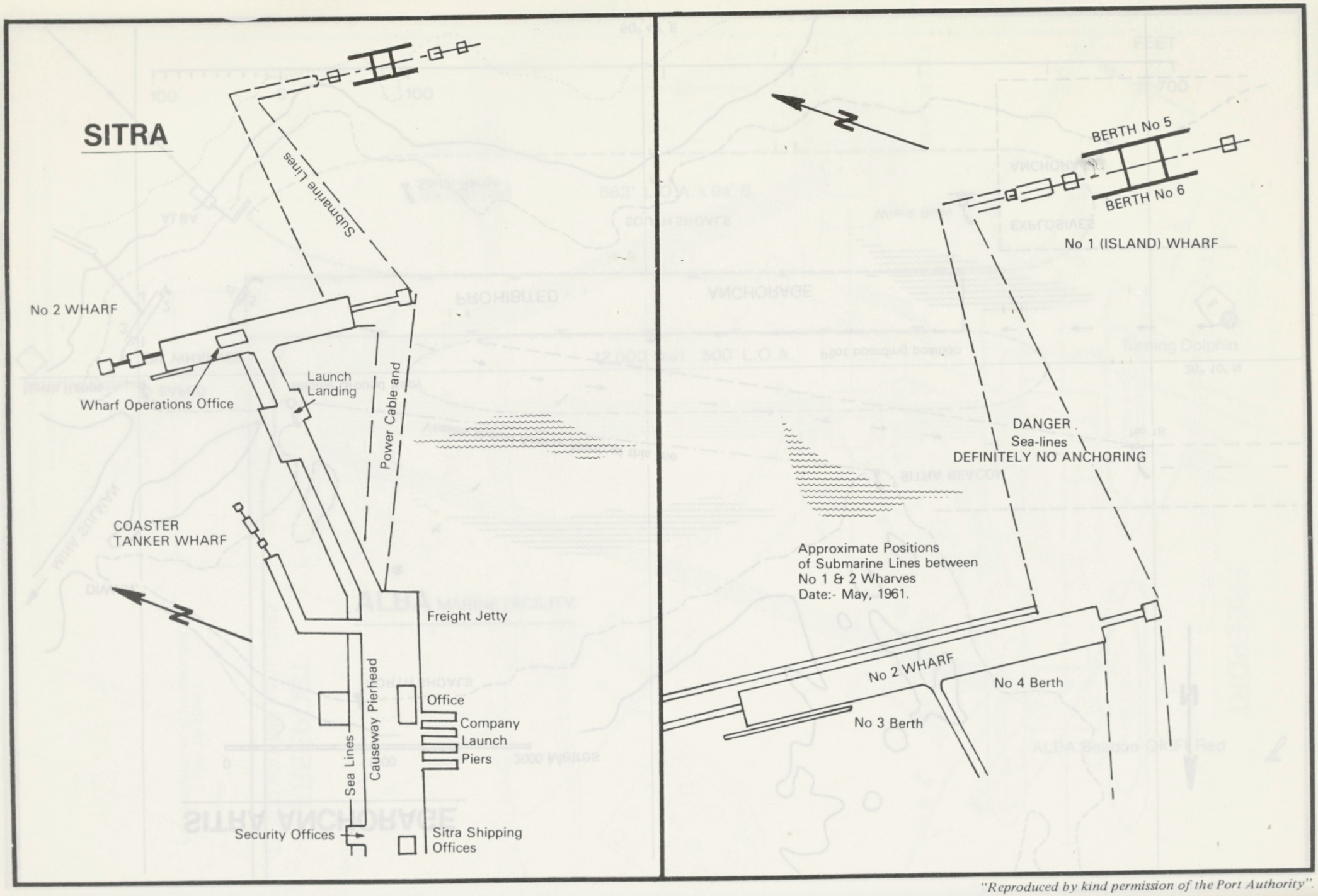

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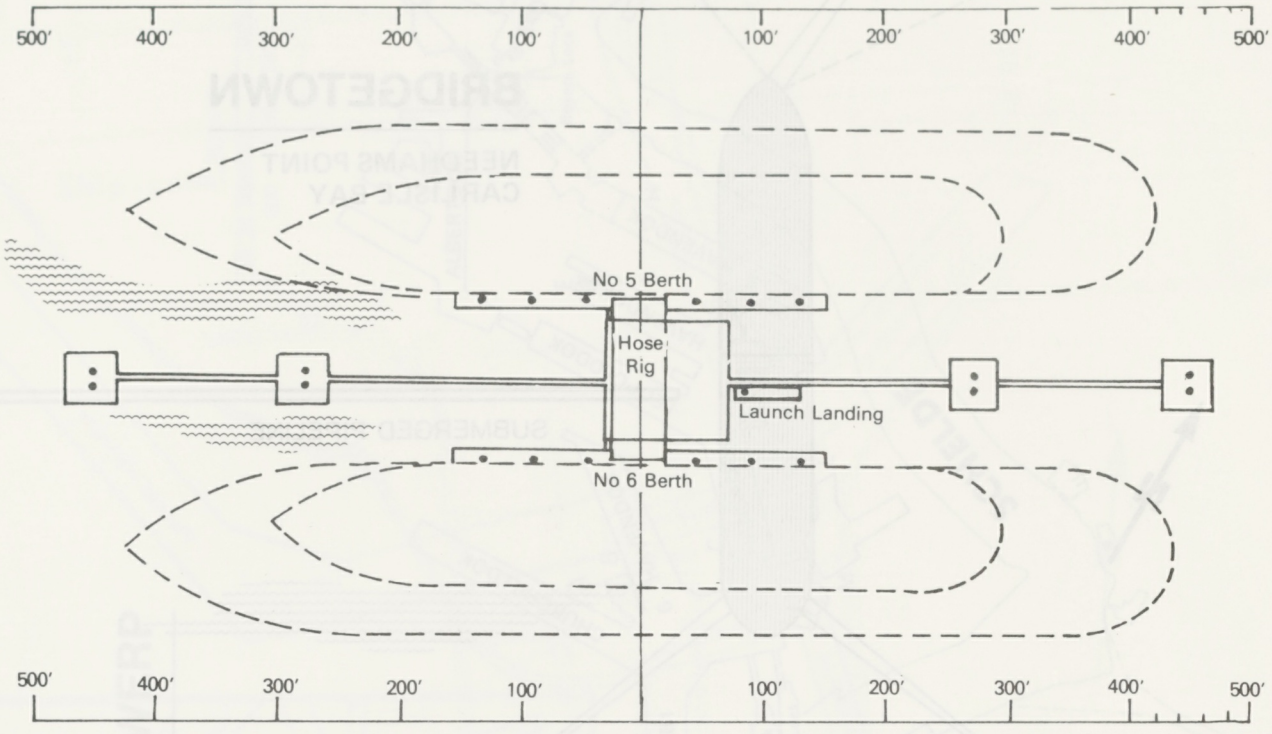
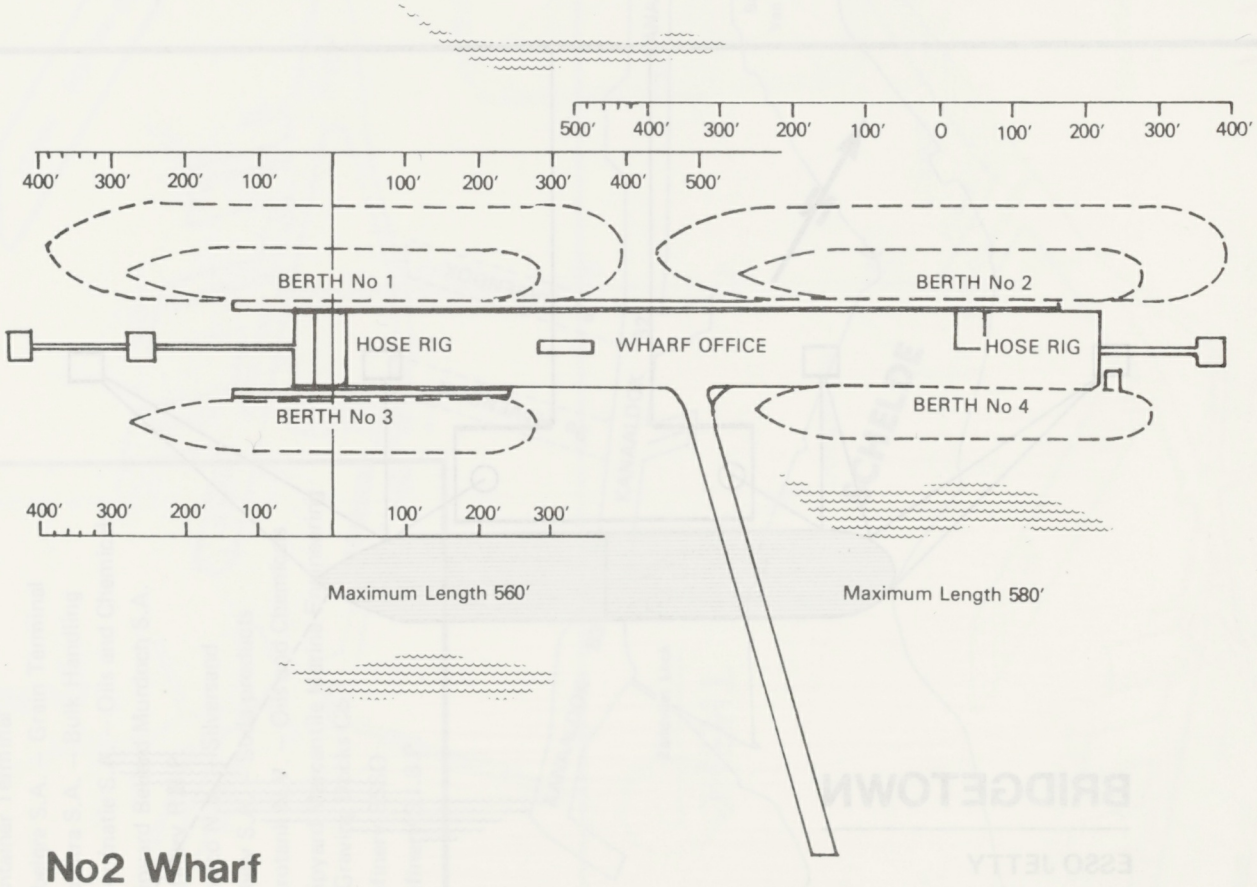
SITRA



No1 Island Wharf



No2 Wharf

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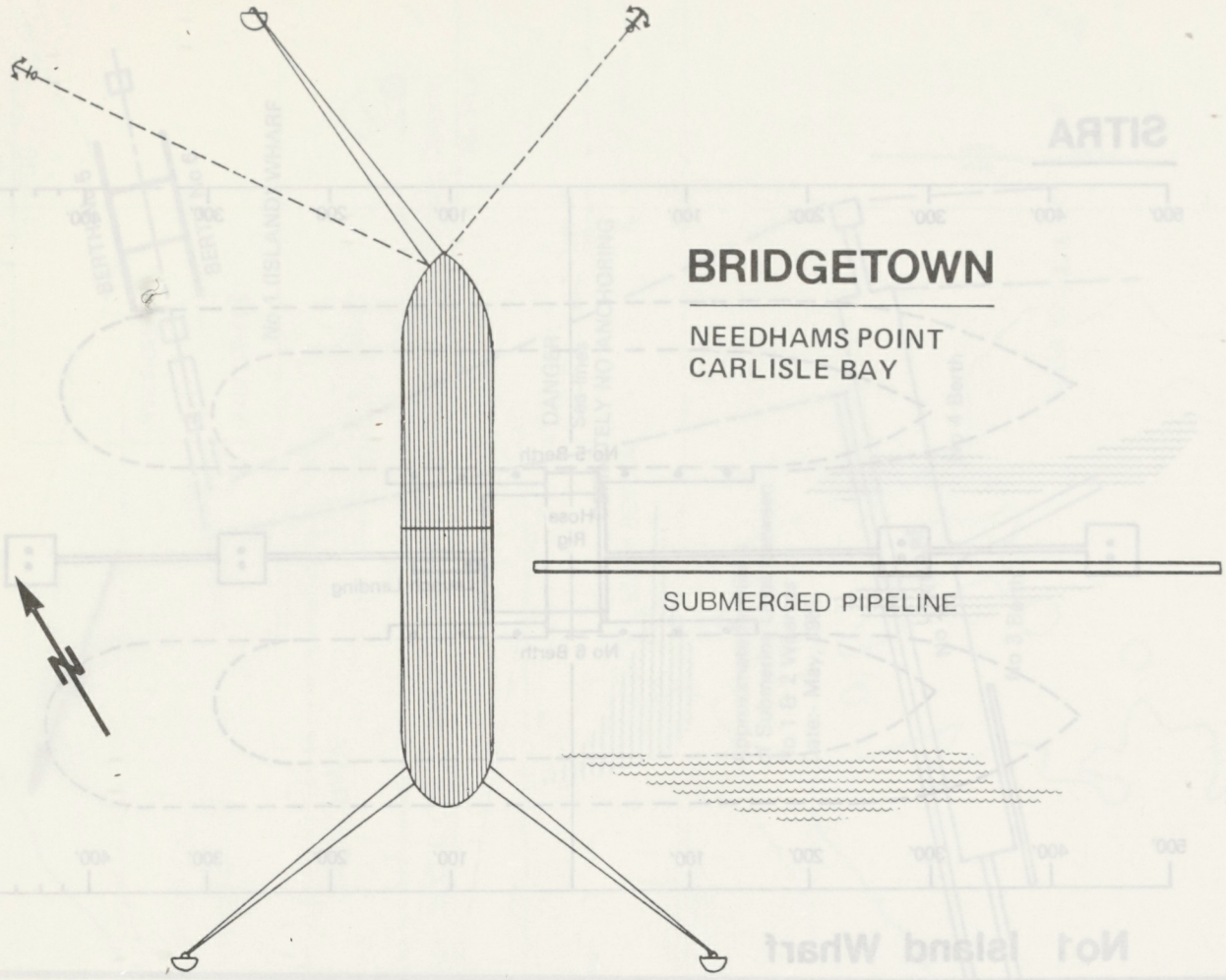

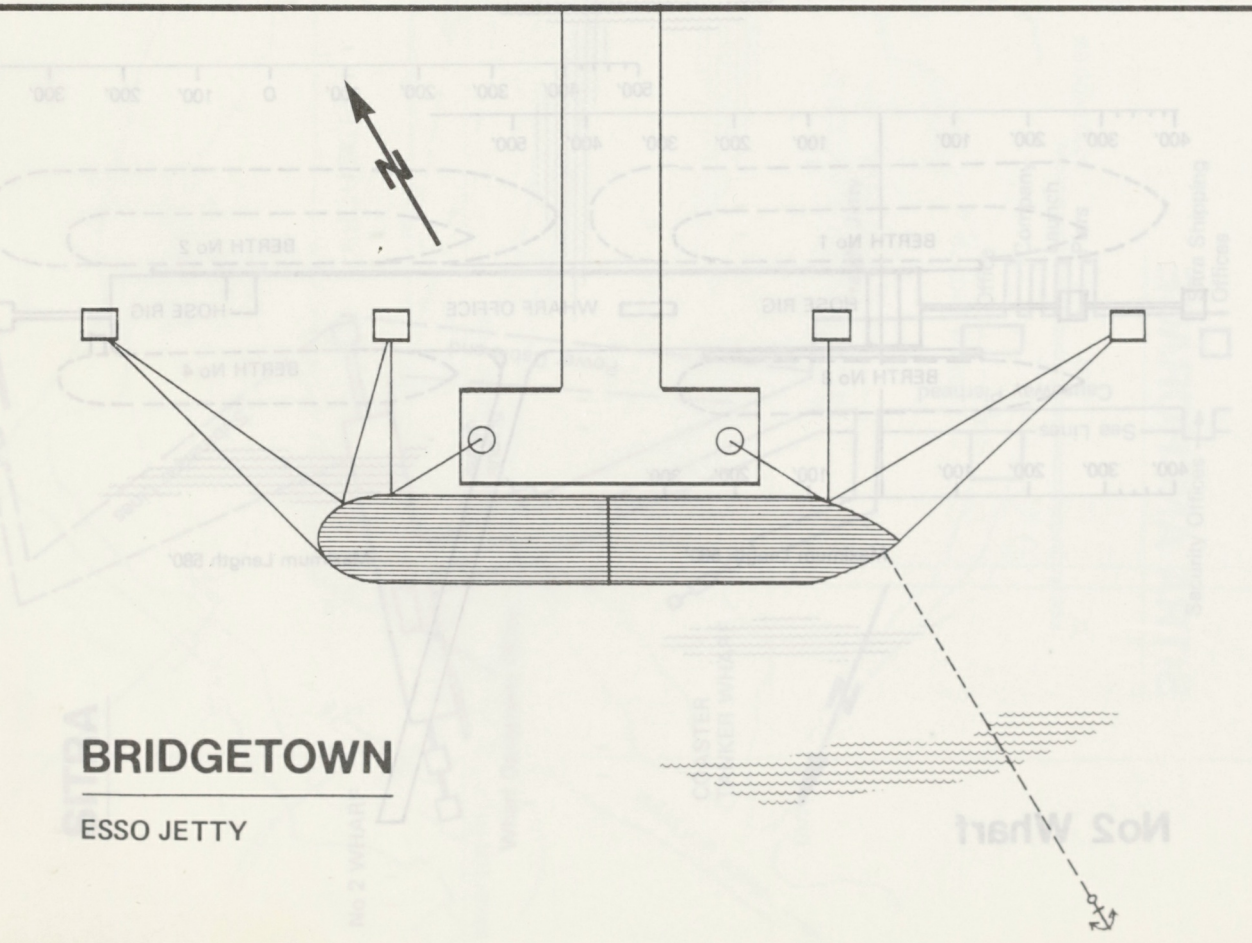

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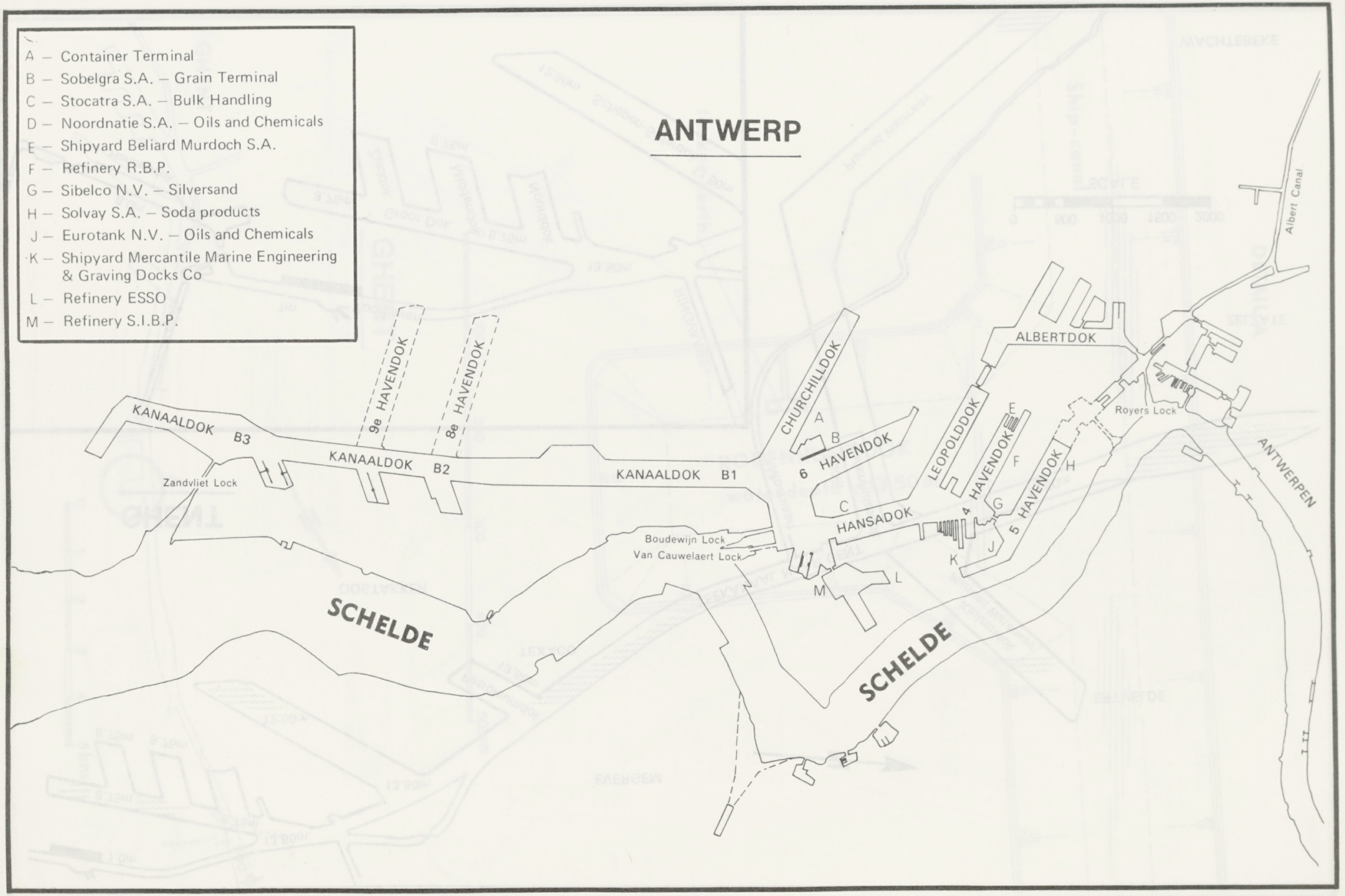

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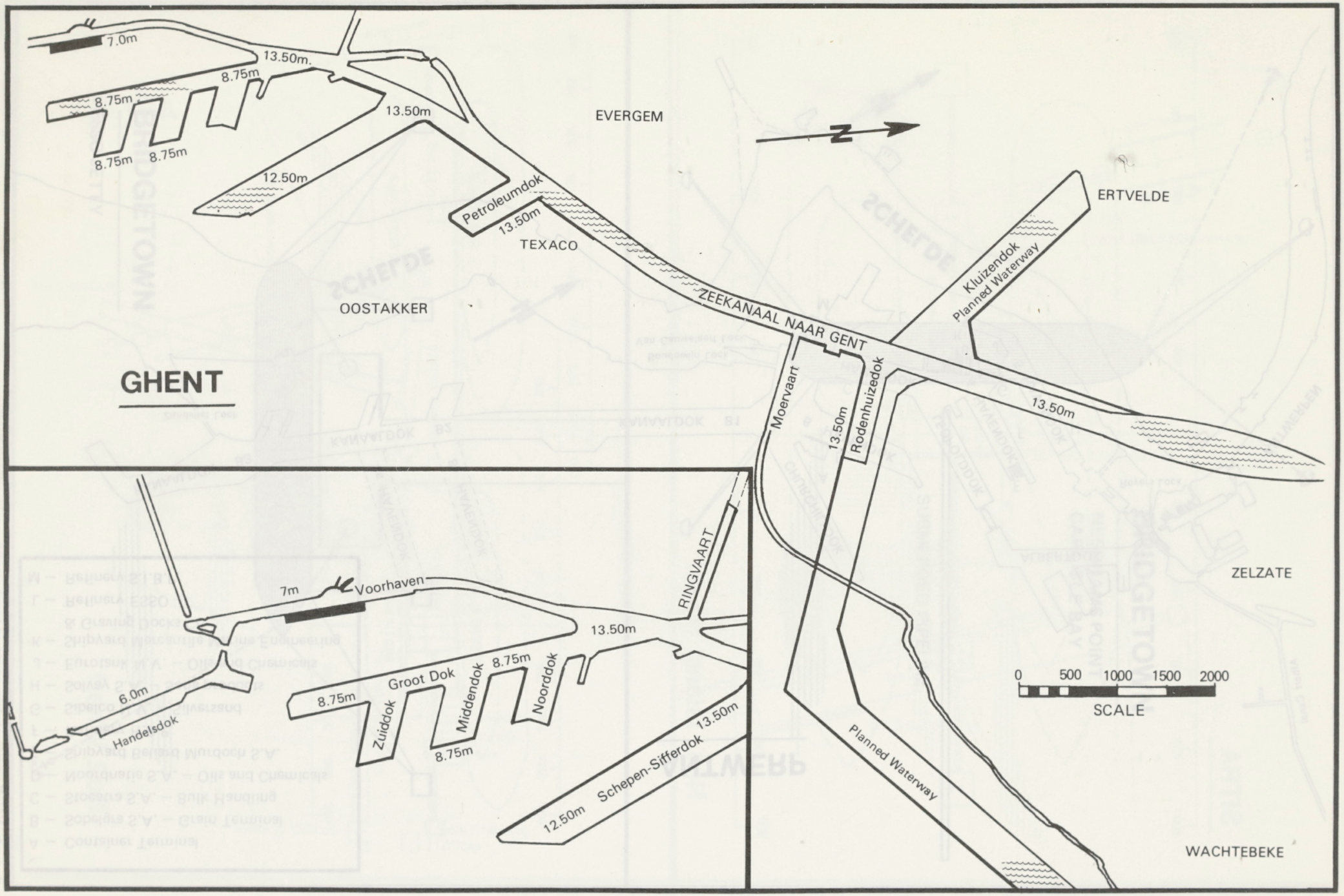

BELGIUM

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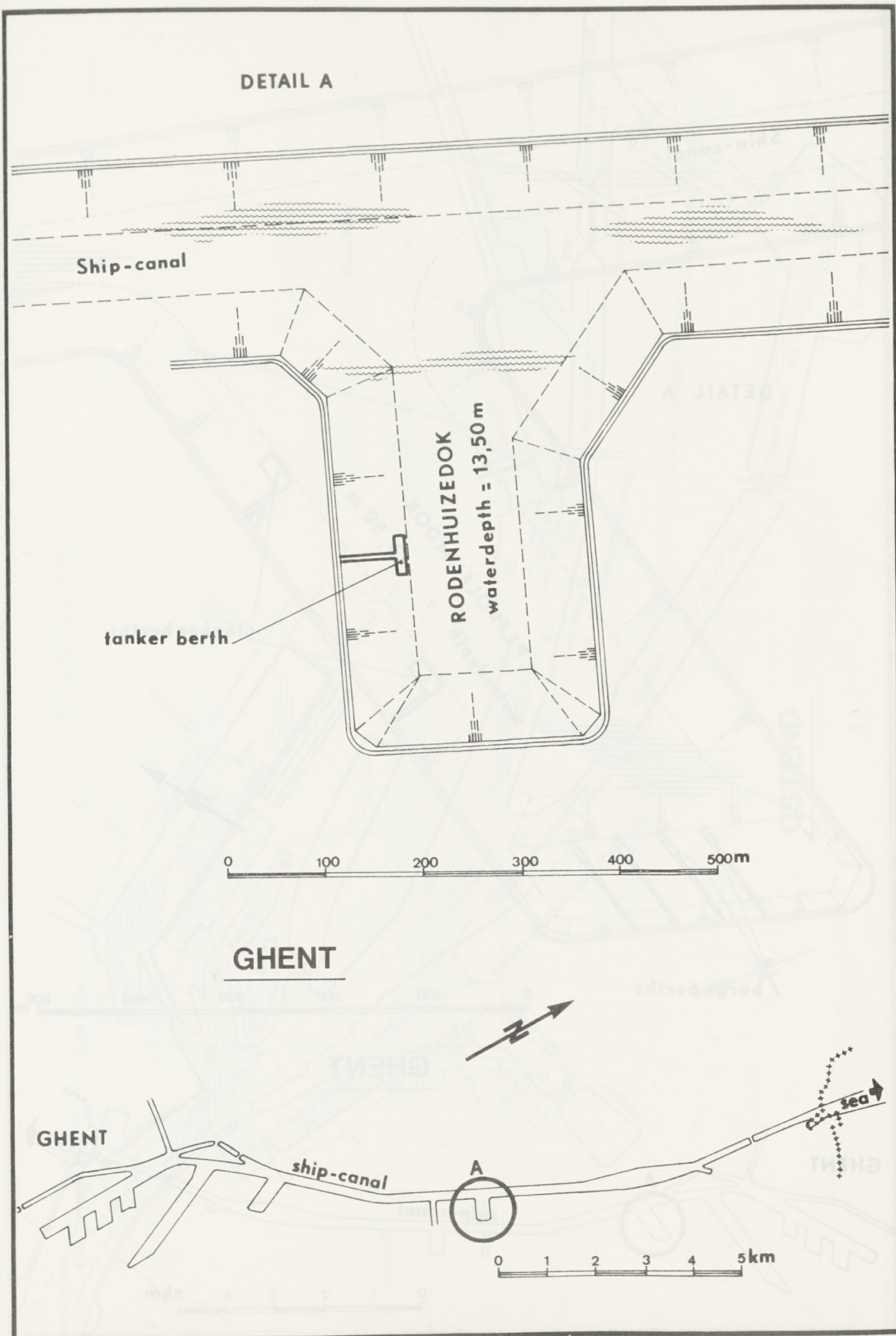

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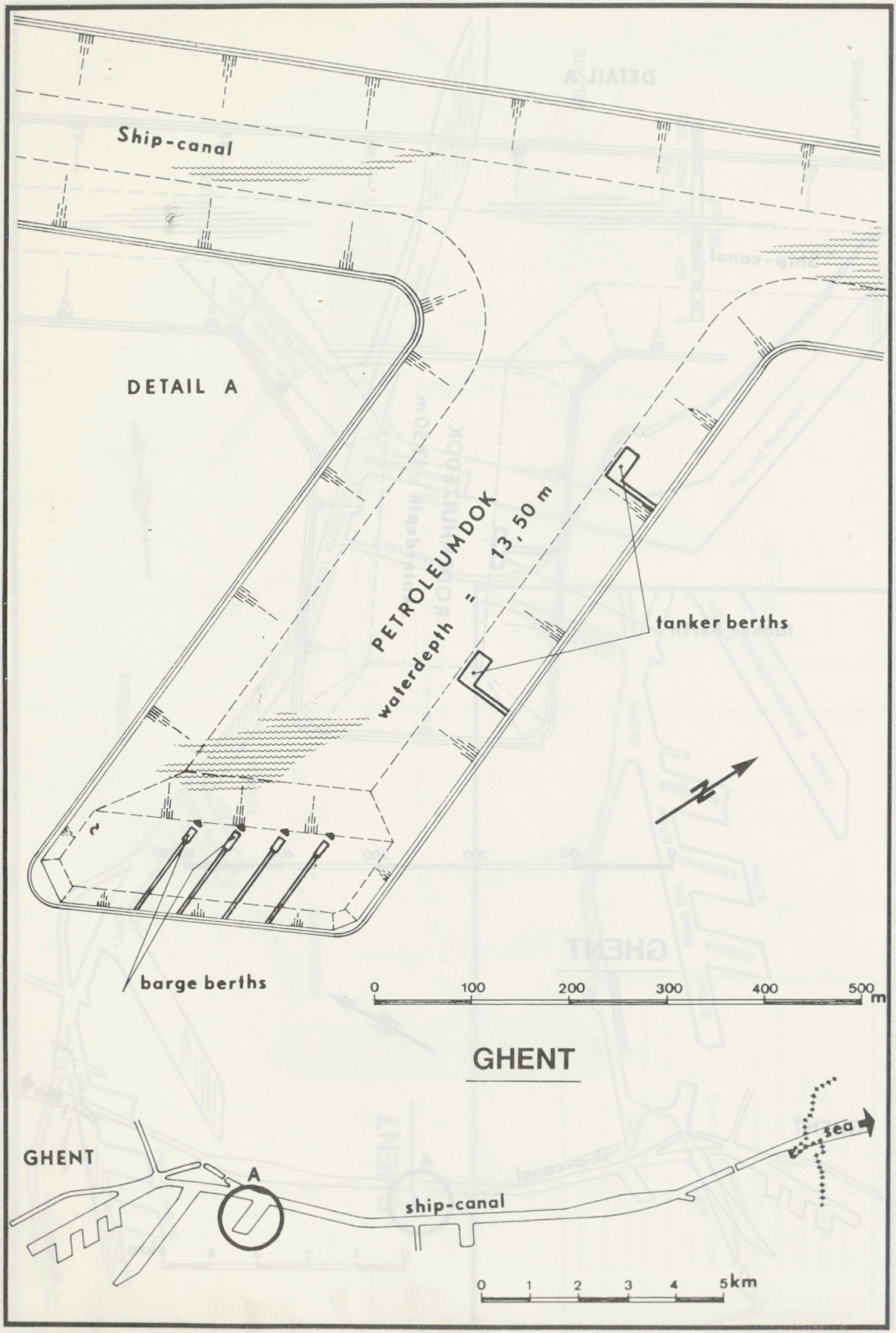

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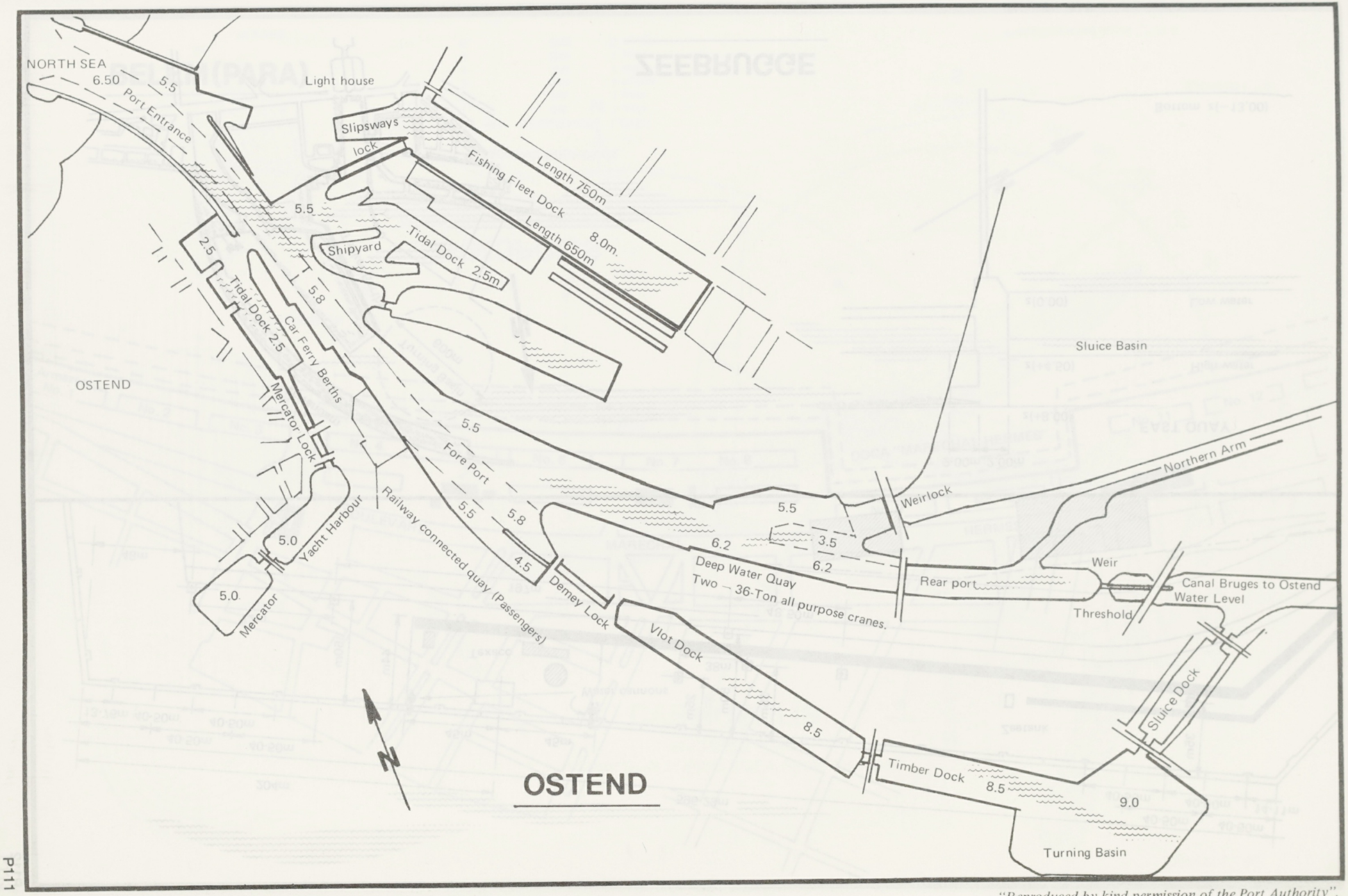

OSTEND

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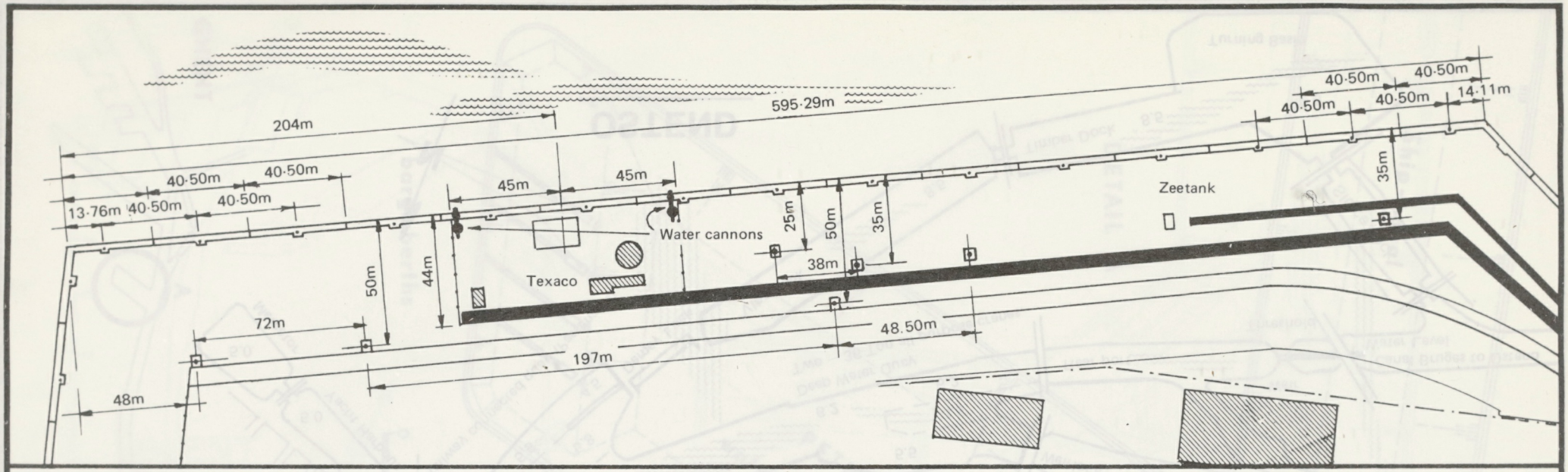

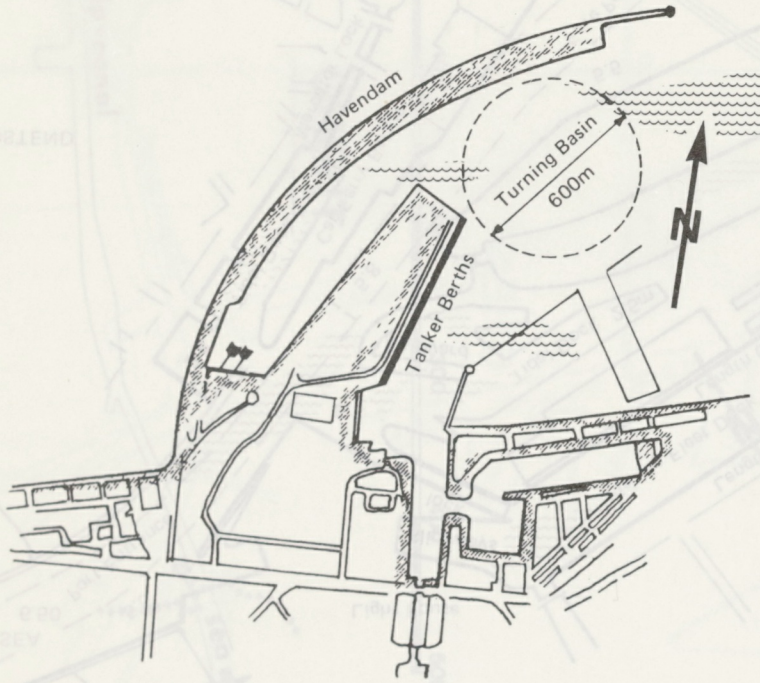

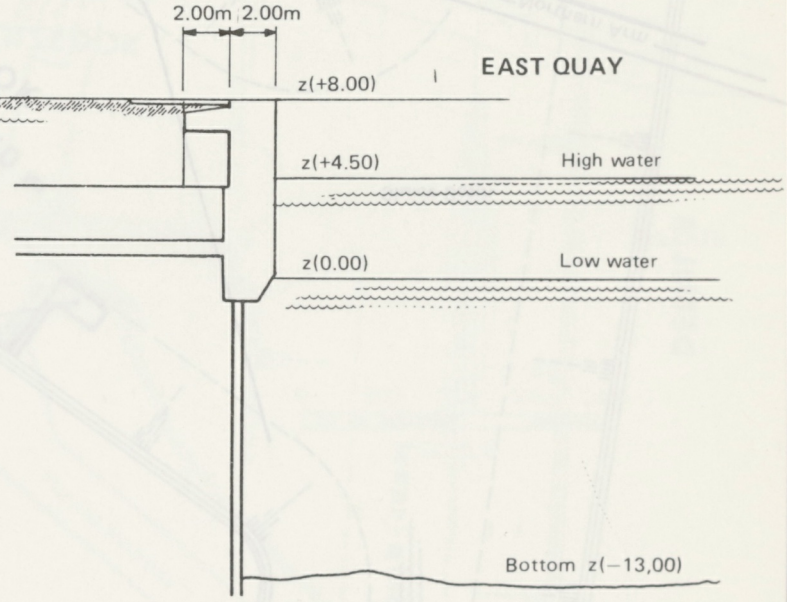

ZEEBRUGGE

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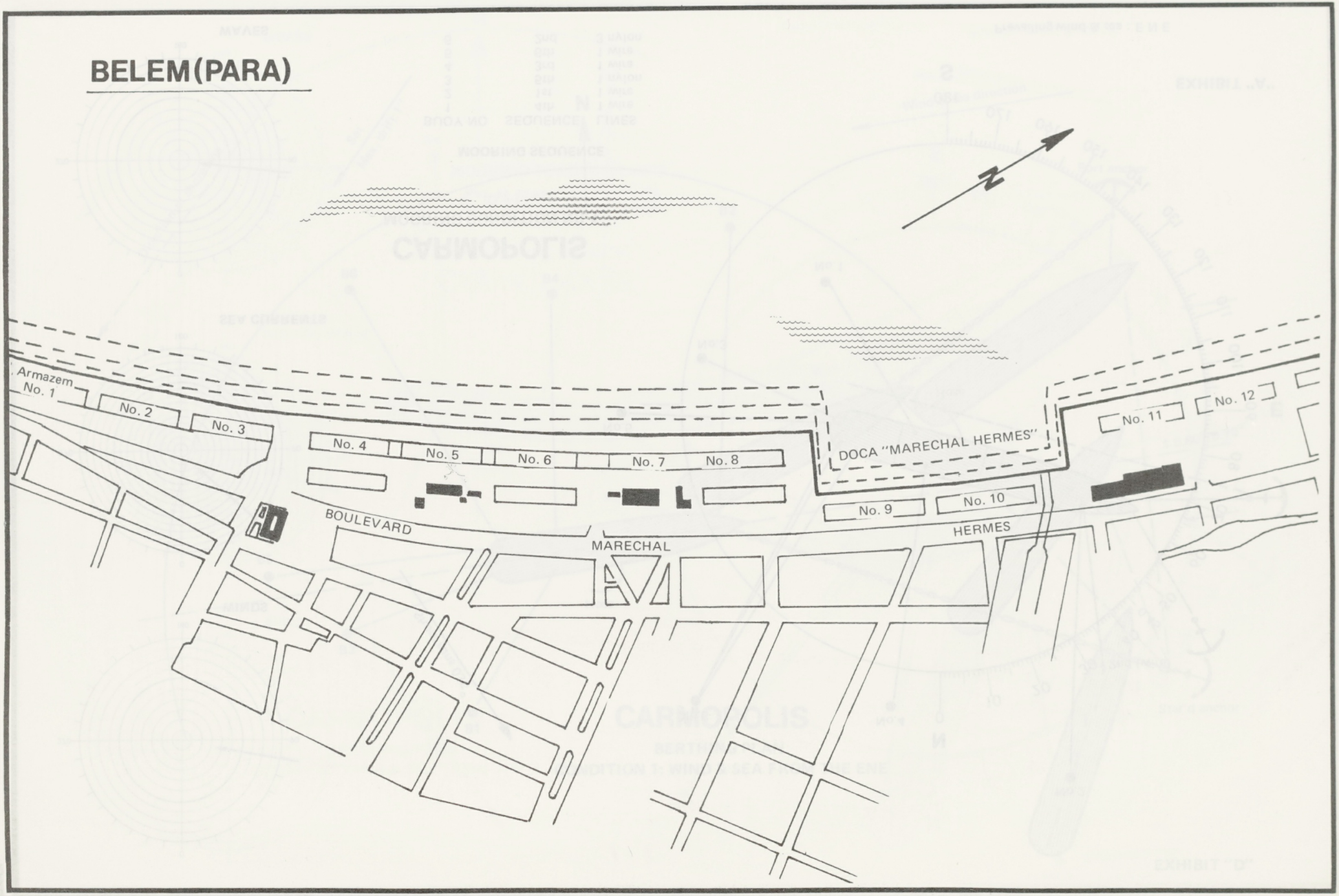
BELEM (PARA)



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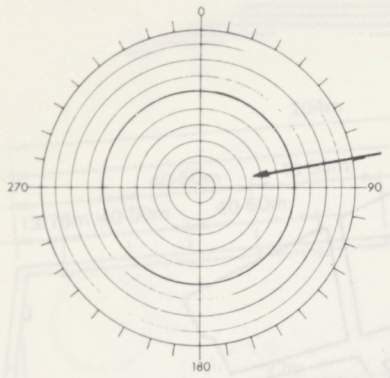
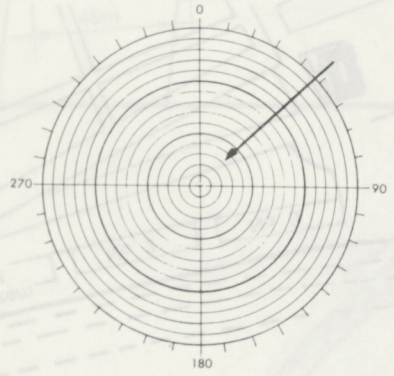
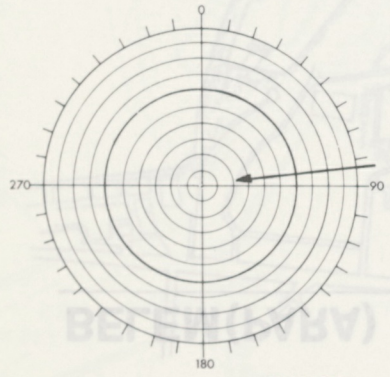


WINDS

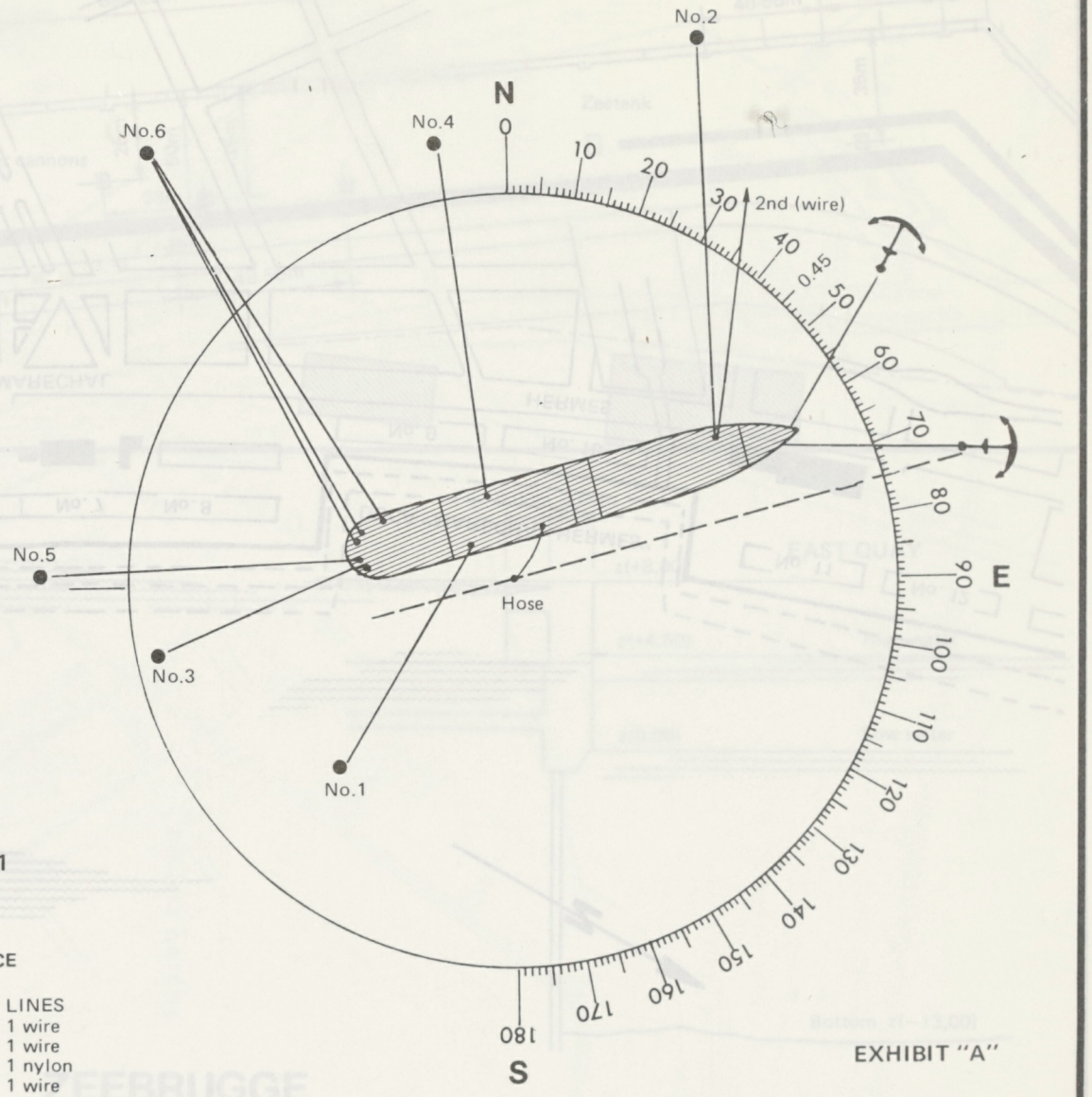


SEA CURRENTS



WAVES

Shore runs 035°



CARMOPOLIS

MOORING CONDITION NR.1

MOORING SEQUENCE

BUOY NO	SEQUENCE	LINES
1	4th	1 wire
2	1st	1 wire
3	5th	1 nylon
4	3rd	1 wire
5	6th	1 wire
6	2nd	3 nylon

EXHIBIT "A"

Prevailing wind & sea : E N E

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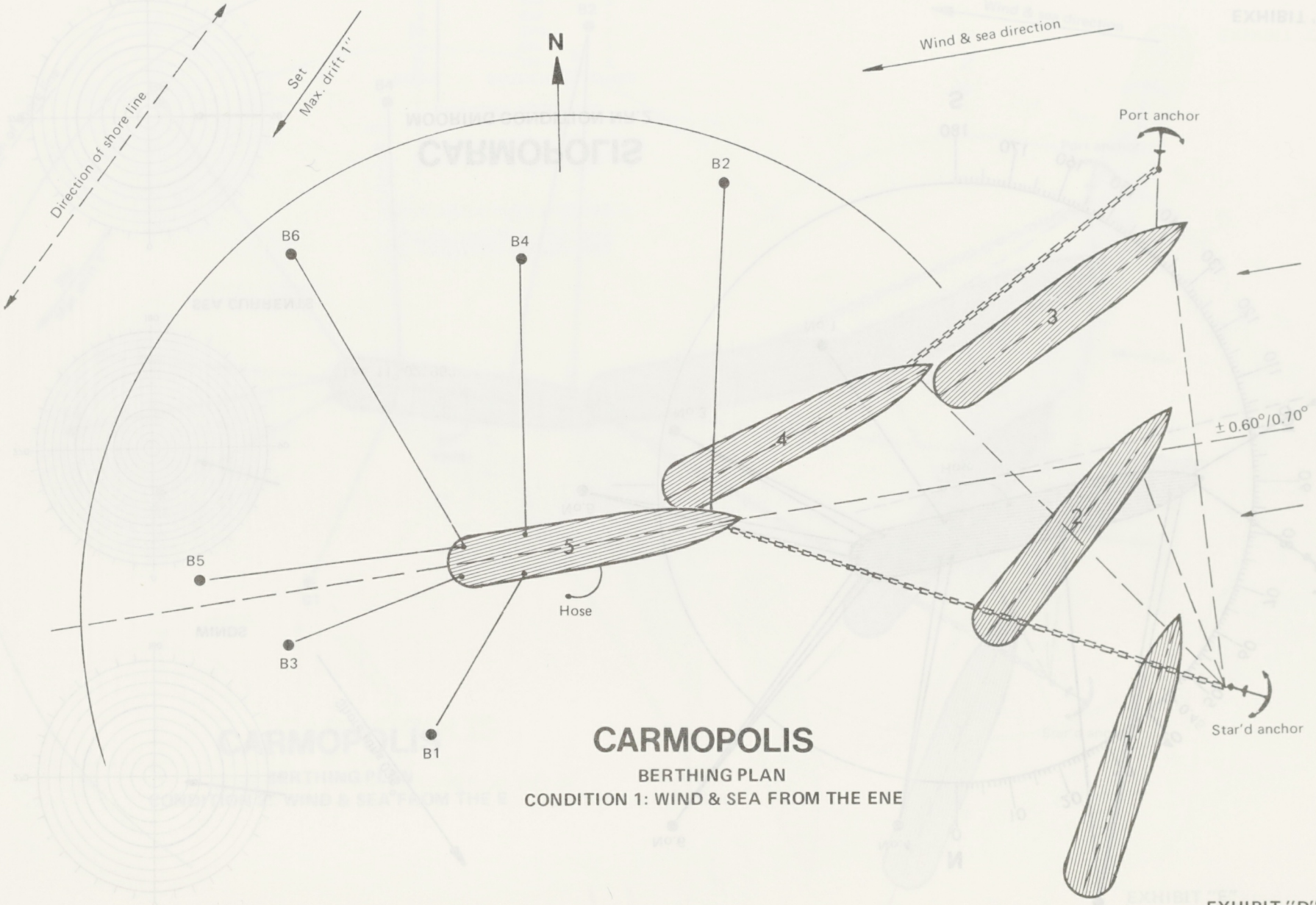

CARMOPOLIS

BERTHING PLAN

CONDITION 1: WIND & SEA FROM THE ENE

EXHIBIT "D"

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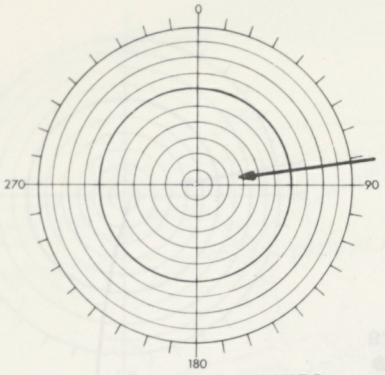
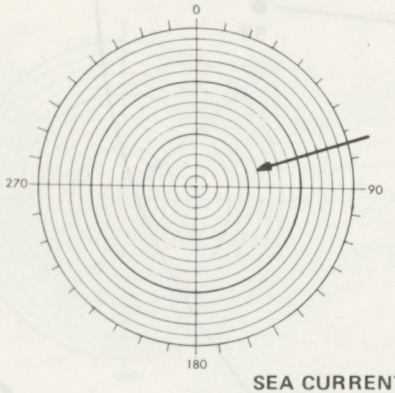
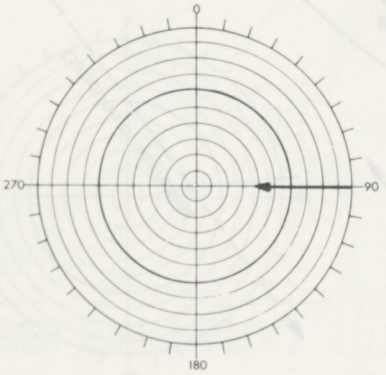


WINDS



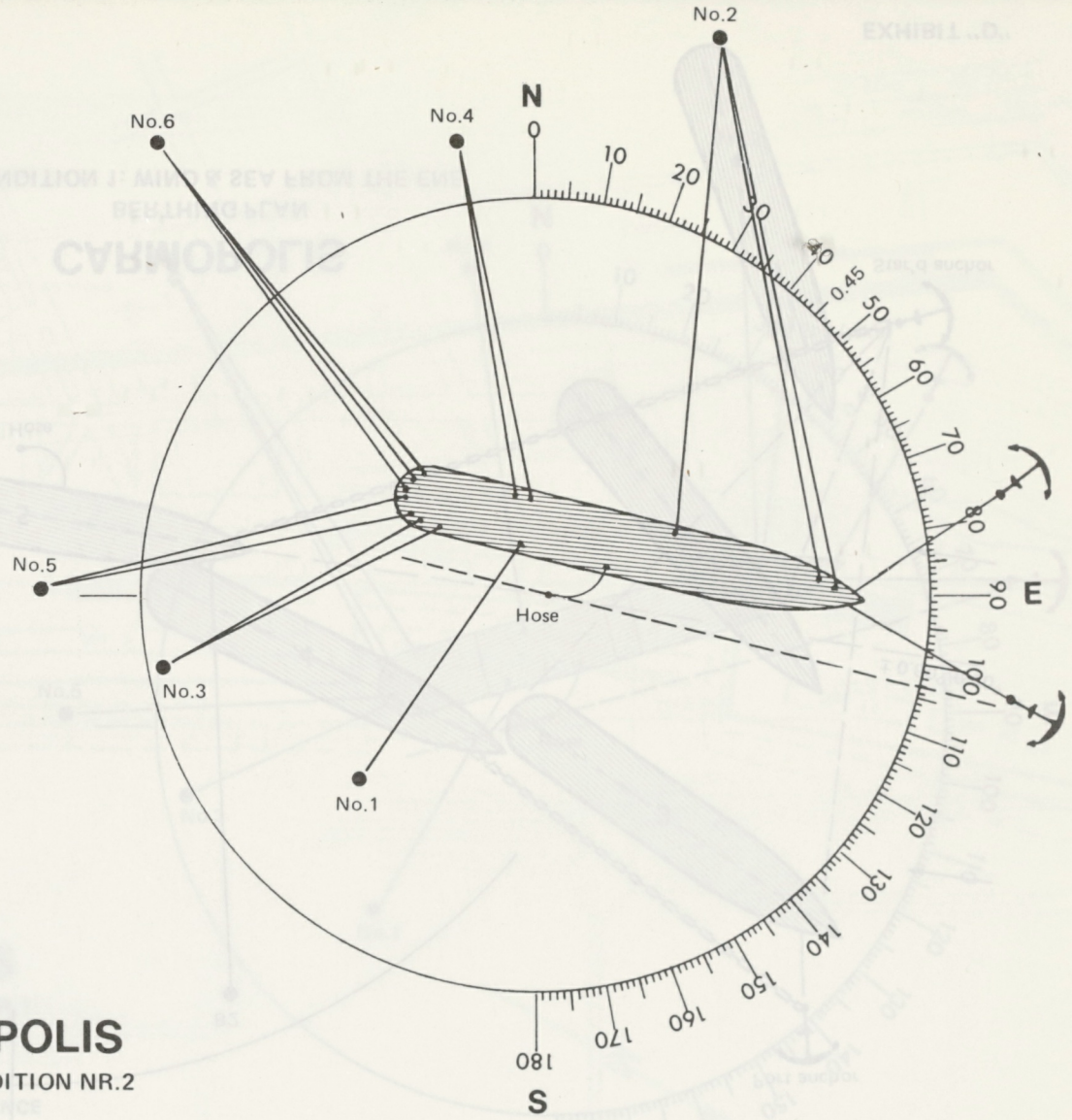
SEA CURRENTS



WAVES

Shore runs 035°

Lat. 11° 02' 95"



CARMOPOLIS

MOORING CONDITION NR.2

EXHIBIT "B"

Prevailing wind & sea : E

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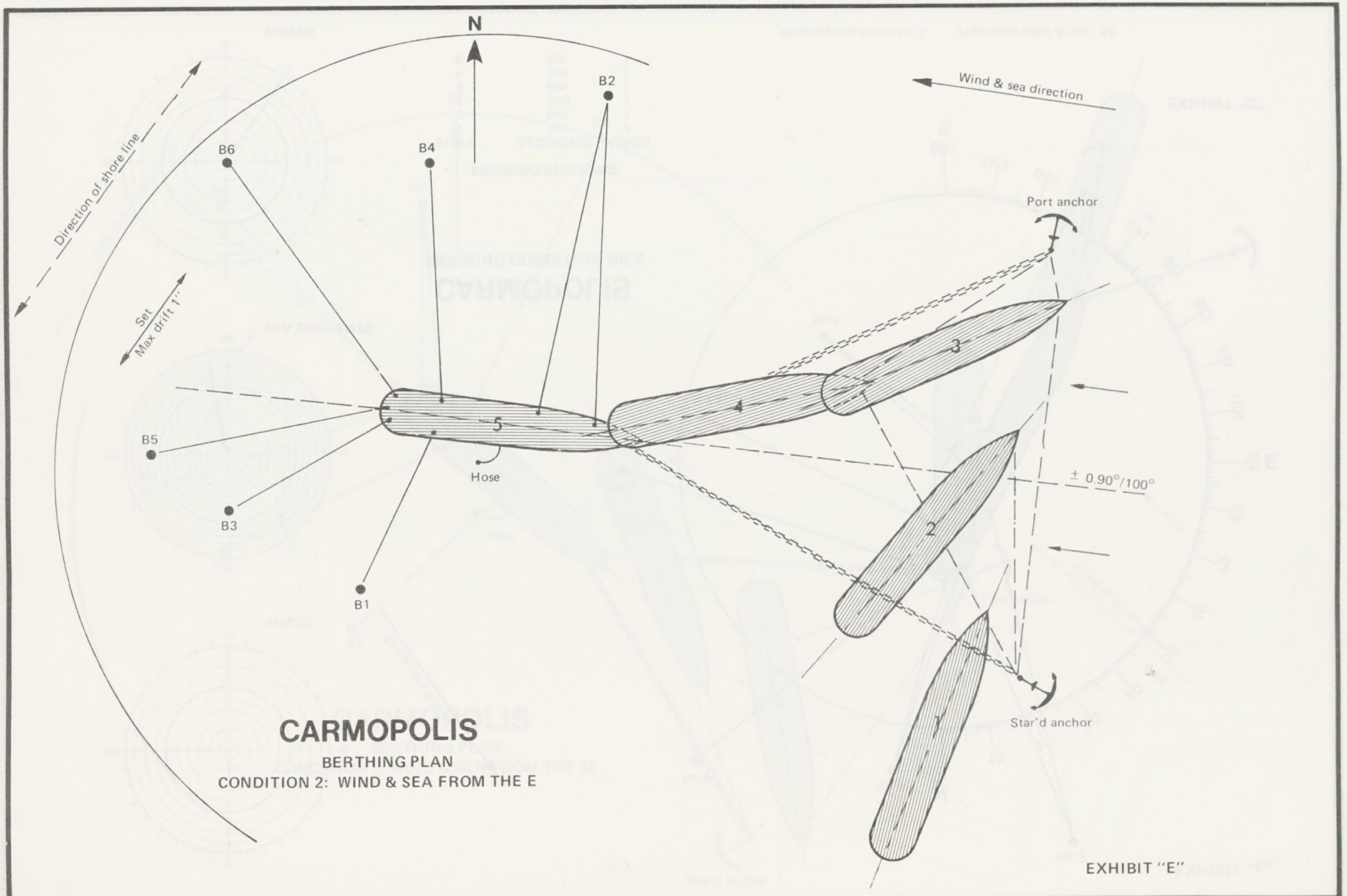

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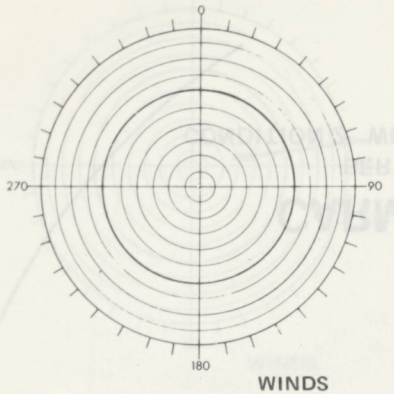
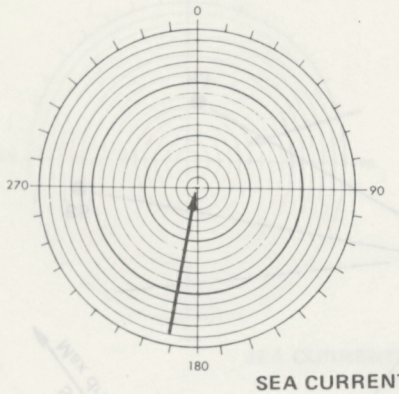
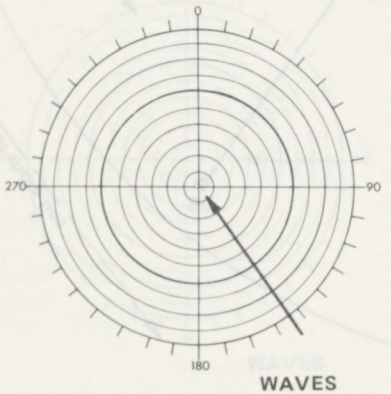


WINDS



SEA CURRENTS



WAVES

Shore runs 035°

CARMOPOLIS

MOORING CONDITION NR.3

MOORING SEQUENCE

BUOY	SEQUENCE	LINES
1	1st	2
2	5th	1
3	2nd	1
4	6th	1
5	3rd	2
6	4th	1

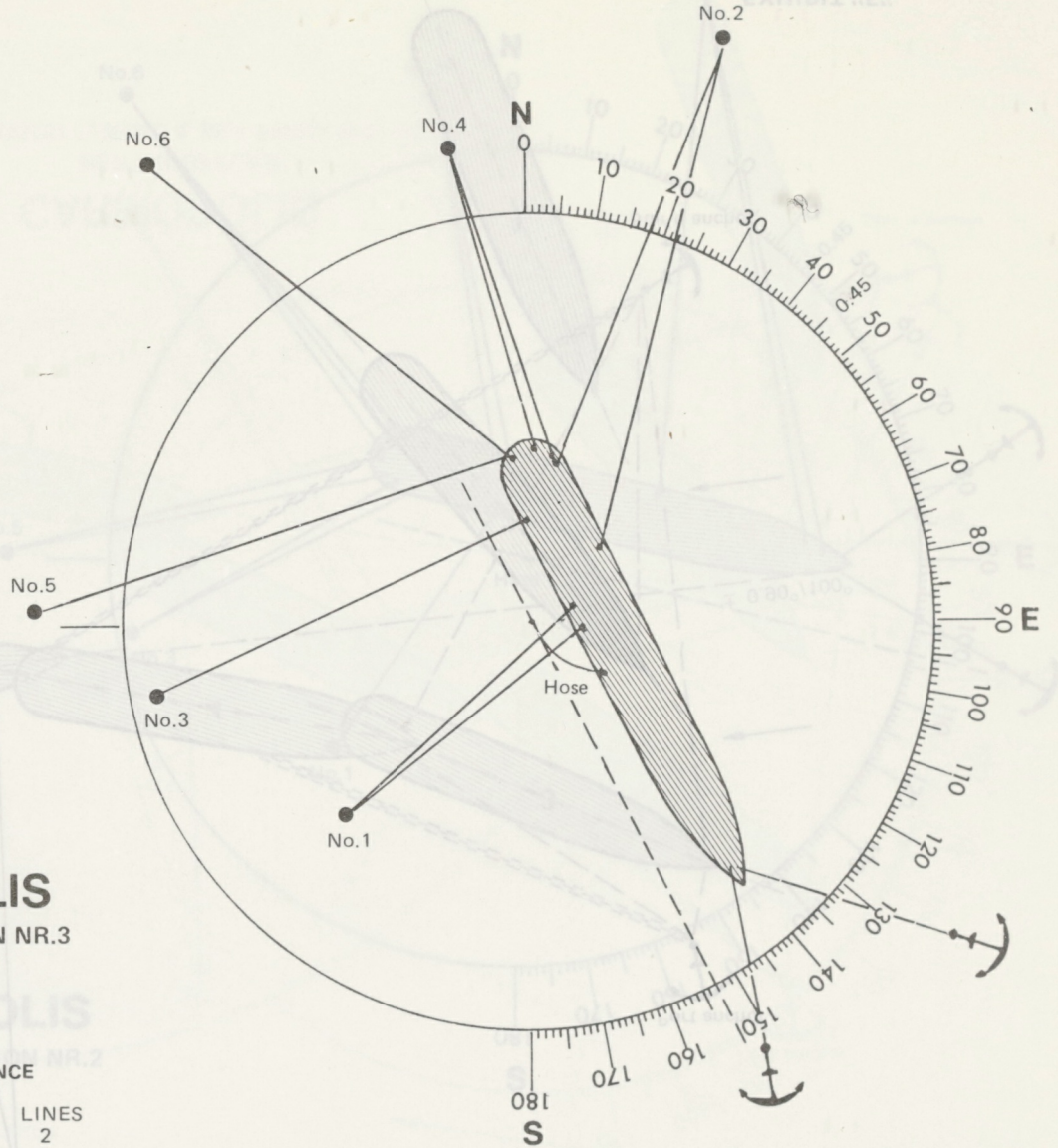


EXHIBIT "C"

Mooring condition Nr.3. Prevailing wind & sea : SE

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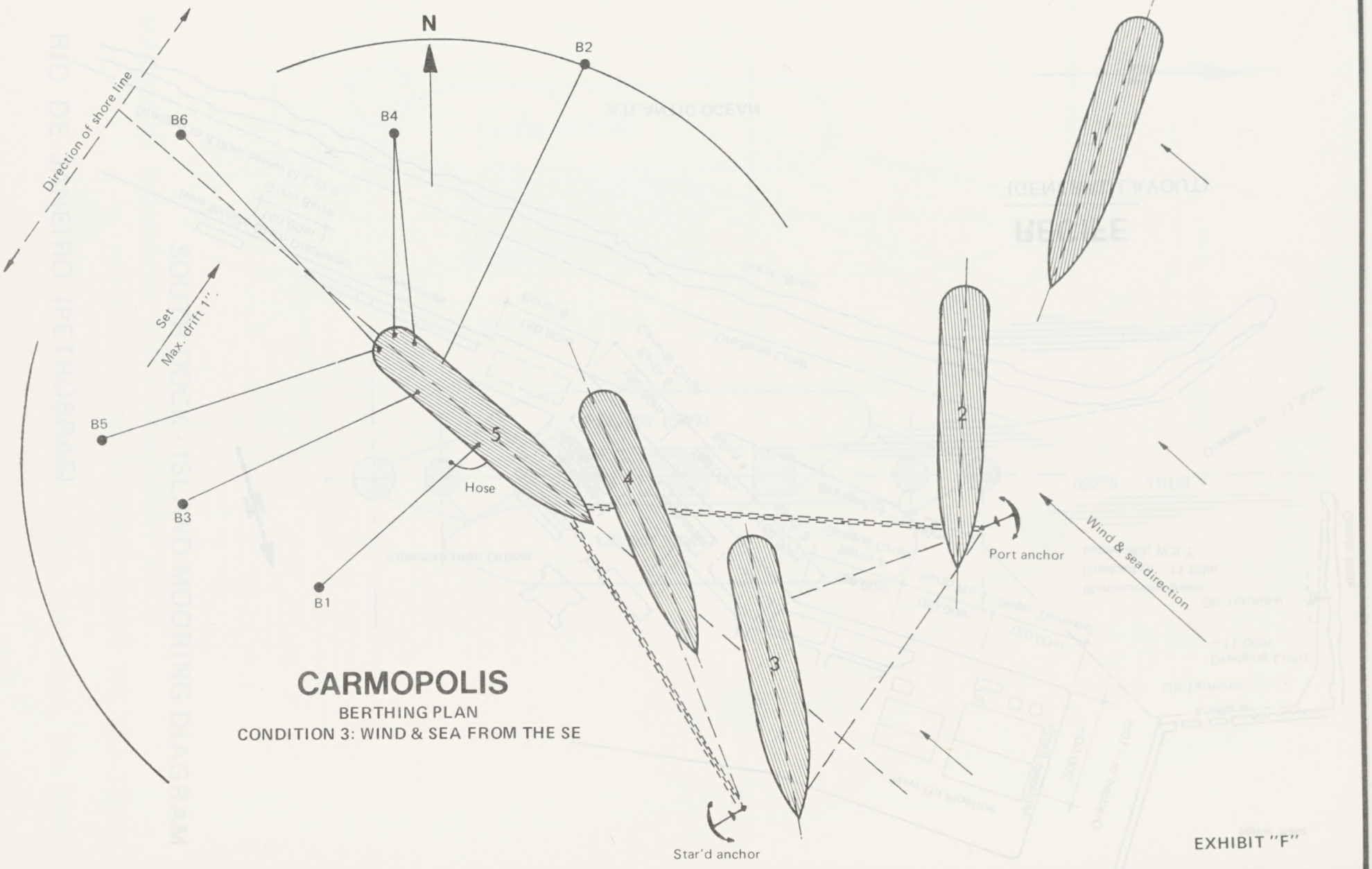

CARMOPOLIS

BERTHING PLAN

CONDITION 3: WIND & SEA FROM THE SE

EXHIBIT "F"

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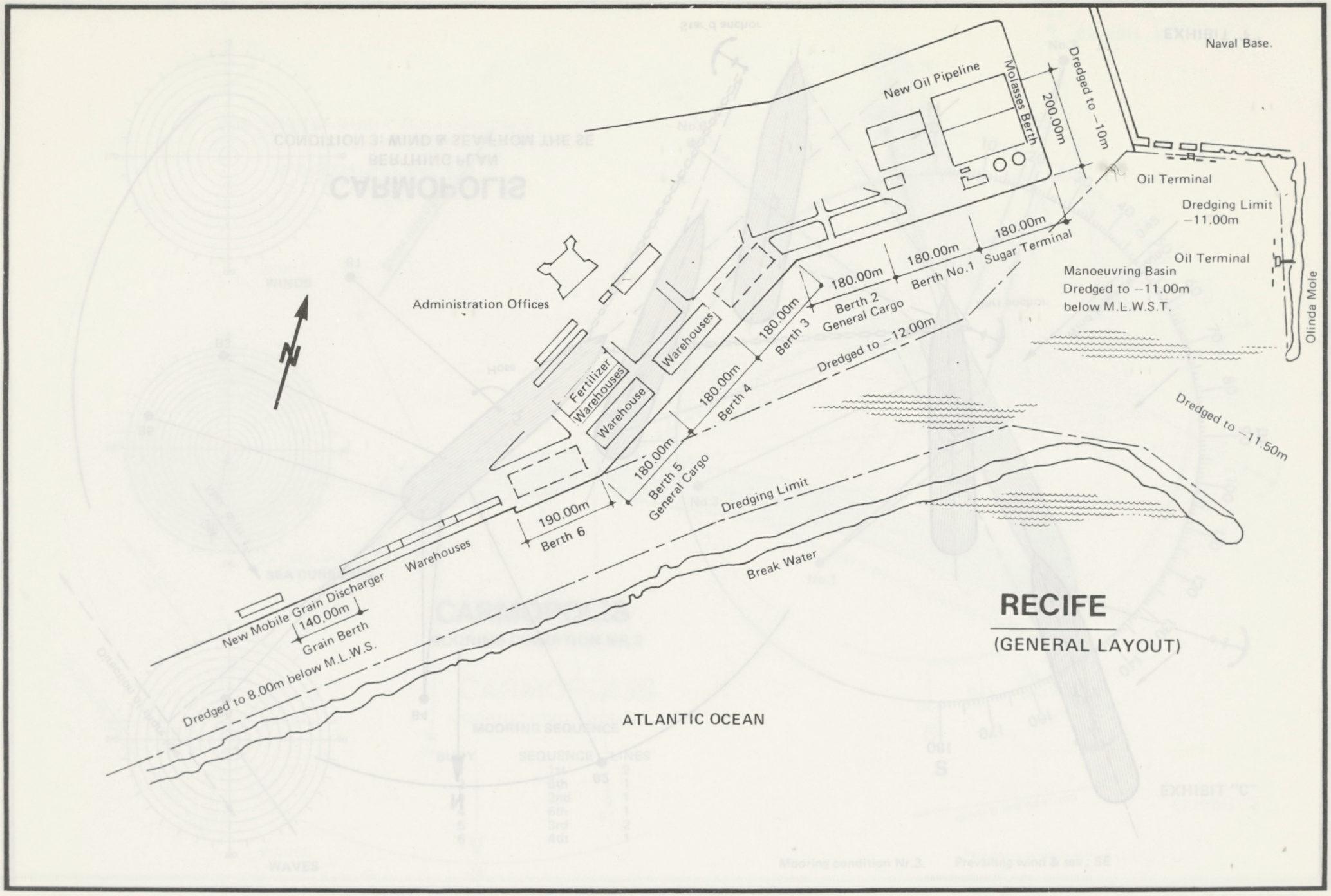

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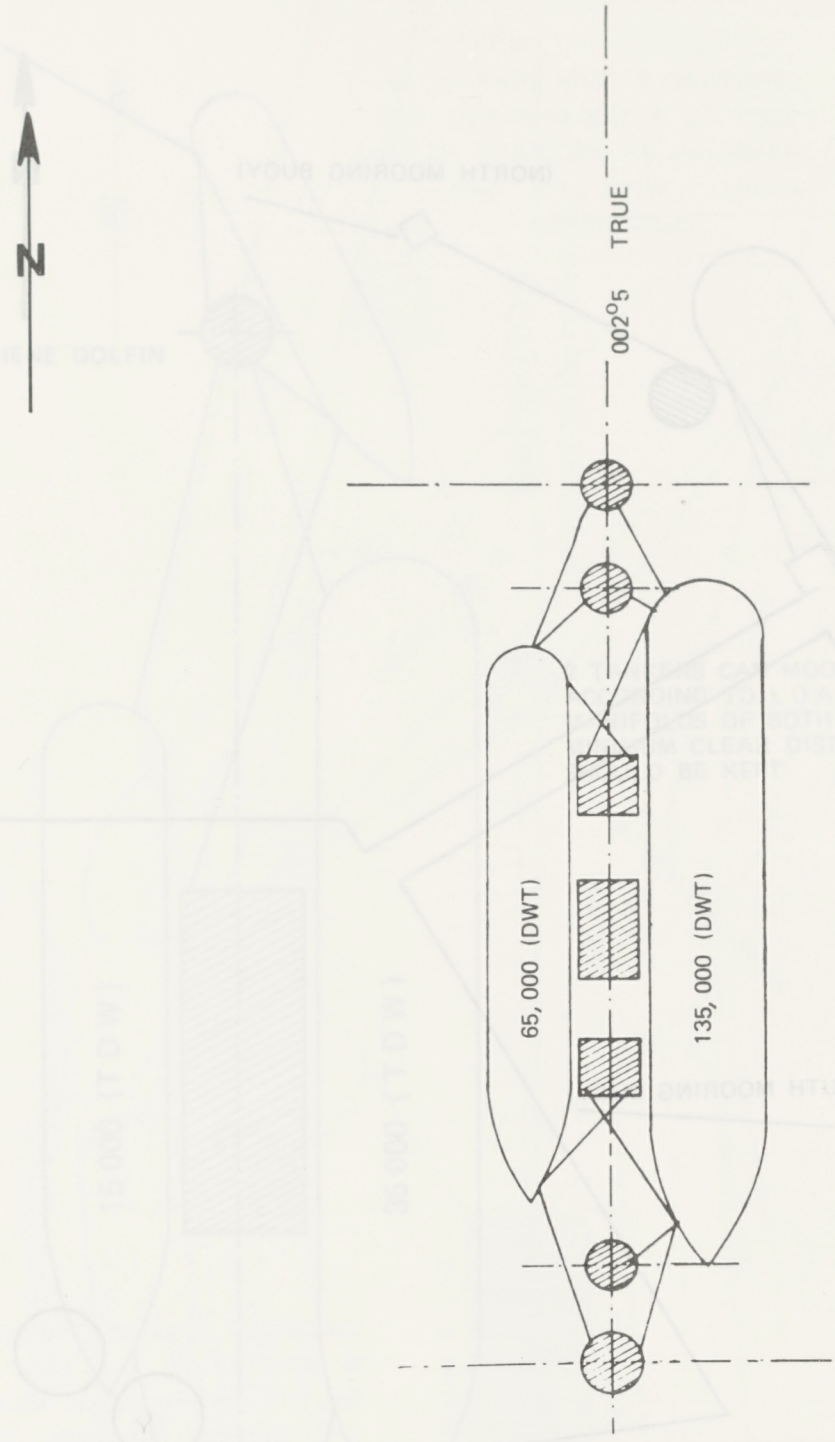

SOUTH DOCK - ISLAND MOORING DIAGRAM

RIO DE JANEIRO (PETROBRAS)

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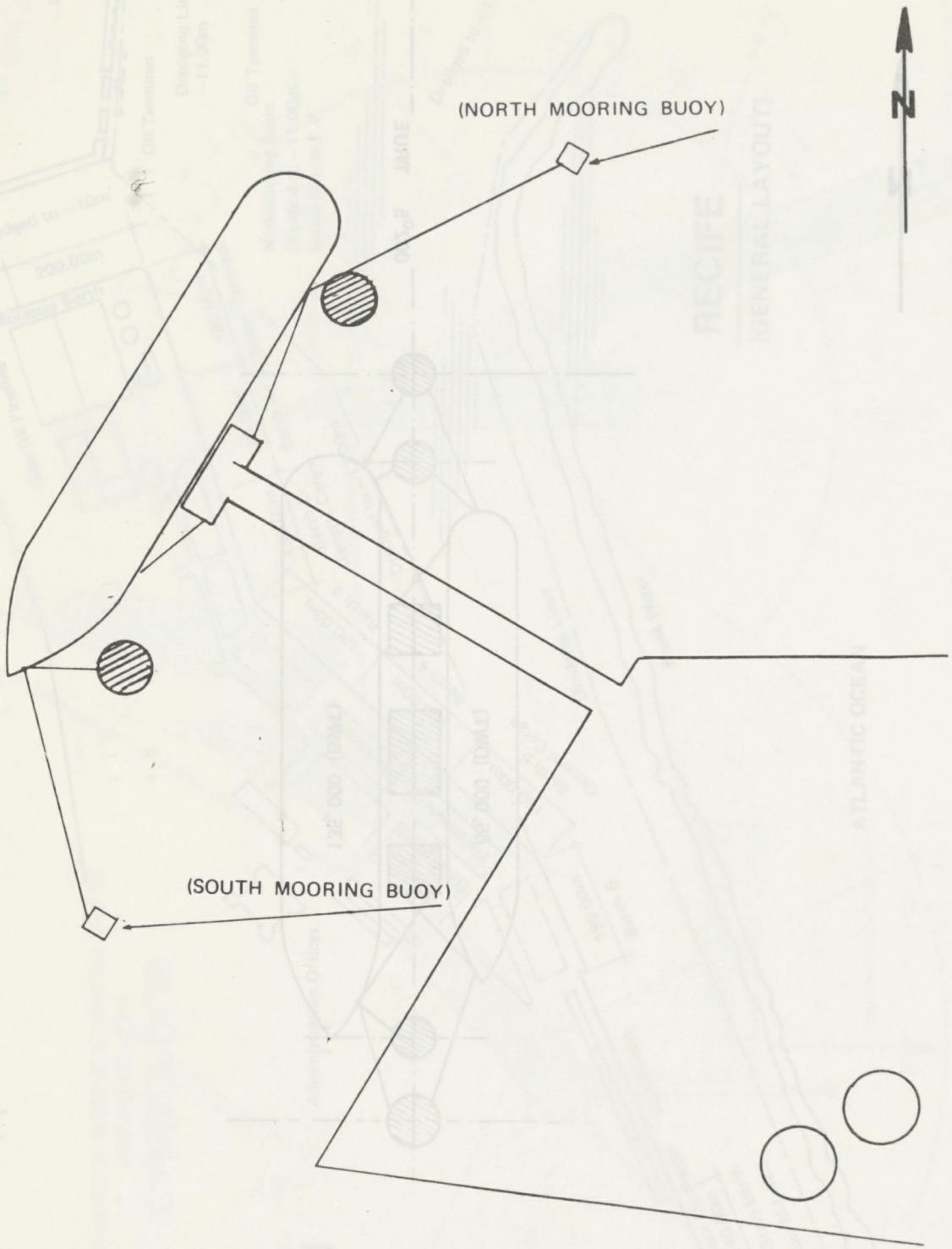

ILHA REDONDA PIER MOORING DIAGRAM

RIO DE JANEIRO (PETROBRAS)

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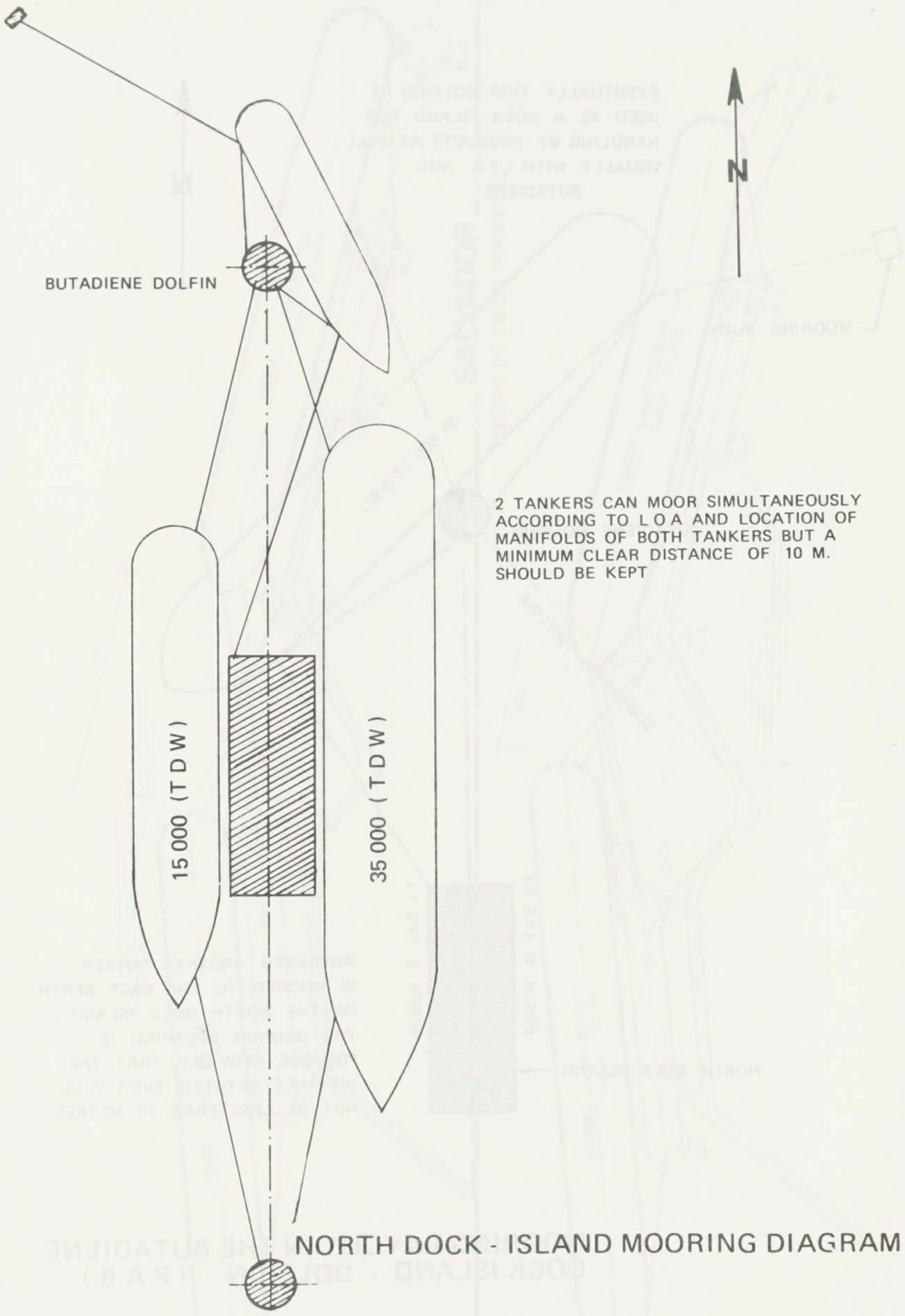

NORTH DOCK - ISLAND MOORING DIAGRAM

RIO DE JANEIRO (PETROBRAS)

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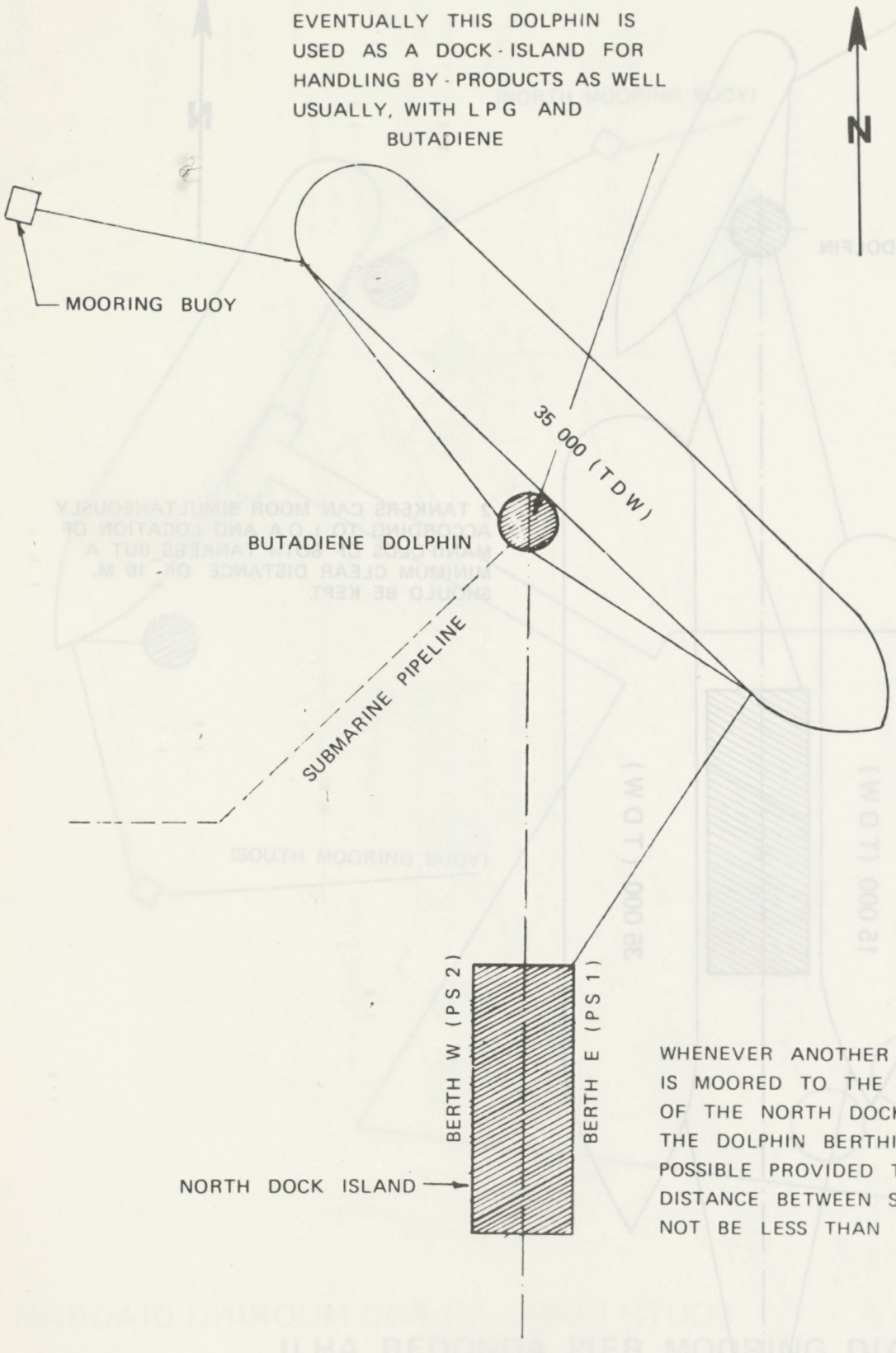

MOORING LAYOUT IN THE BUTADIENE DOCK ISLAND - DOLPHIN - (P A B)

RIO DE JANEIRO (PETROBRAS)

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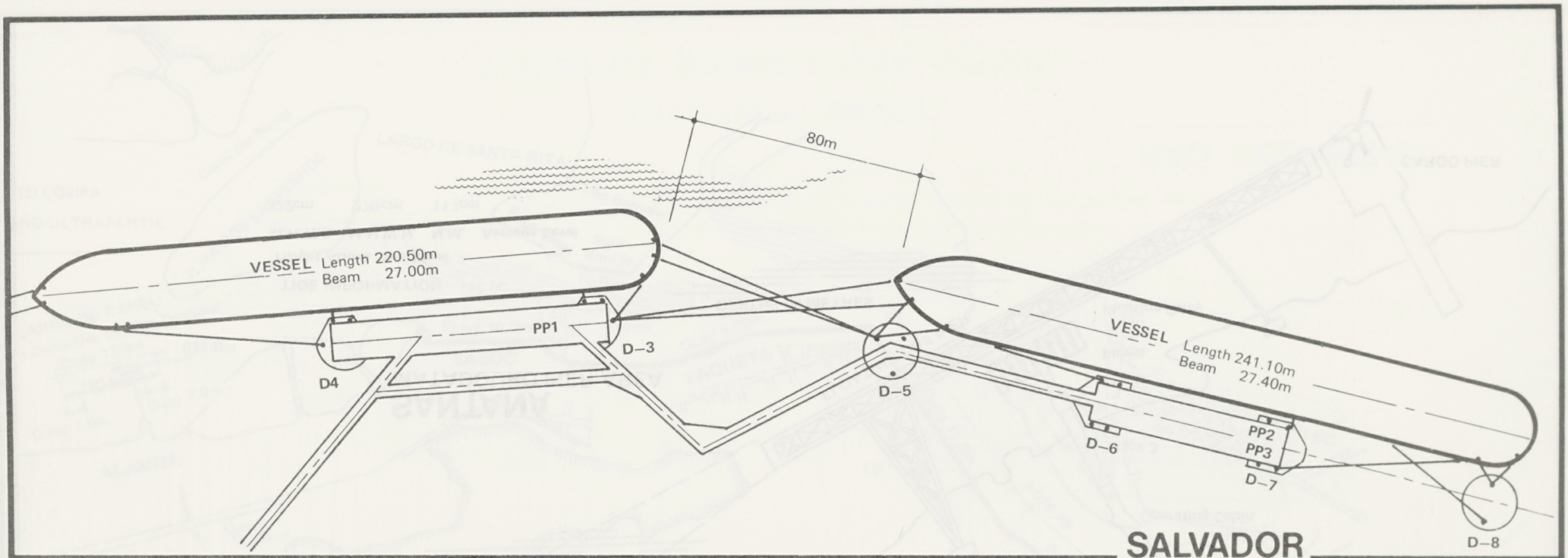
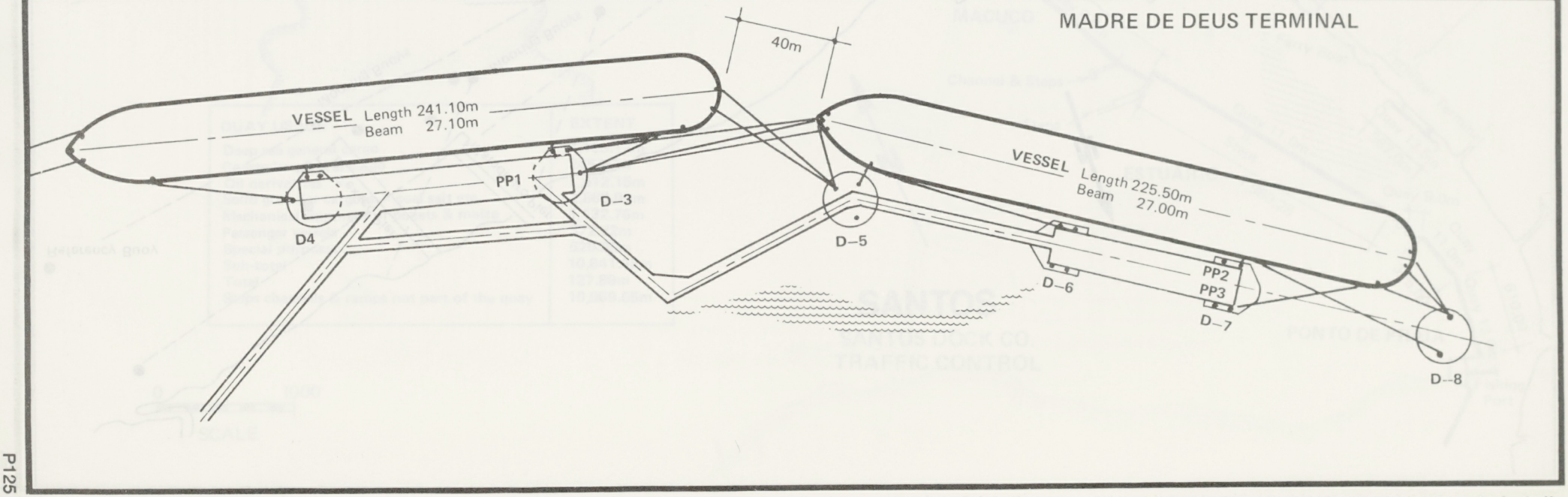


SALVADOR

MADRE DE DEUS TERMINAL



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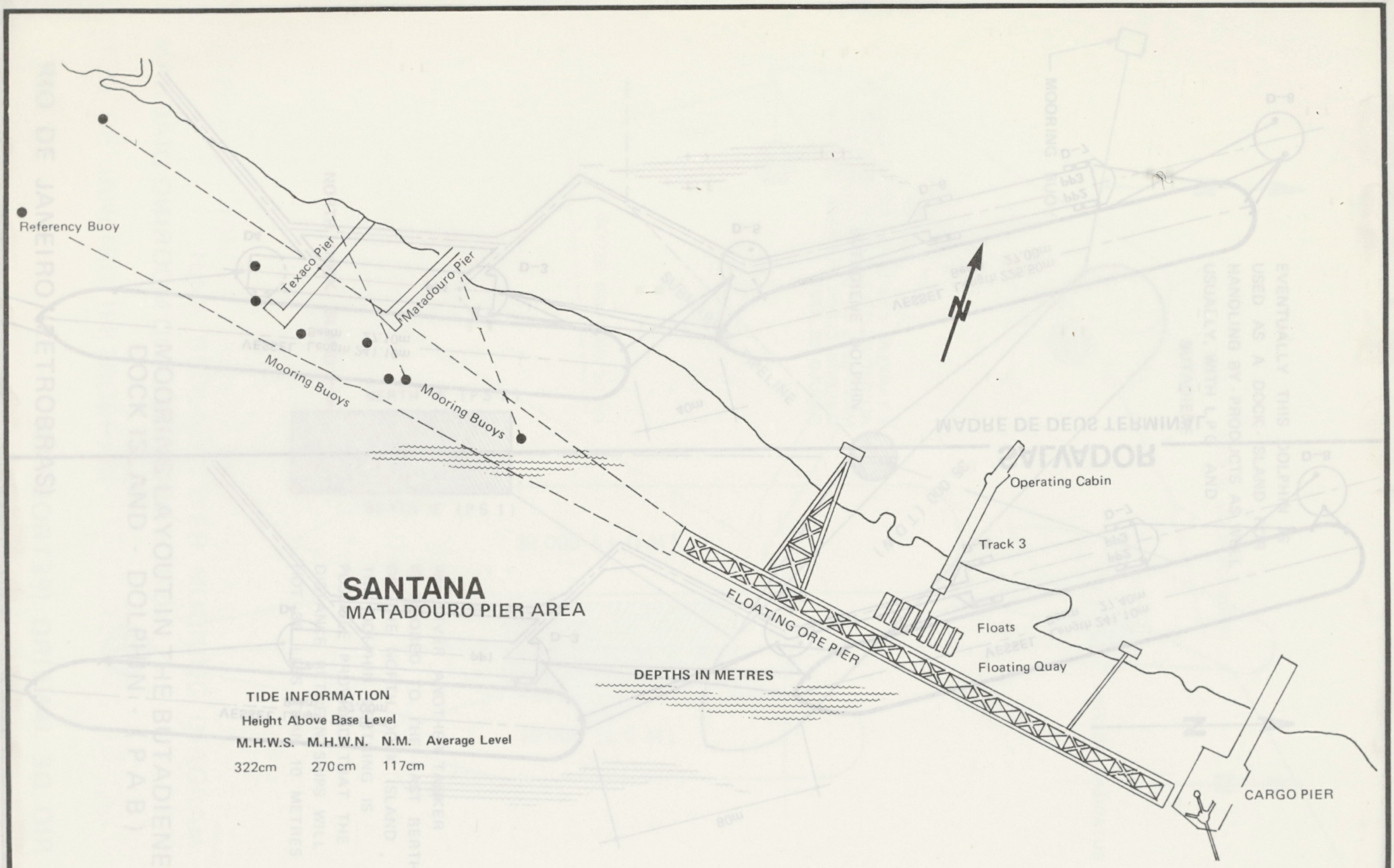

SANTANA
MATADOURO PIER AREA

TIDE INFORMATION

Height Above Base Level

M.H.W.S.	M.H.W.N.	N.M.	Average Level
322cm	270cm	117cm	

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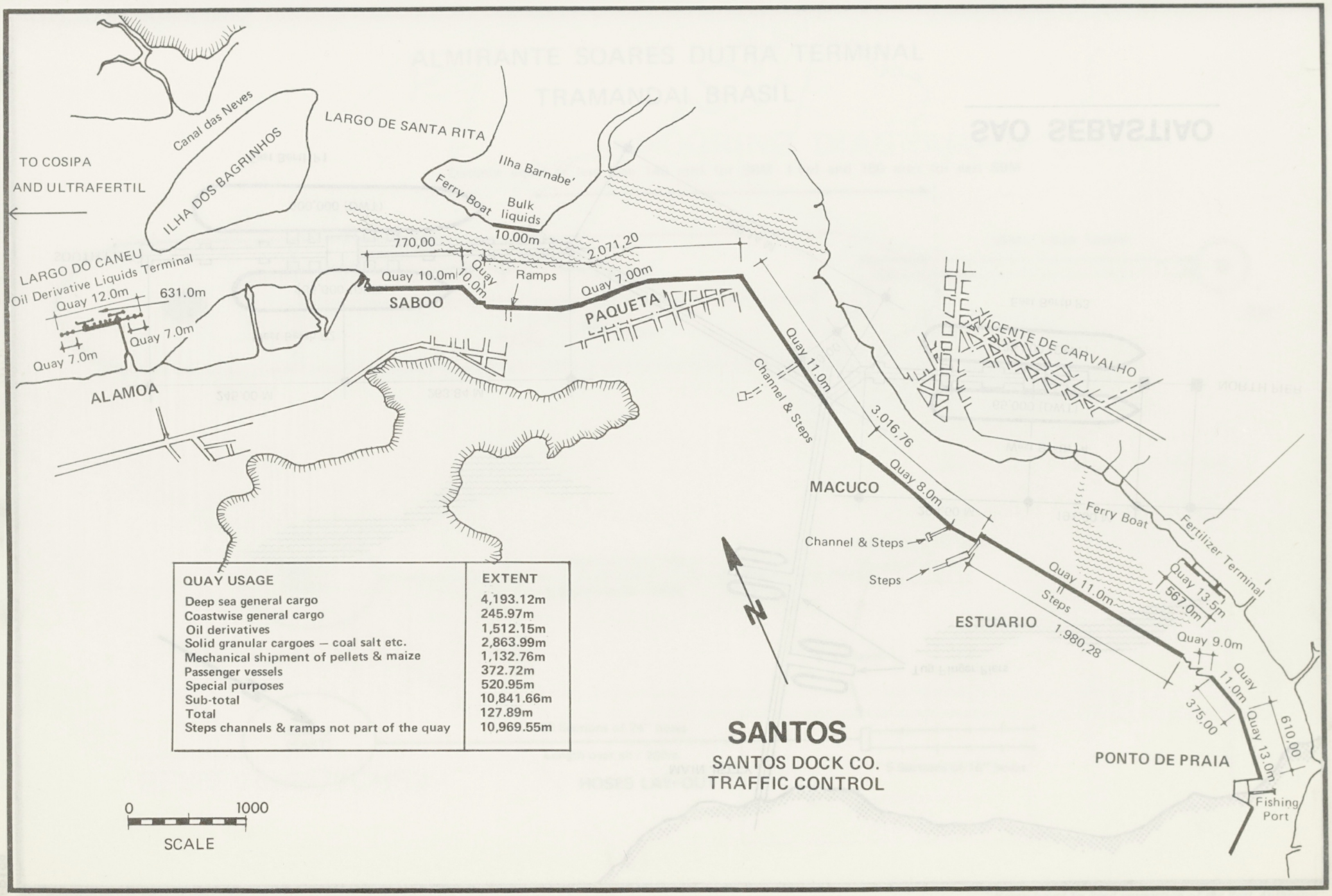

QUAY USAGE	EXTENT
Deep sea general cargo	4,193.12m
Coastwise general cargo	245.97m
Oil derivatives	1,512.15m
Solid granular cargoes – coal salt etc.	2,863.99m
Mechanical shipment of pellets & maize	1,132.76m
Passenger vessels	372.72m
Special purposes	520.95m
Sub-total	10,841.66m
Total	127.89m
Steps channels & ramps not part of the quay	10,969.55m

SANTOS

SANTOS DOCK CO.
TRAFFIC CONTROL

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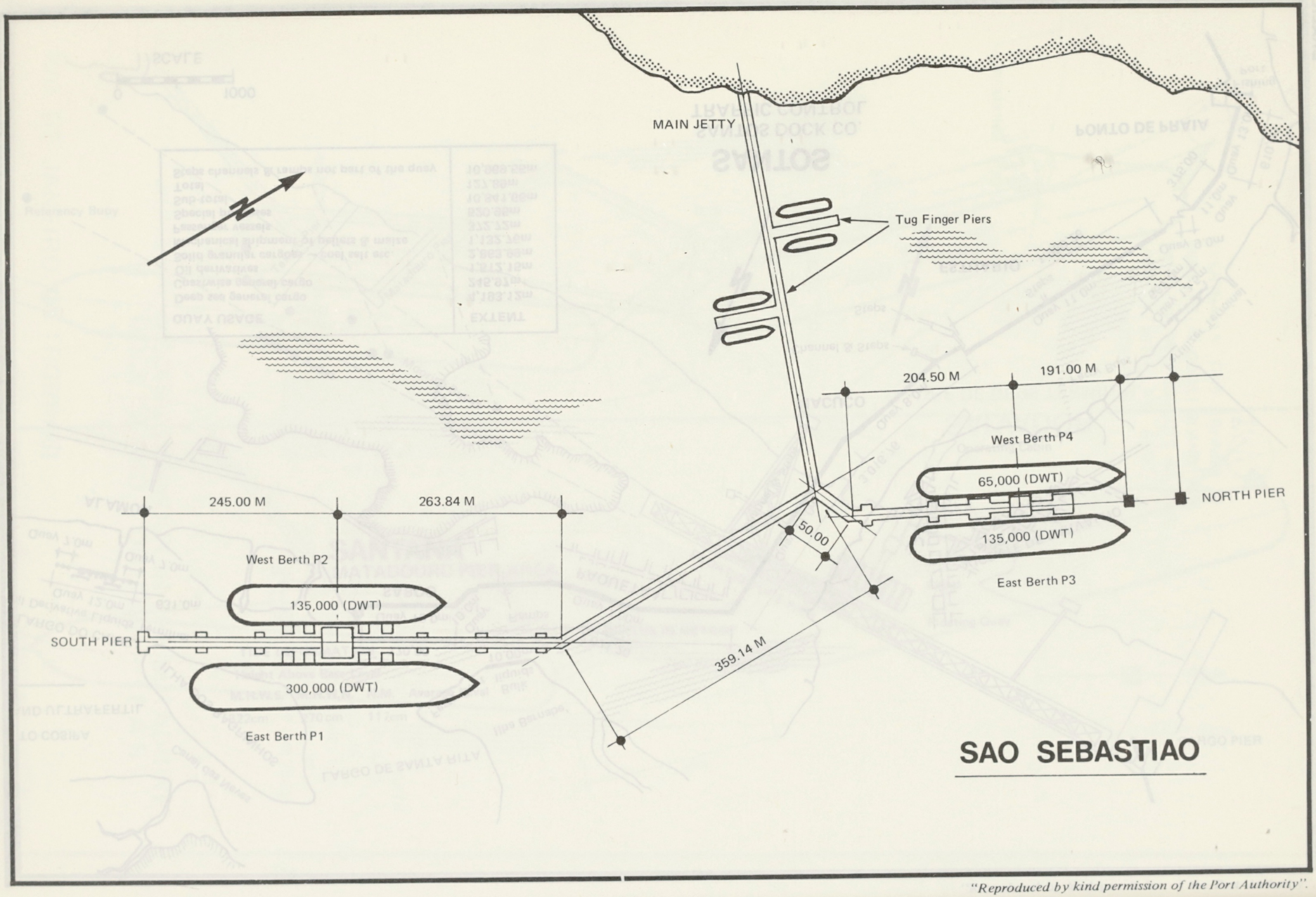

SAO SEBASTIAO

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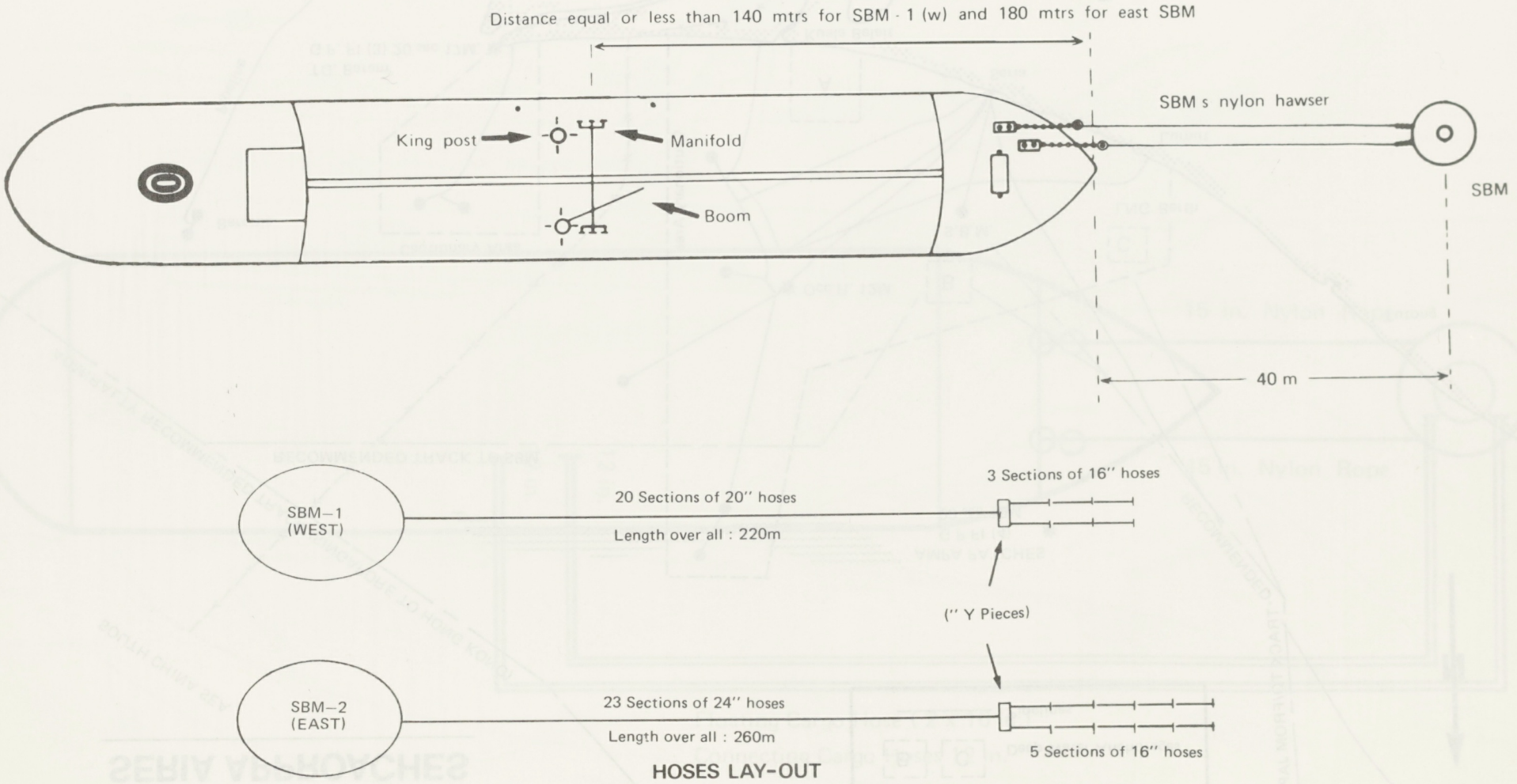
ALMIRANTE SOARES DUTRA TERMINAL
TRAMANDAI BRASIL



HOSES LAY-OUT

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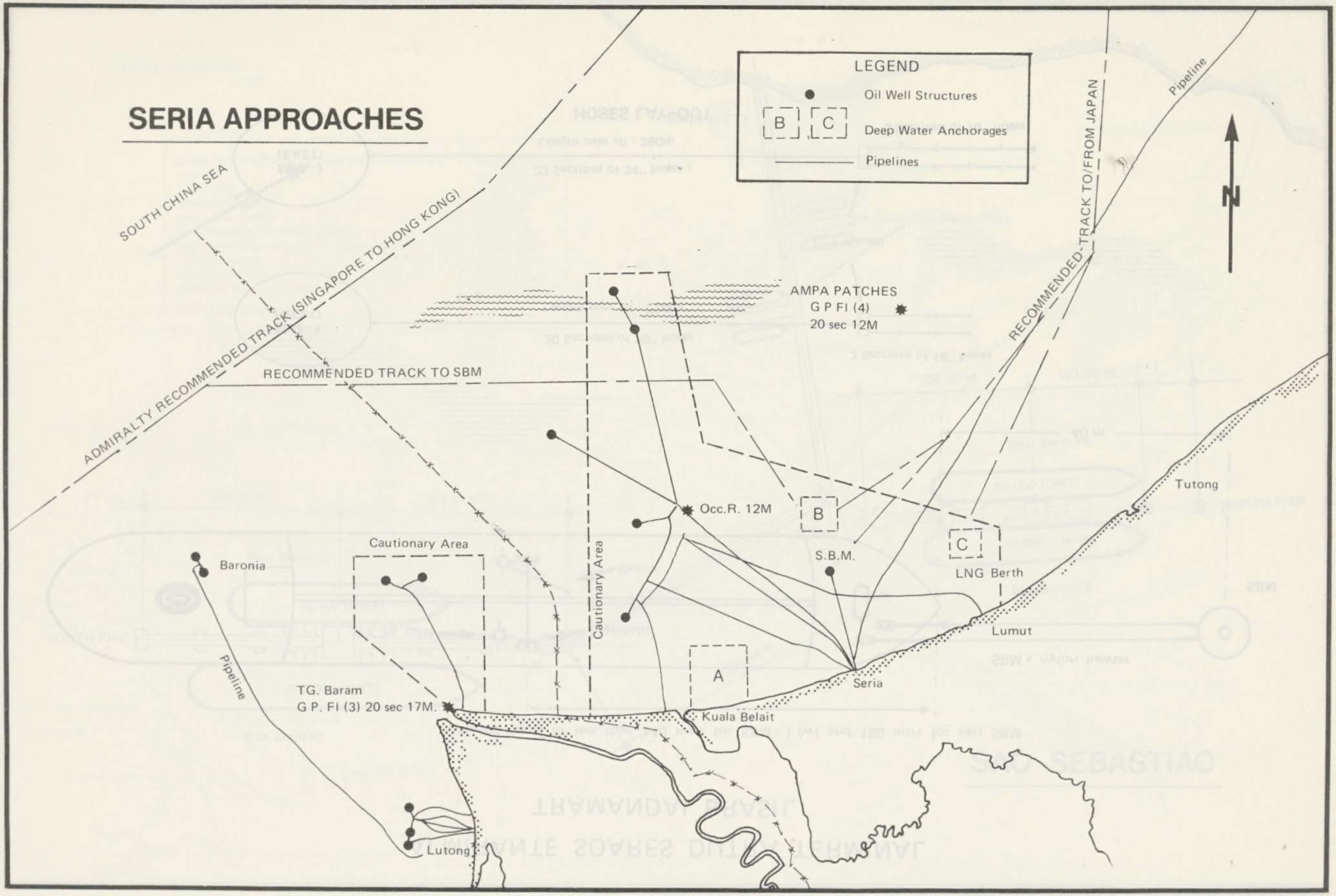

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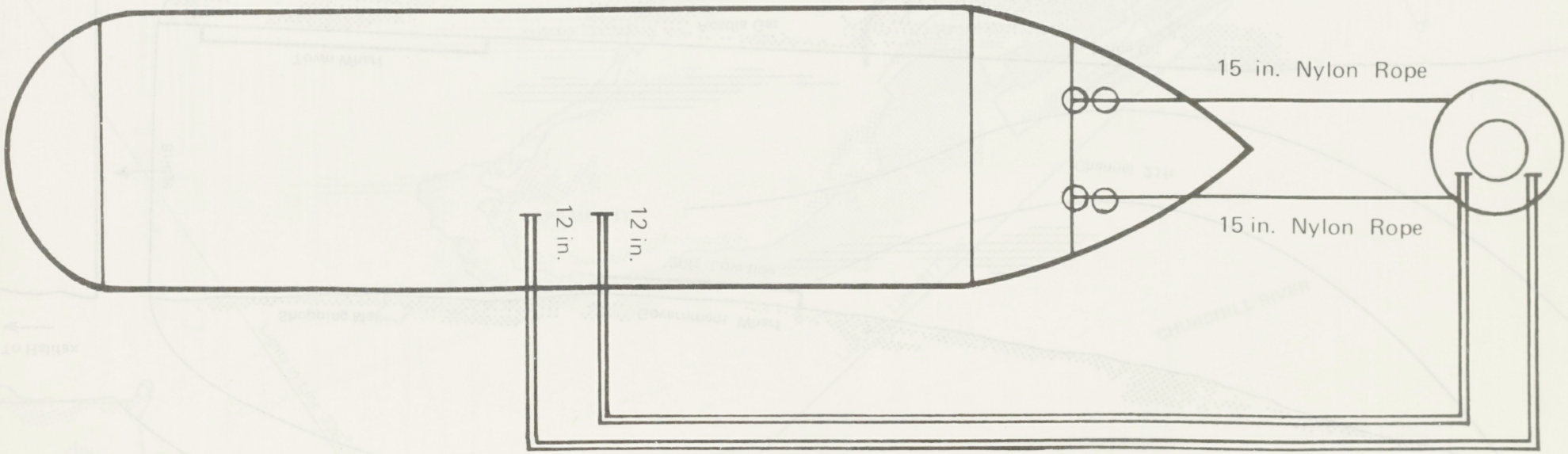
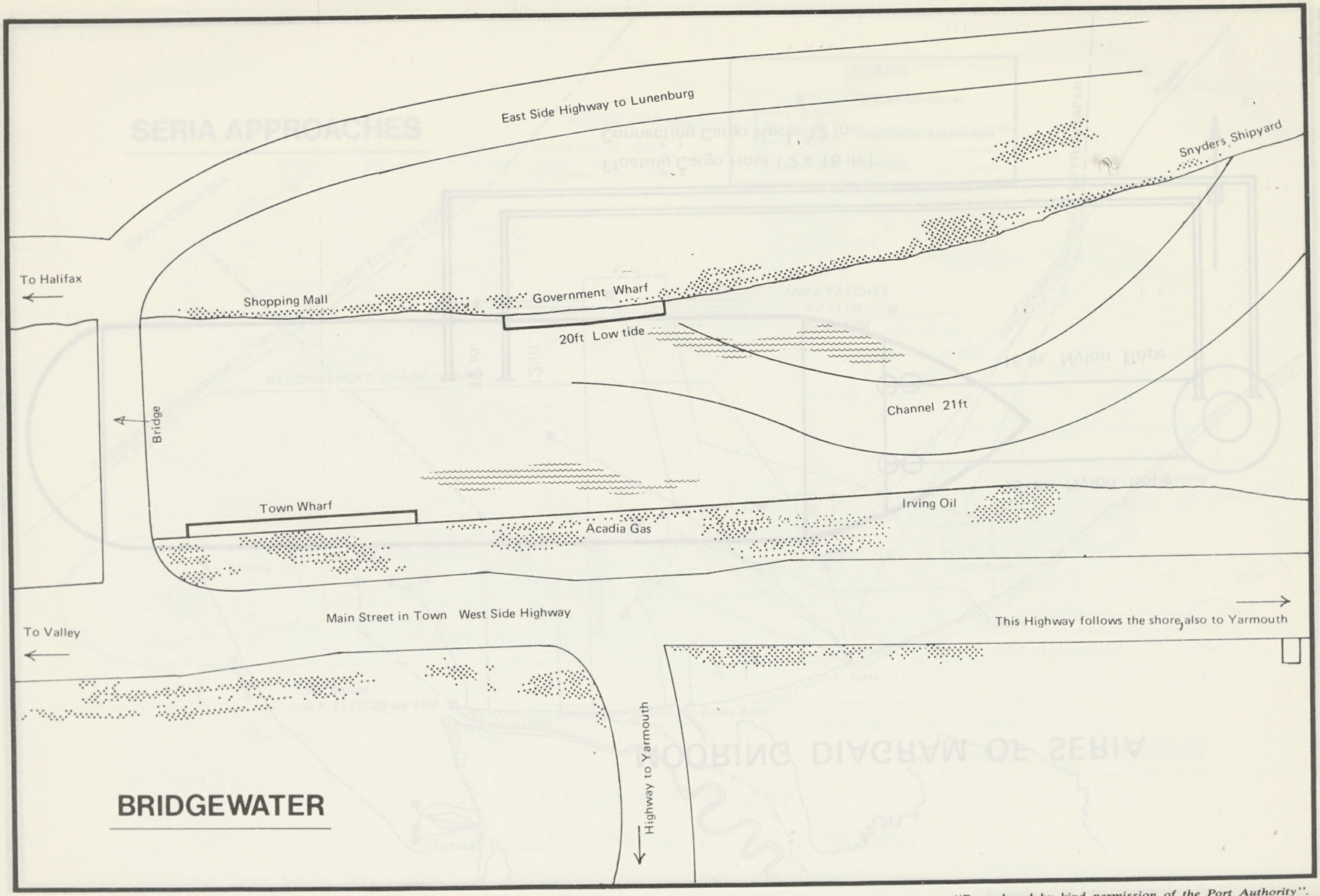
MOORING DIAGRAM OF SERIA



Floating Cargo Hose (2 x 16 in.)

Connecting Cargo Hoses 12 in.

Plan supplied by Ship's Master.



CANADA

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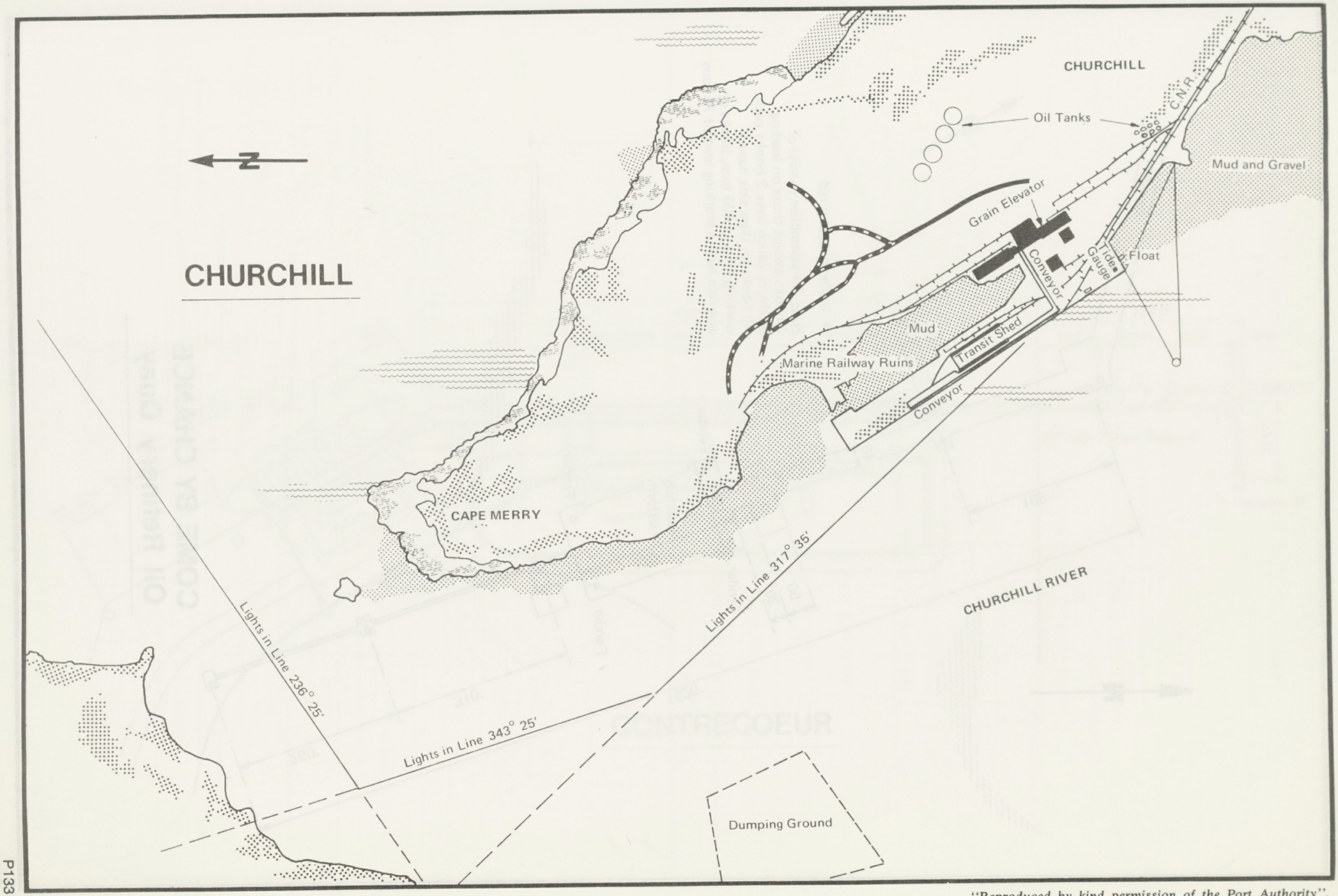

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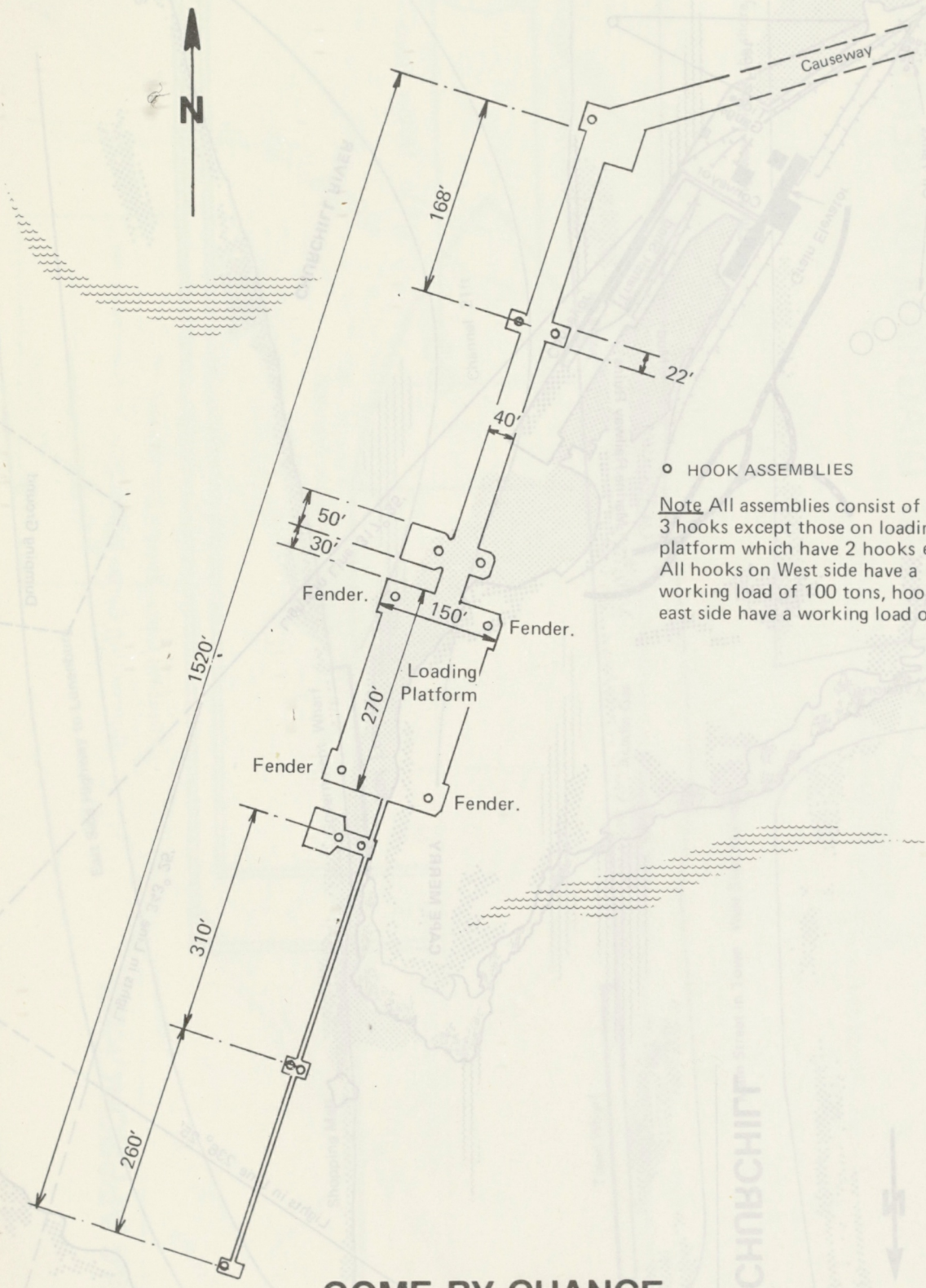
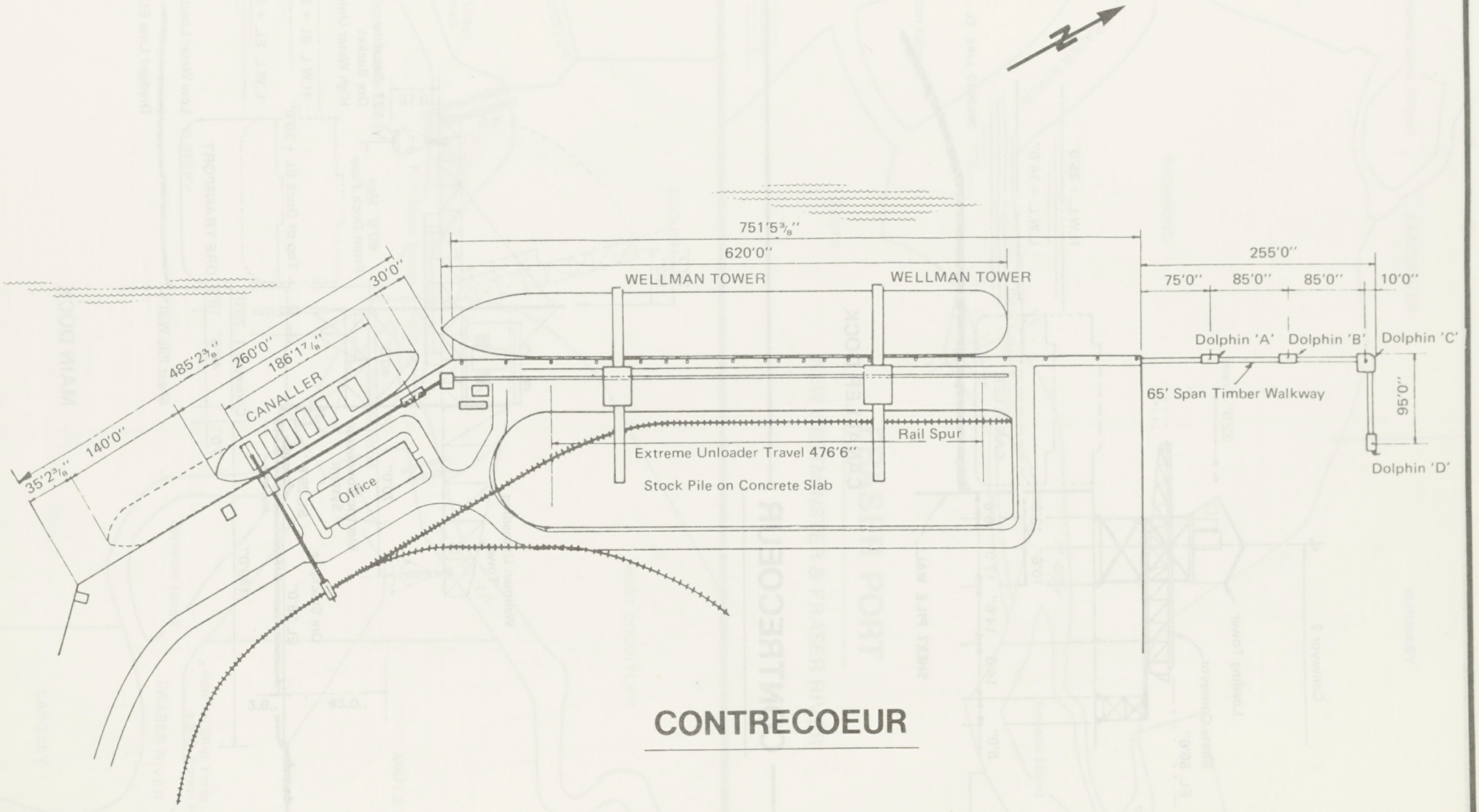


o HOOK ASSEMBLIES

Note All assemblies consist of 3 hooks except those on loading platform which have 2 hooks each. All hooks on West side have a working load of 100 tons, hooks on east side have a working load of 75 tons

COME BY CHANCE
Oil Refinery Quay

Plan supplied by Ship's Officer.



CONTRECOEUR

P135

CANADA

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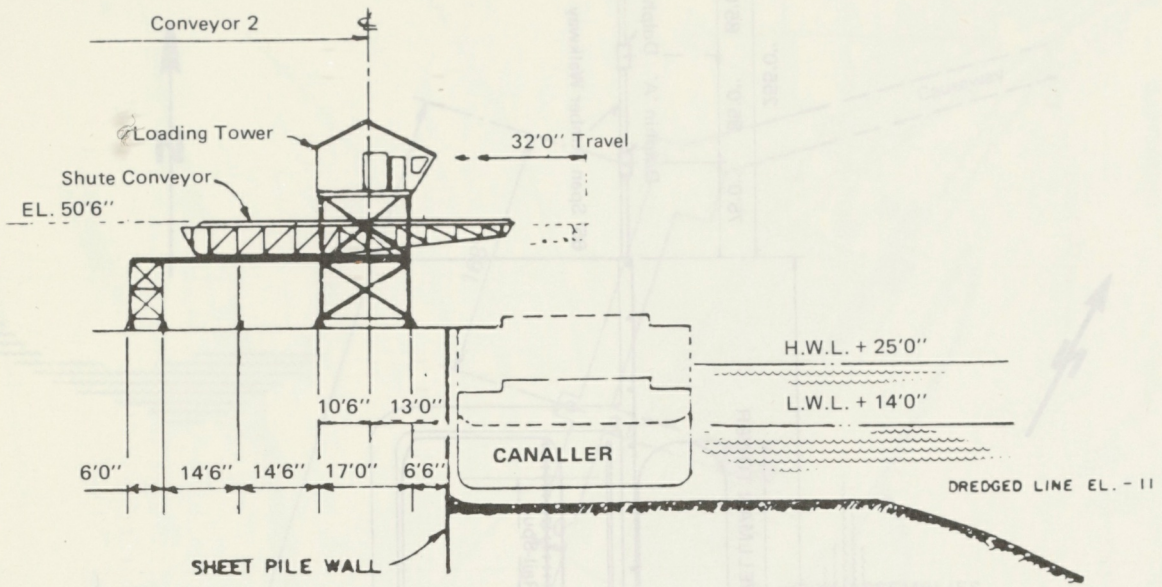
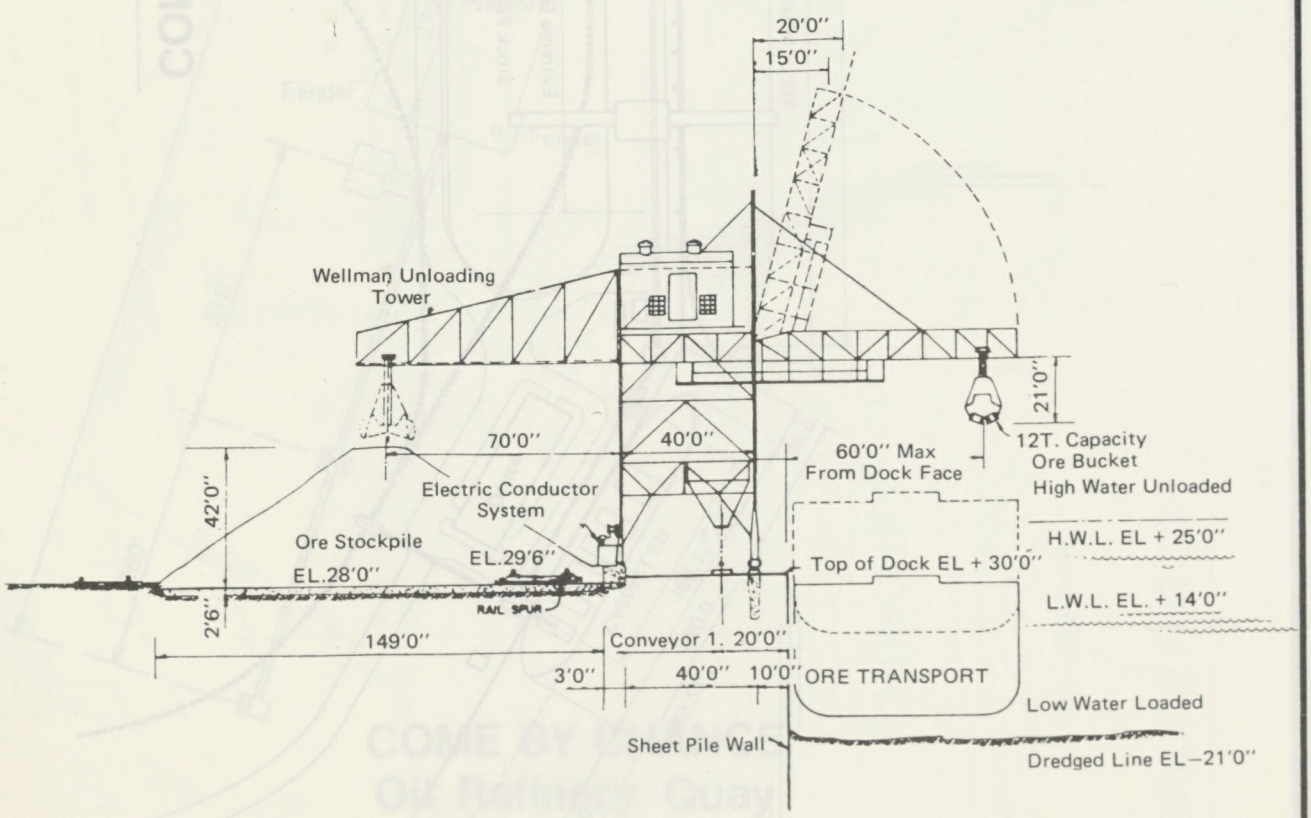


CANALLER DOCK

CONTRECOEUR



MAIN DOCK

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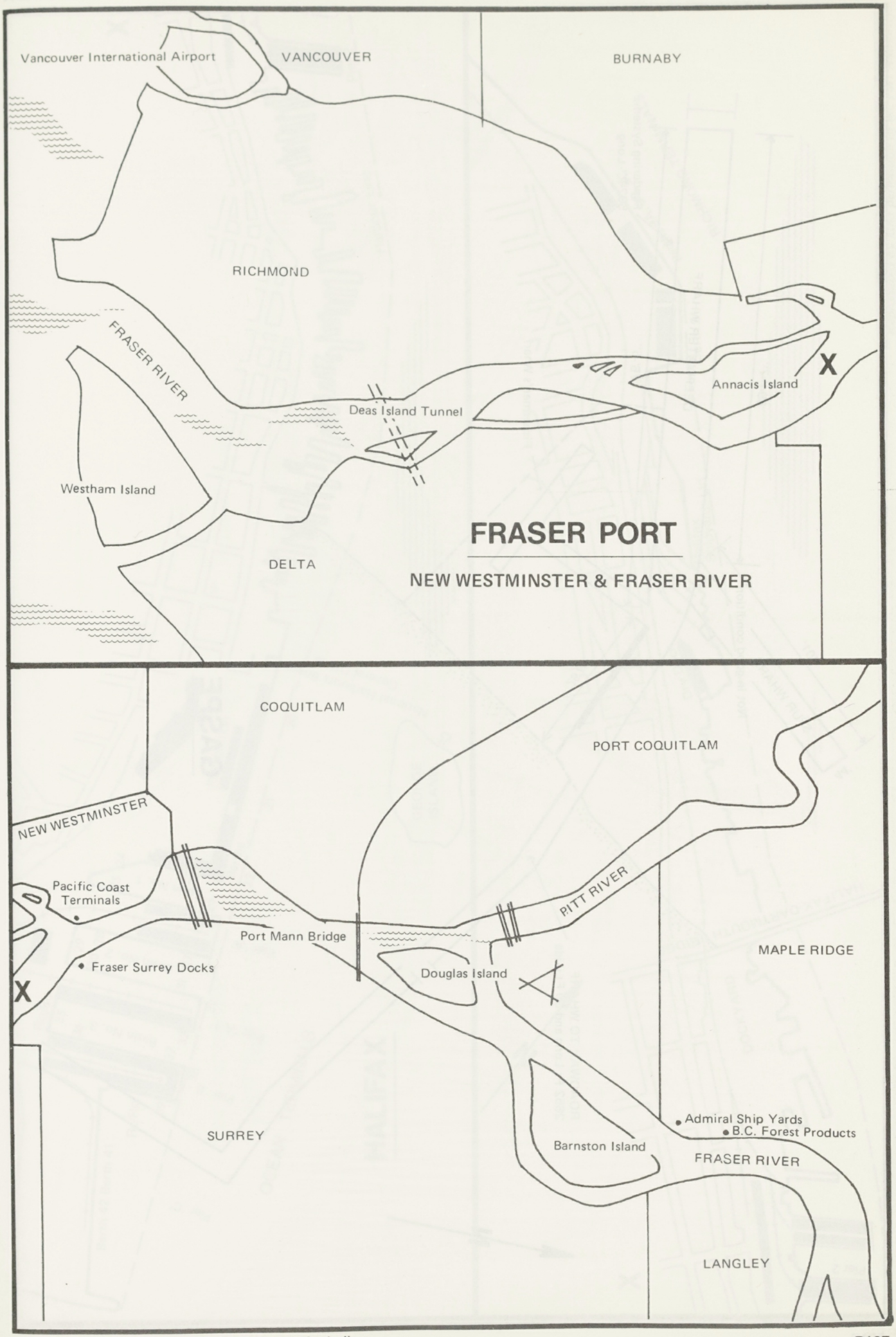

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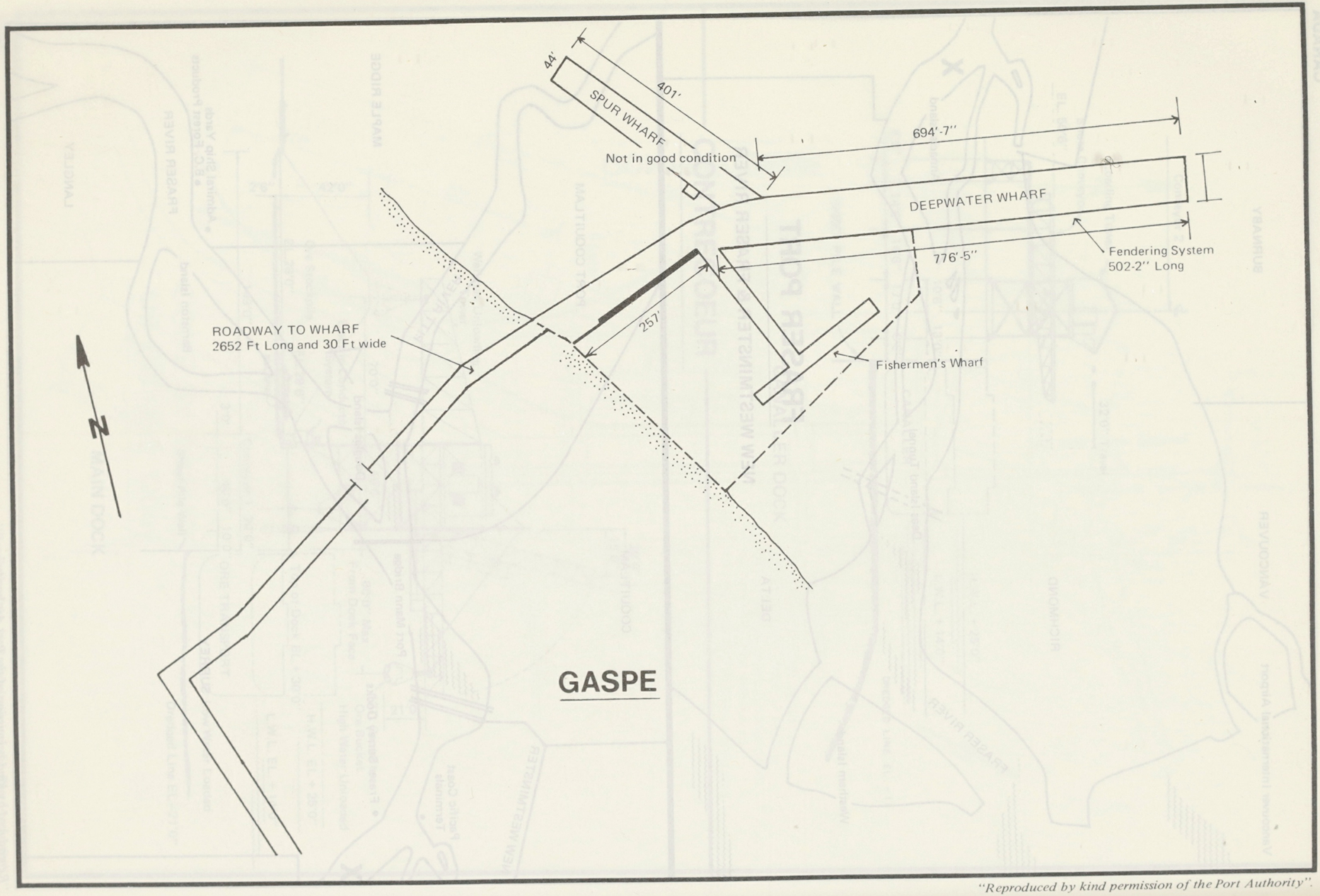

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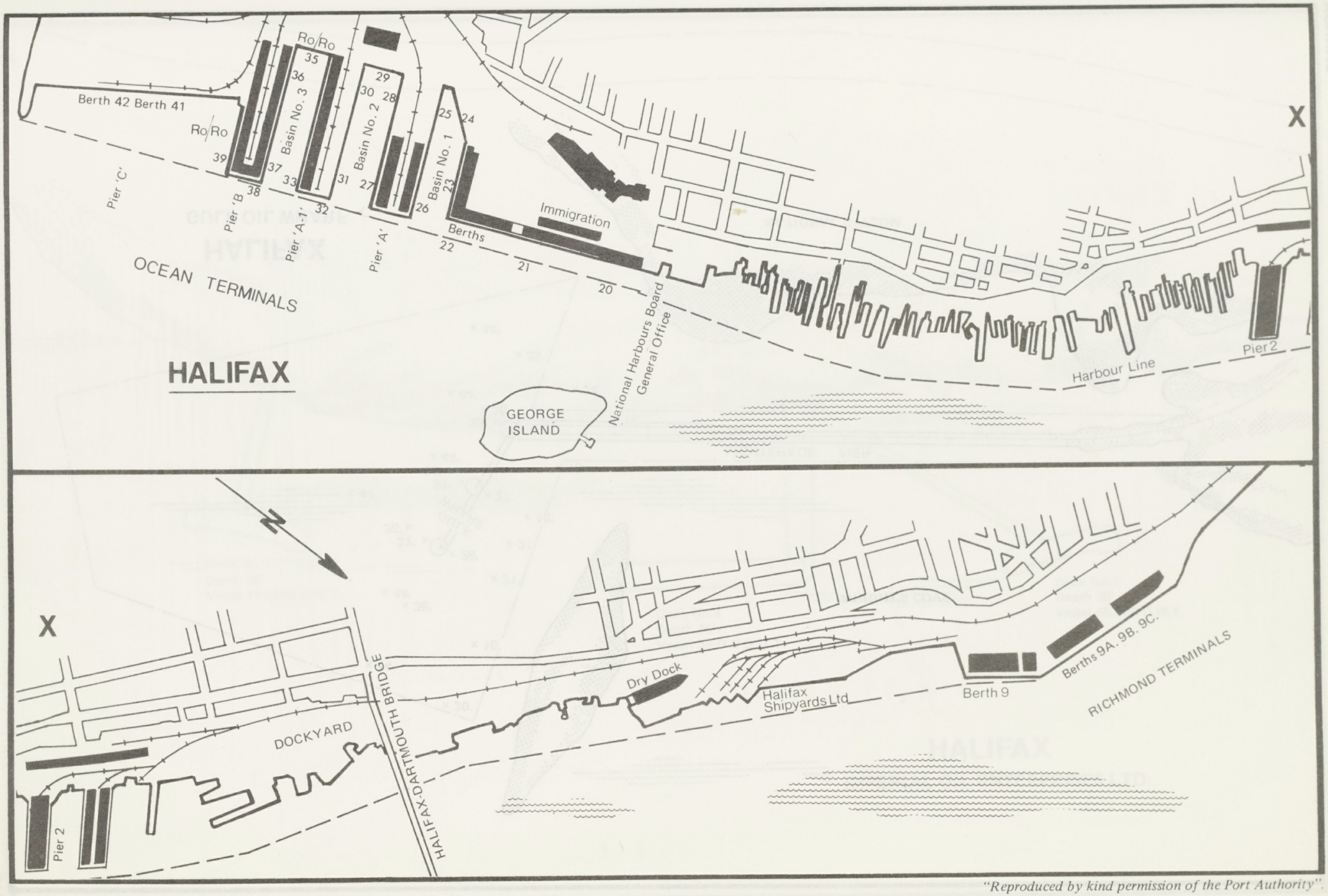

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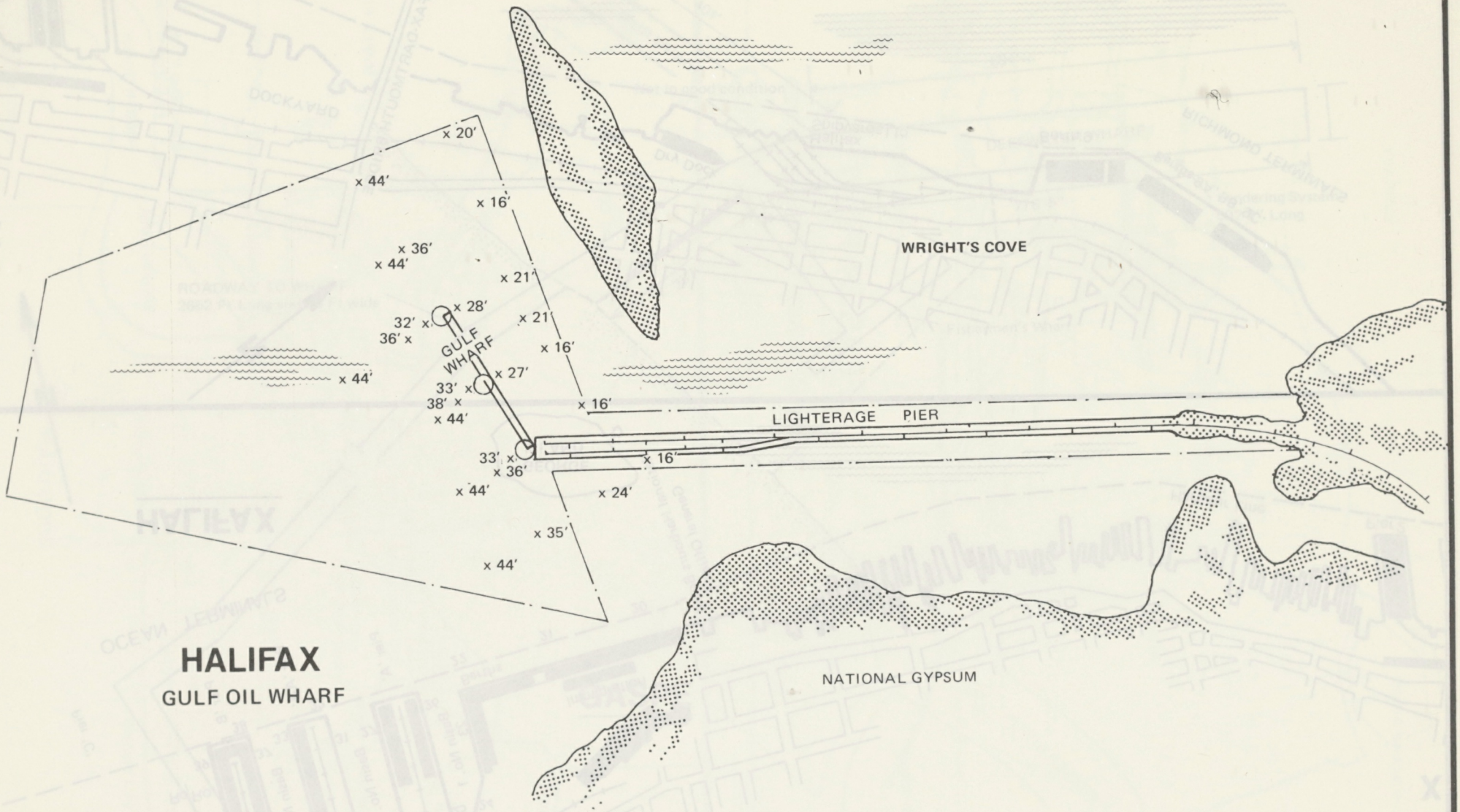

HALIFAX

GULF OIL WHARF

CANADA

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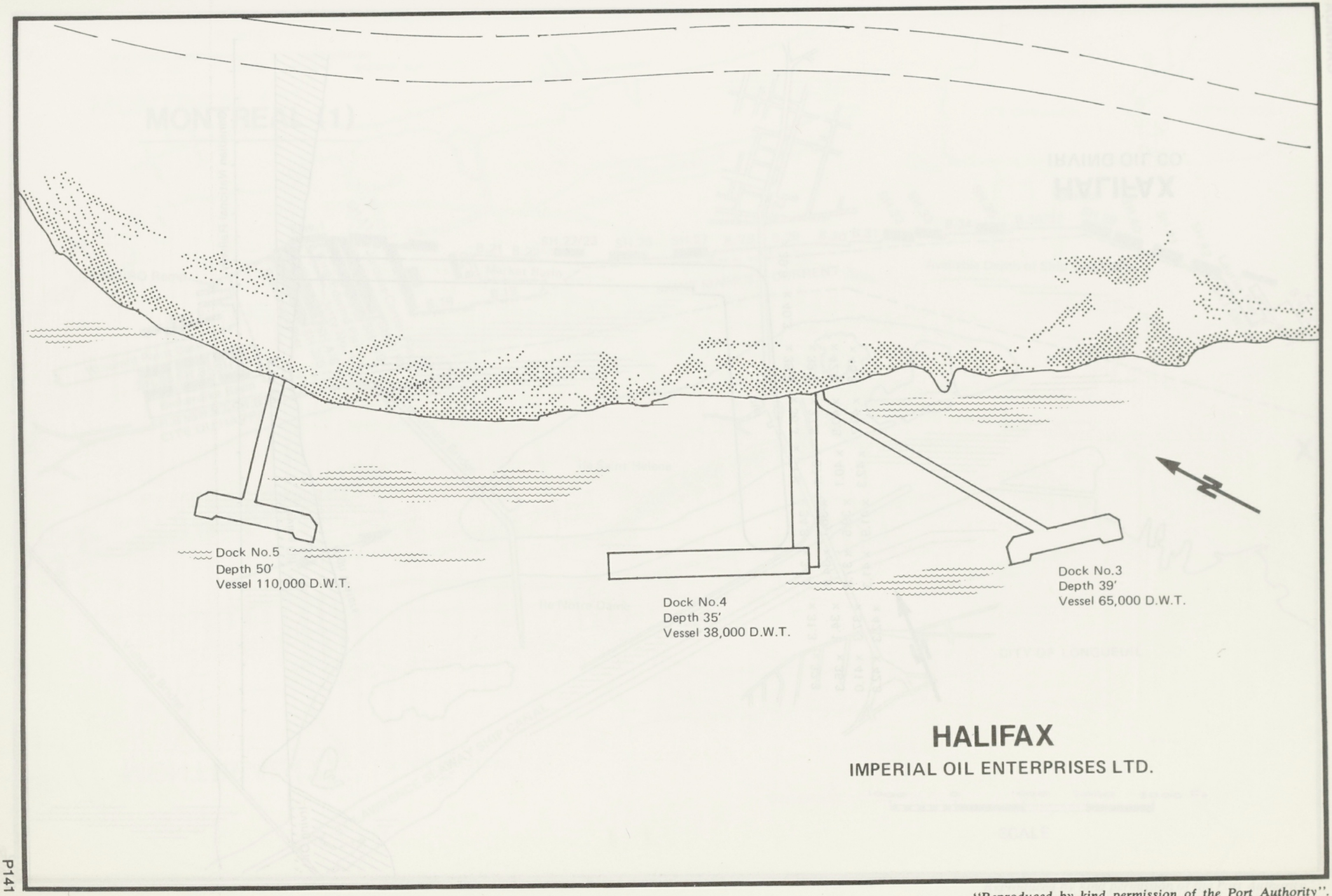

HALIFAX

IMPERIAL OIL ENTERPRISES LTD.

CANADA

P141

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HALIFAX

IRVING OIL CO.

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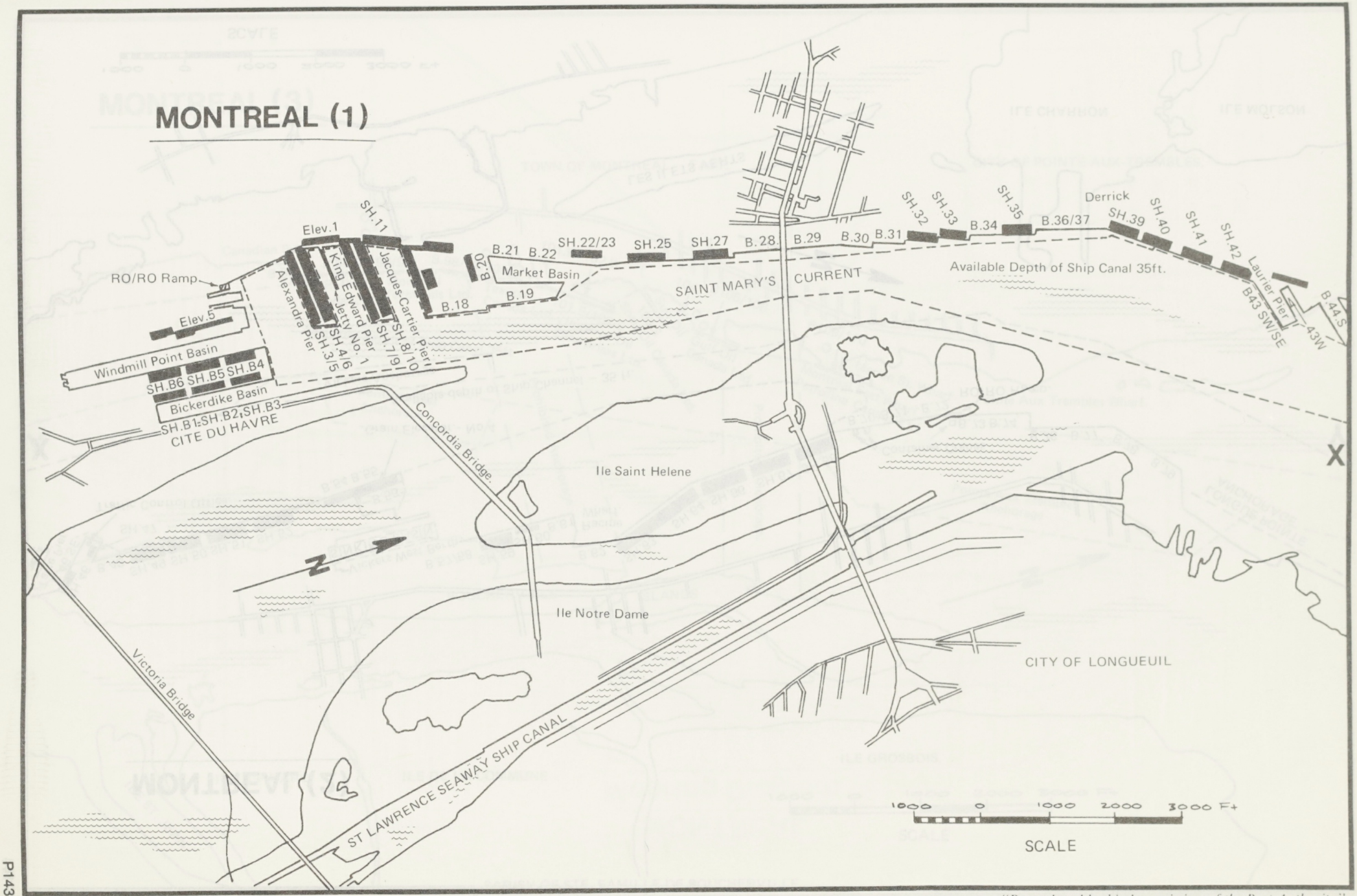
CANADA



P143

CANADA

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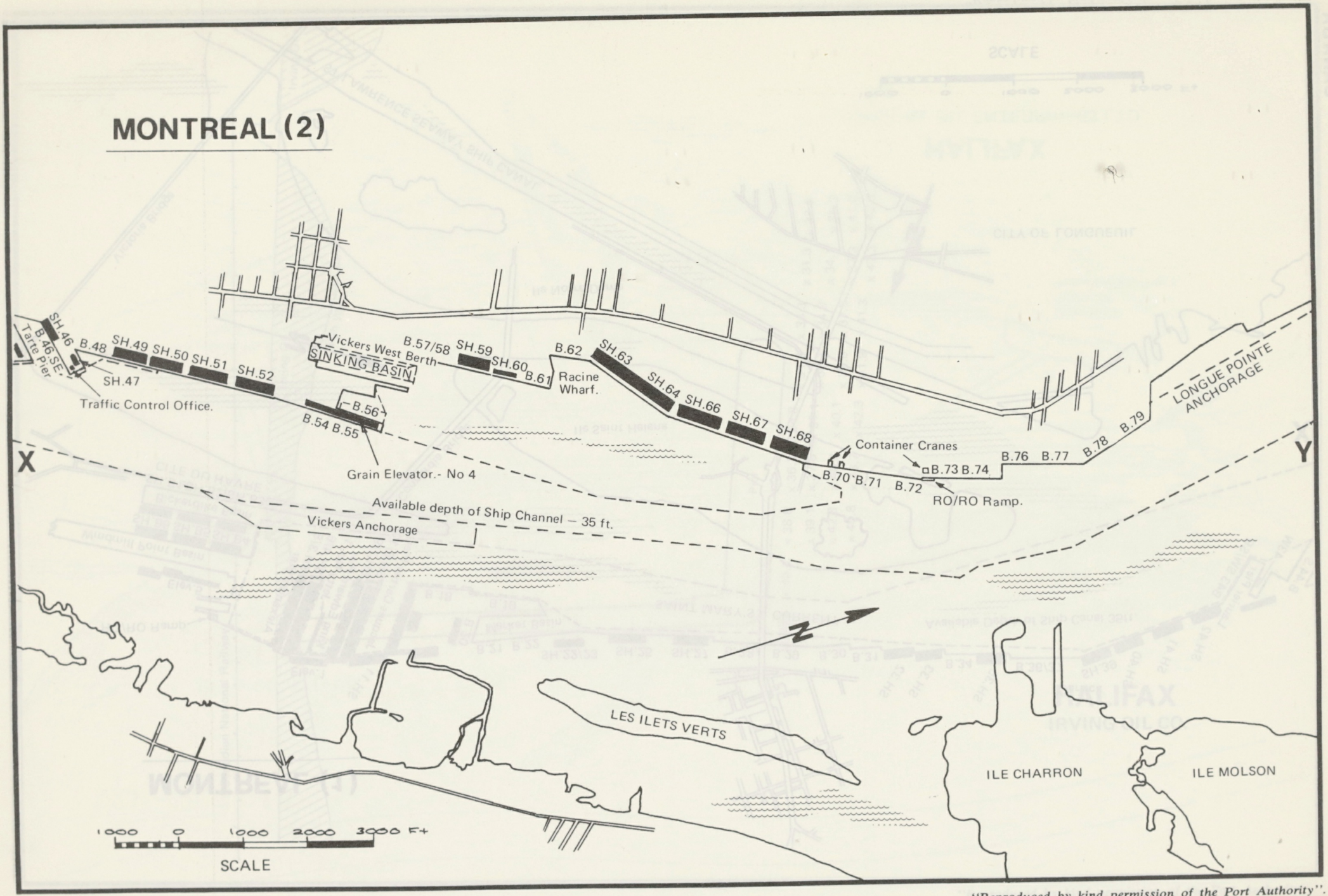
MONTREAL (2)



CANADA

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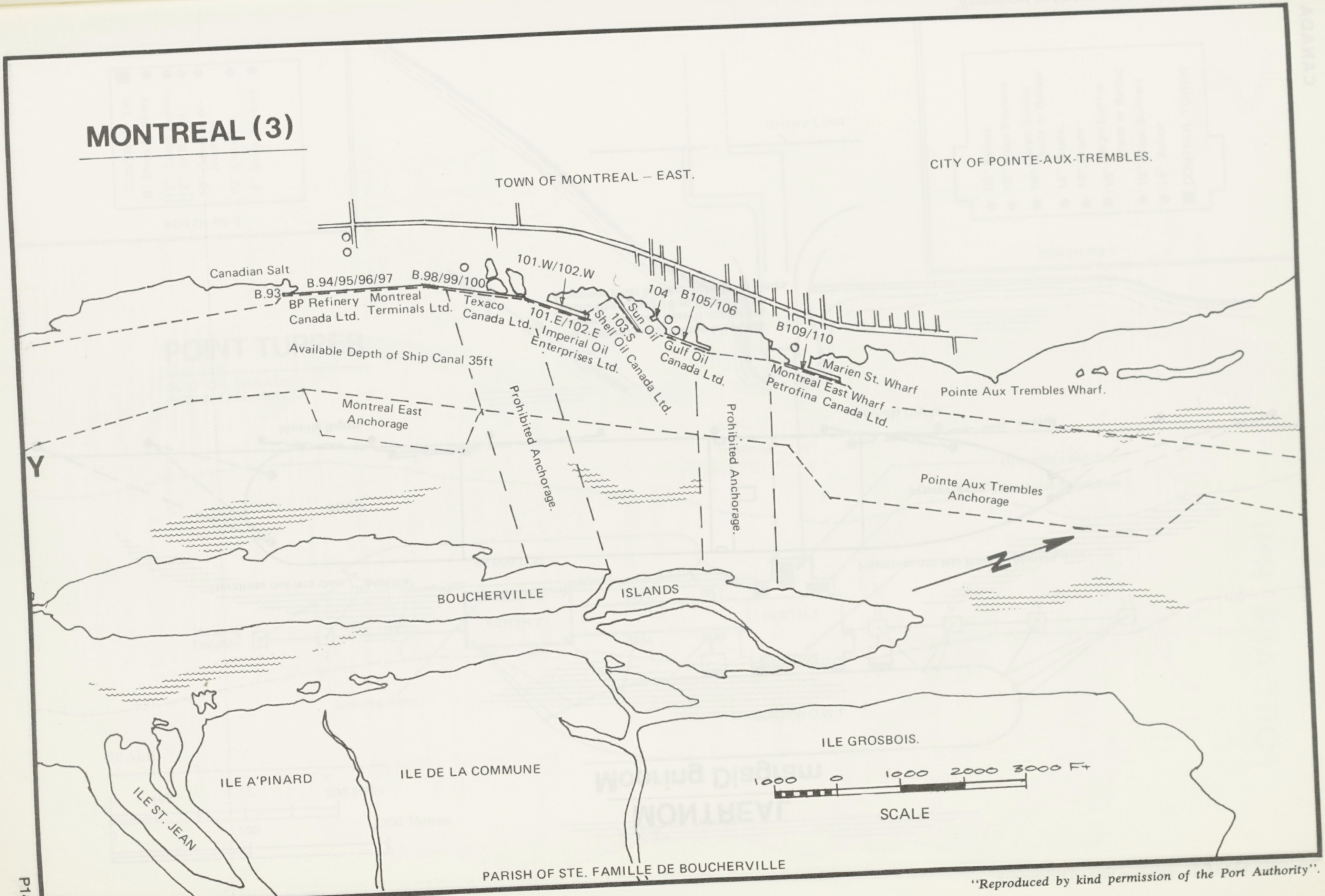
MONTREAL (3)



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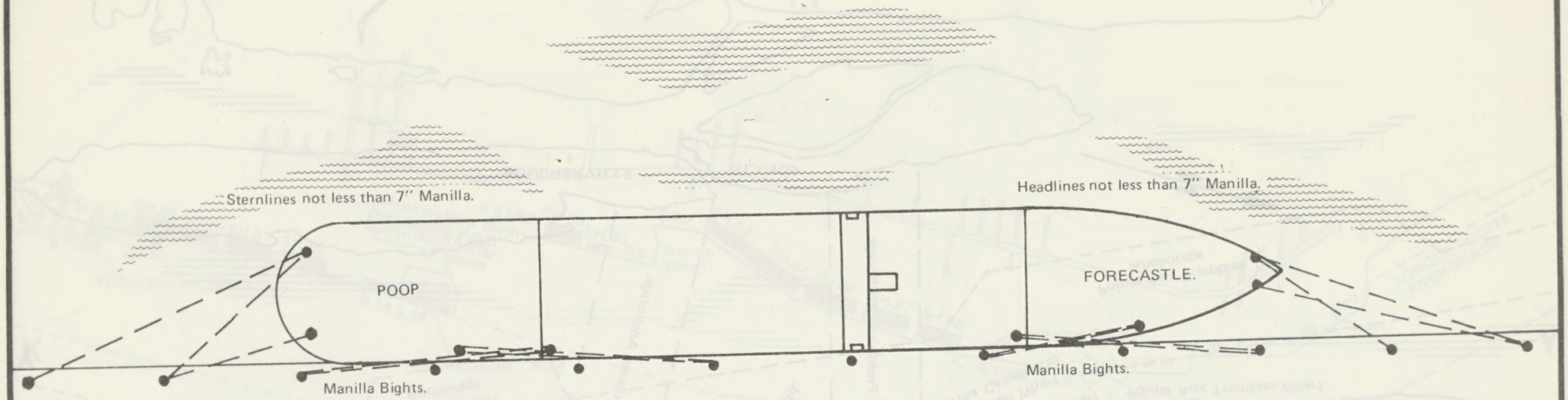
MONTREAL
Mooring Diagram



This diagram indicates the Moorings recommended for Vessels occupying Berths from Shed 18 to Section 110
Moorings must be kept tight at all times.

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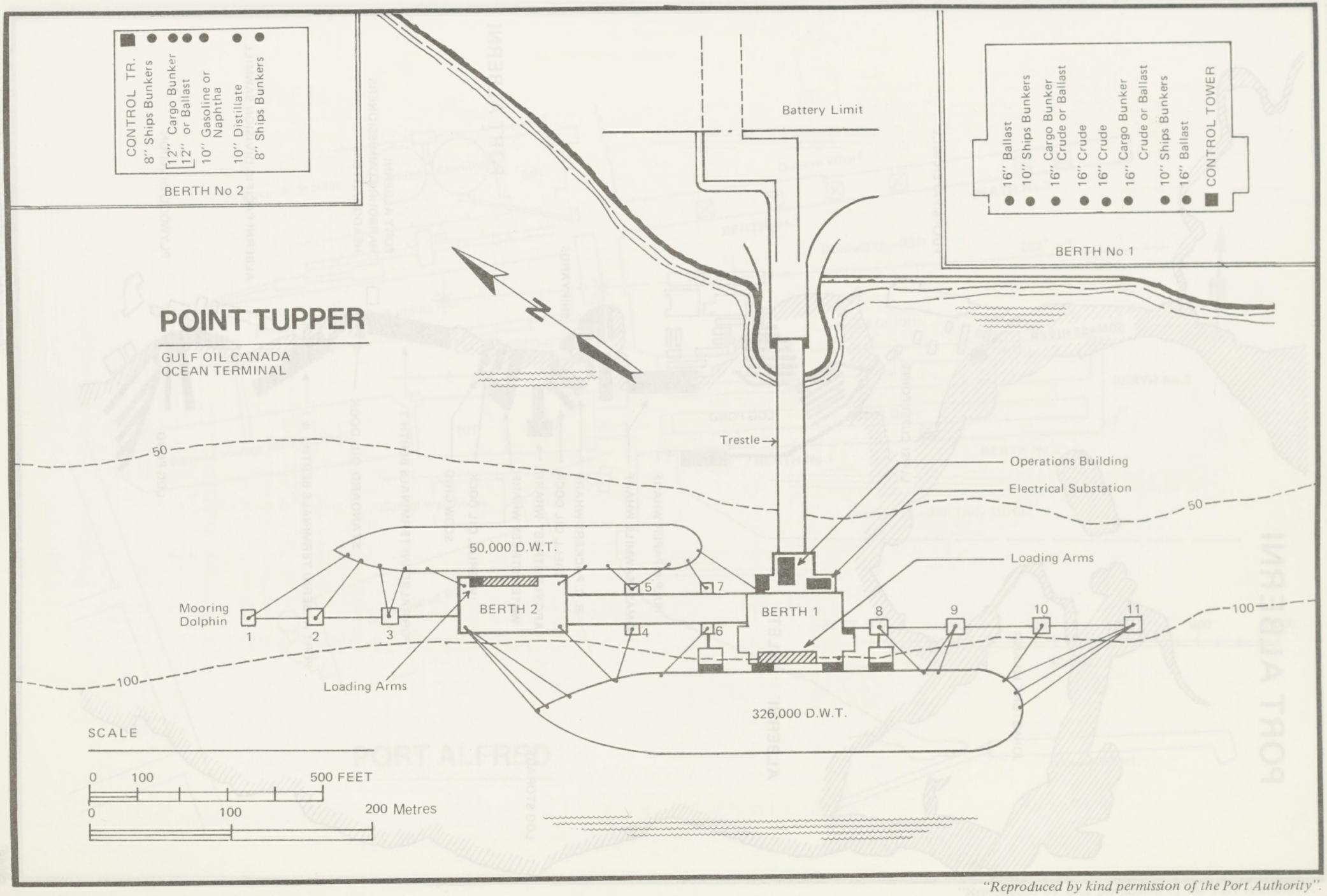

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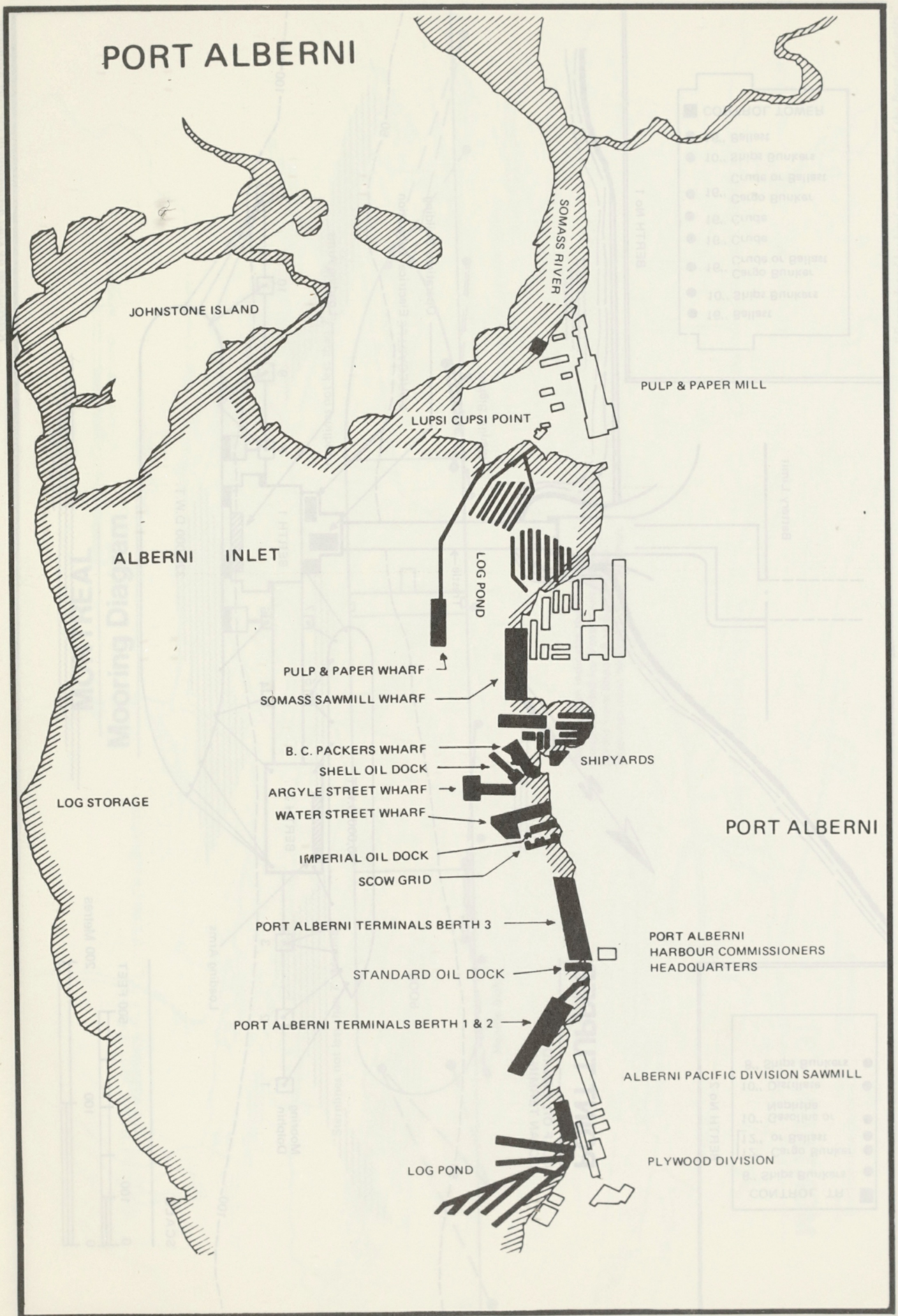

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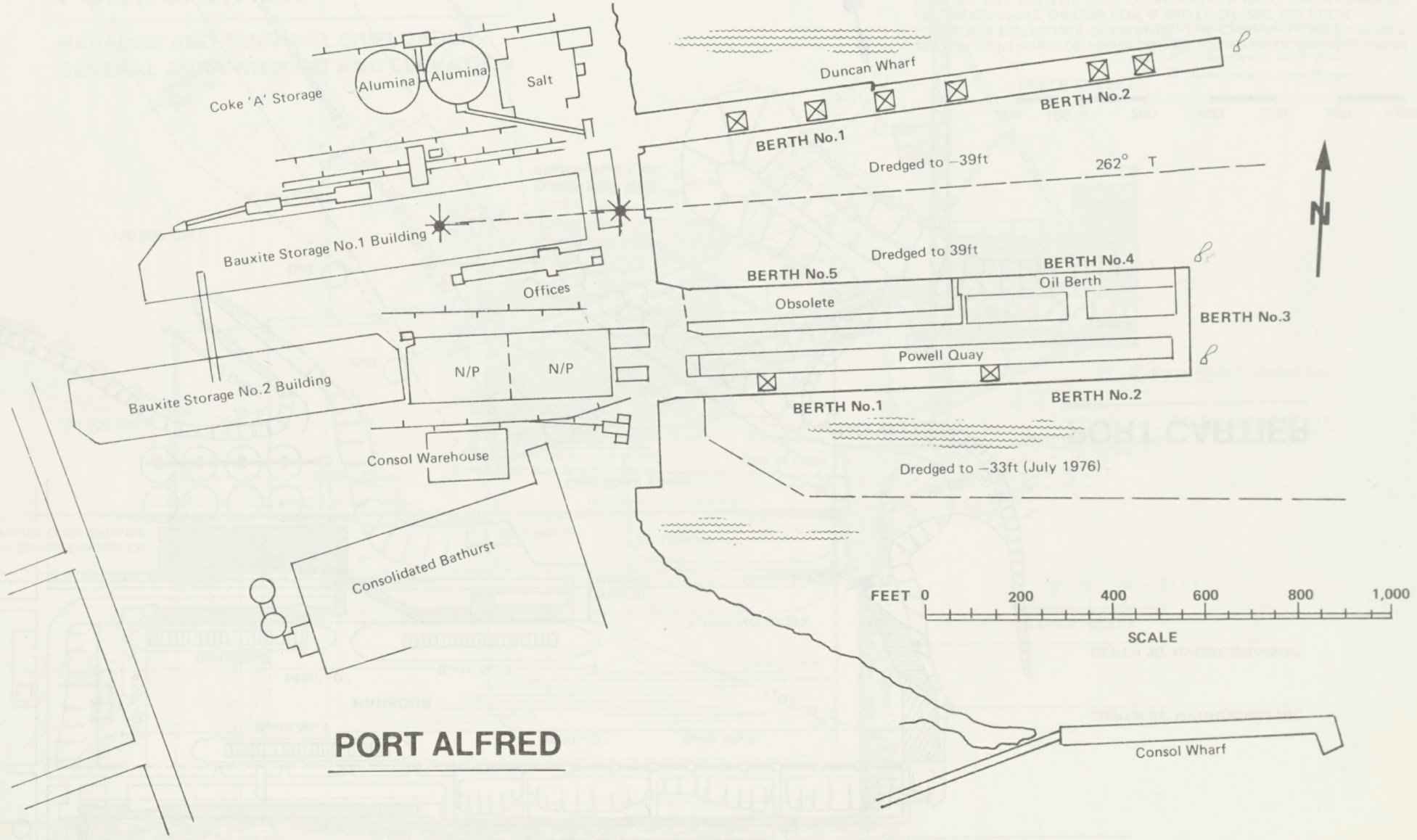

PORT ALFRED

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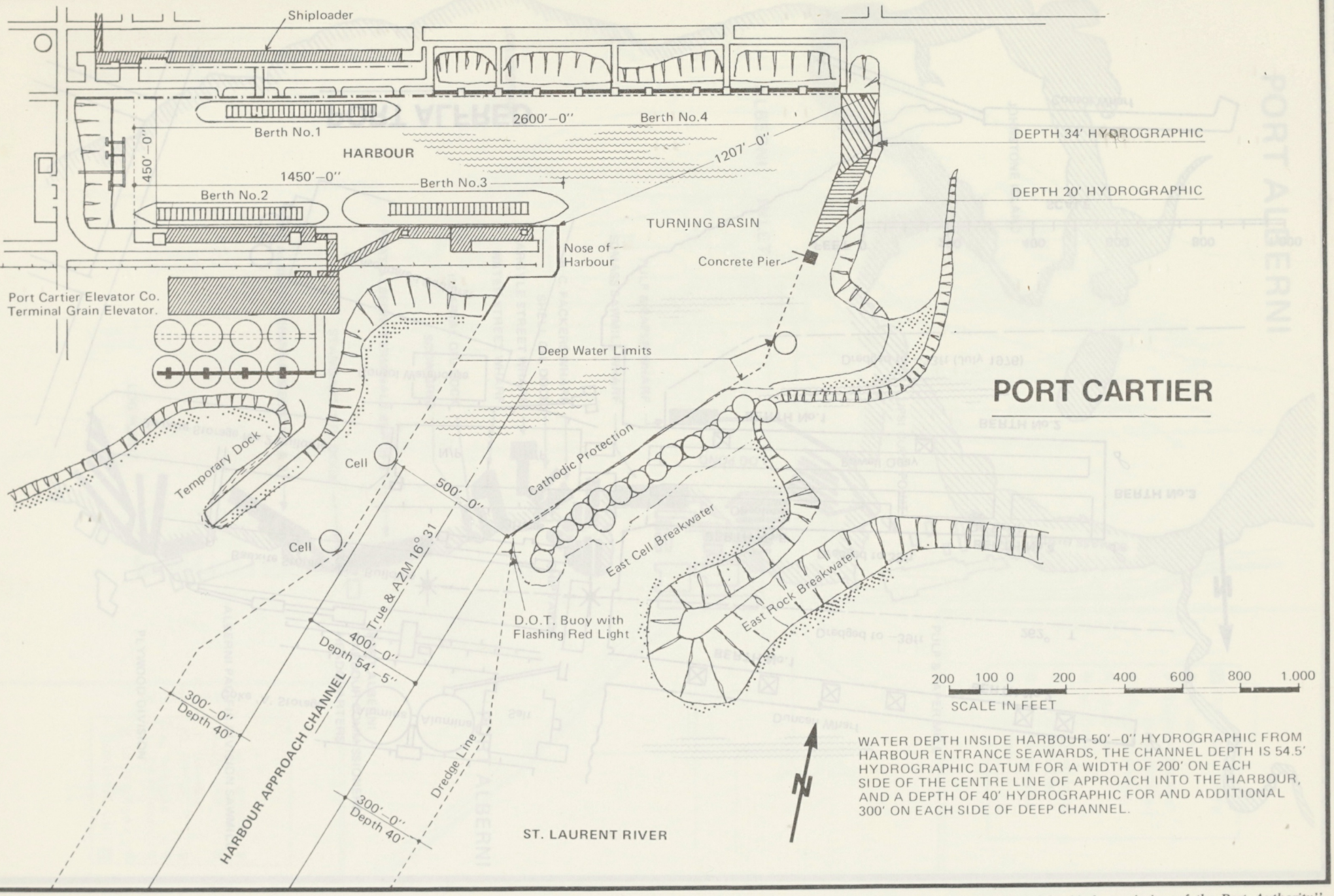

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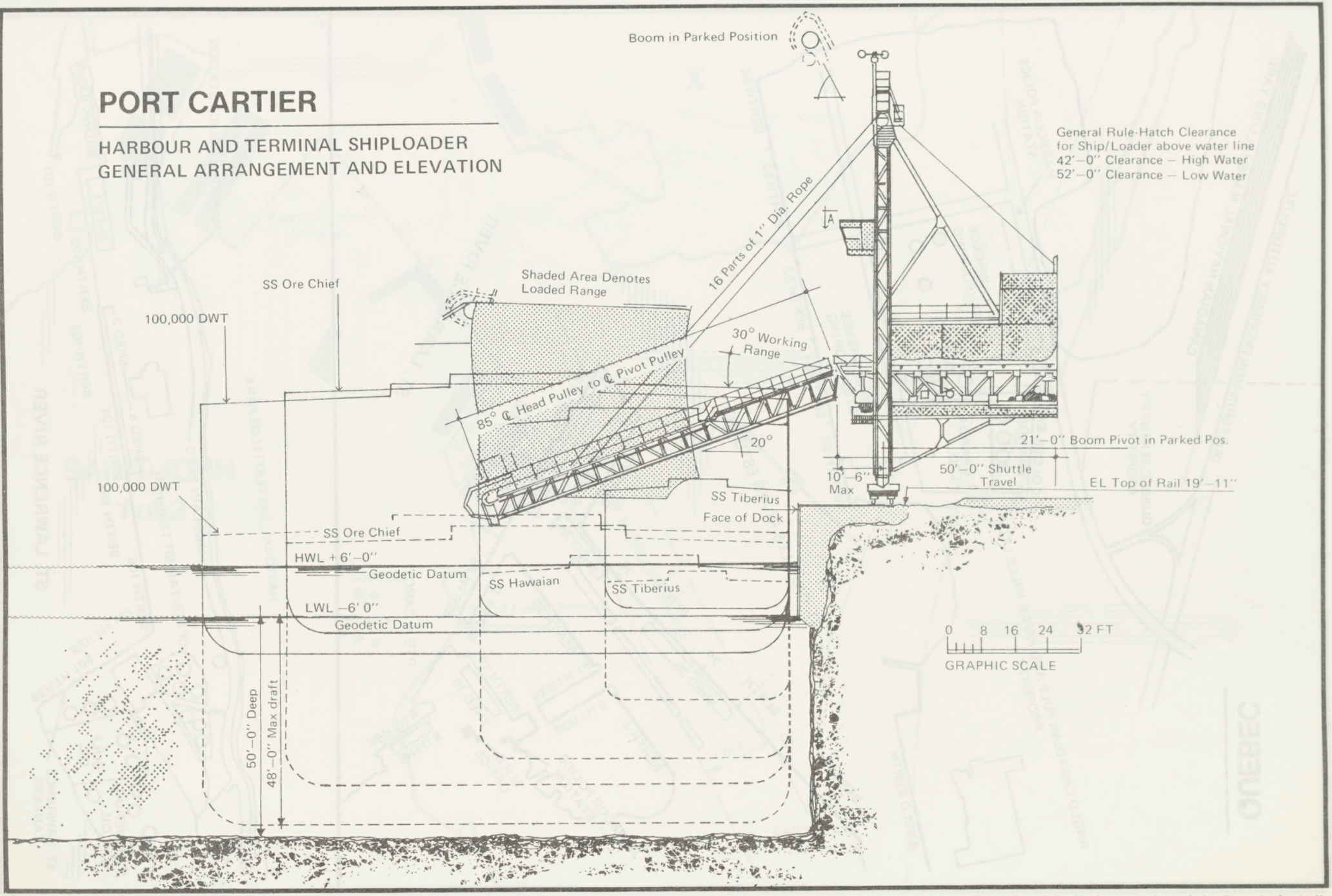
PORT CARTIER

HARBOUR AND TERMINAL SHIPLOADER
GENERAL ARRANGEMENT AND ELEVATION



P151

CANADA

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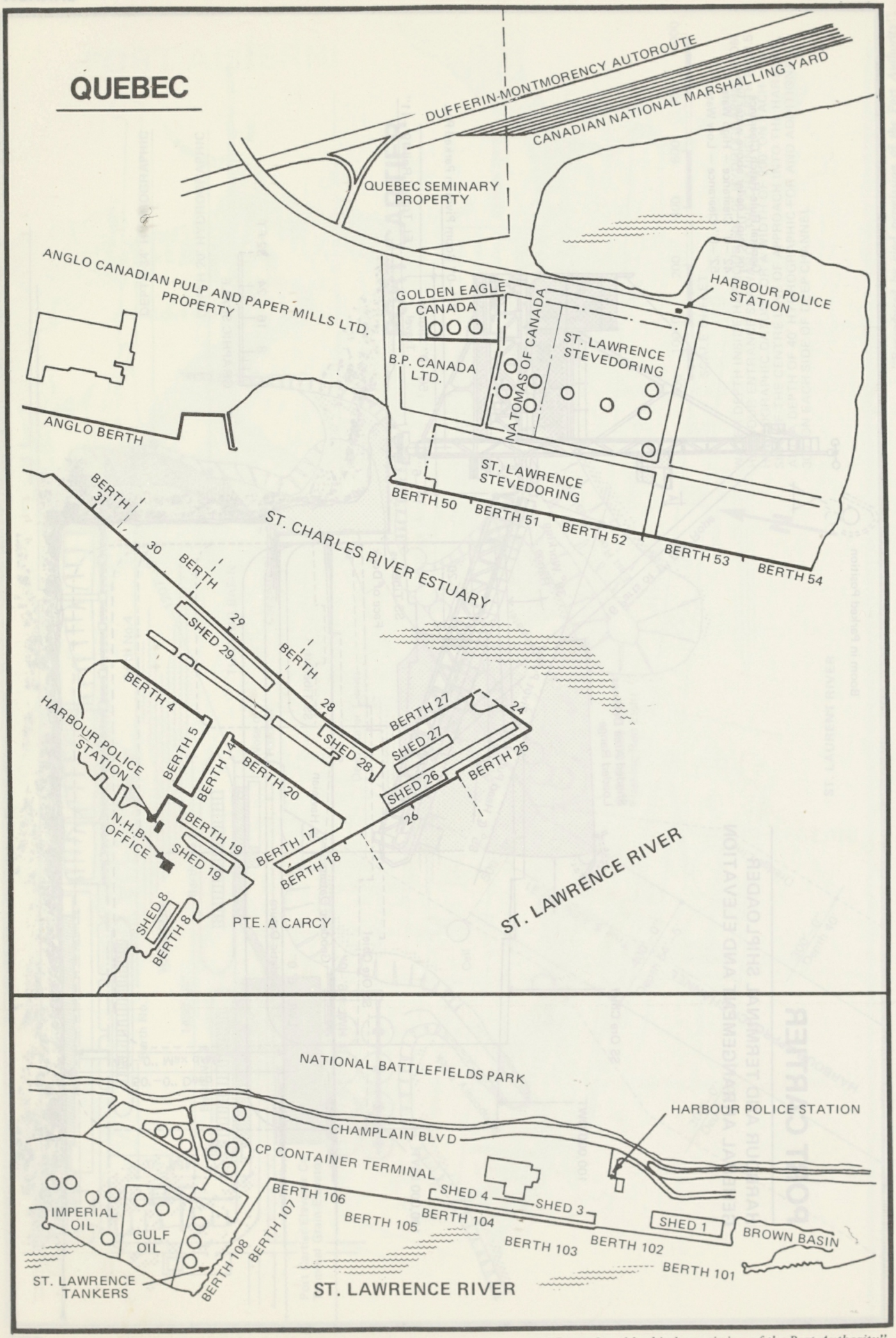

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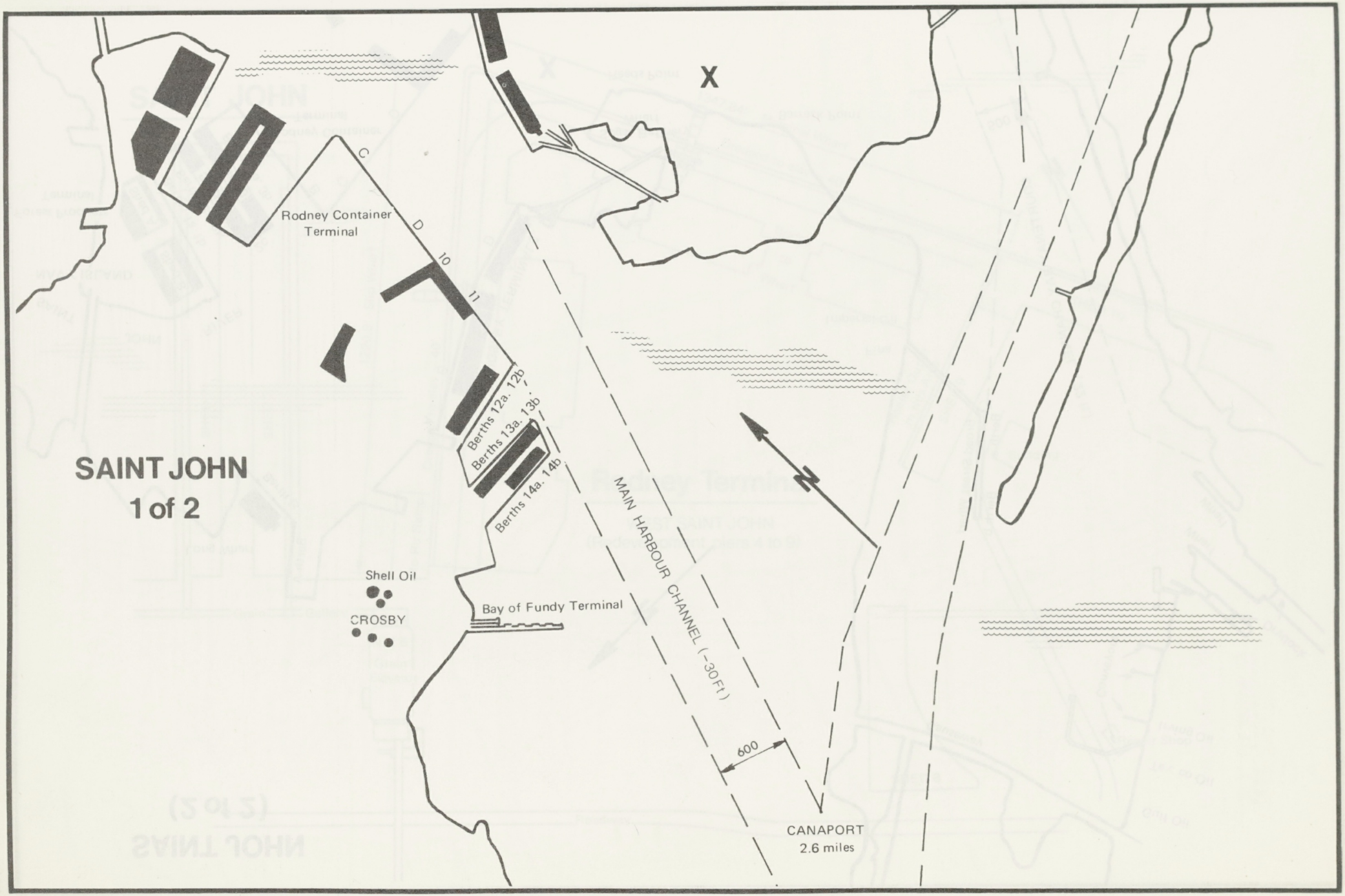

P153

CANADA

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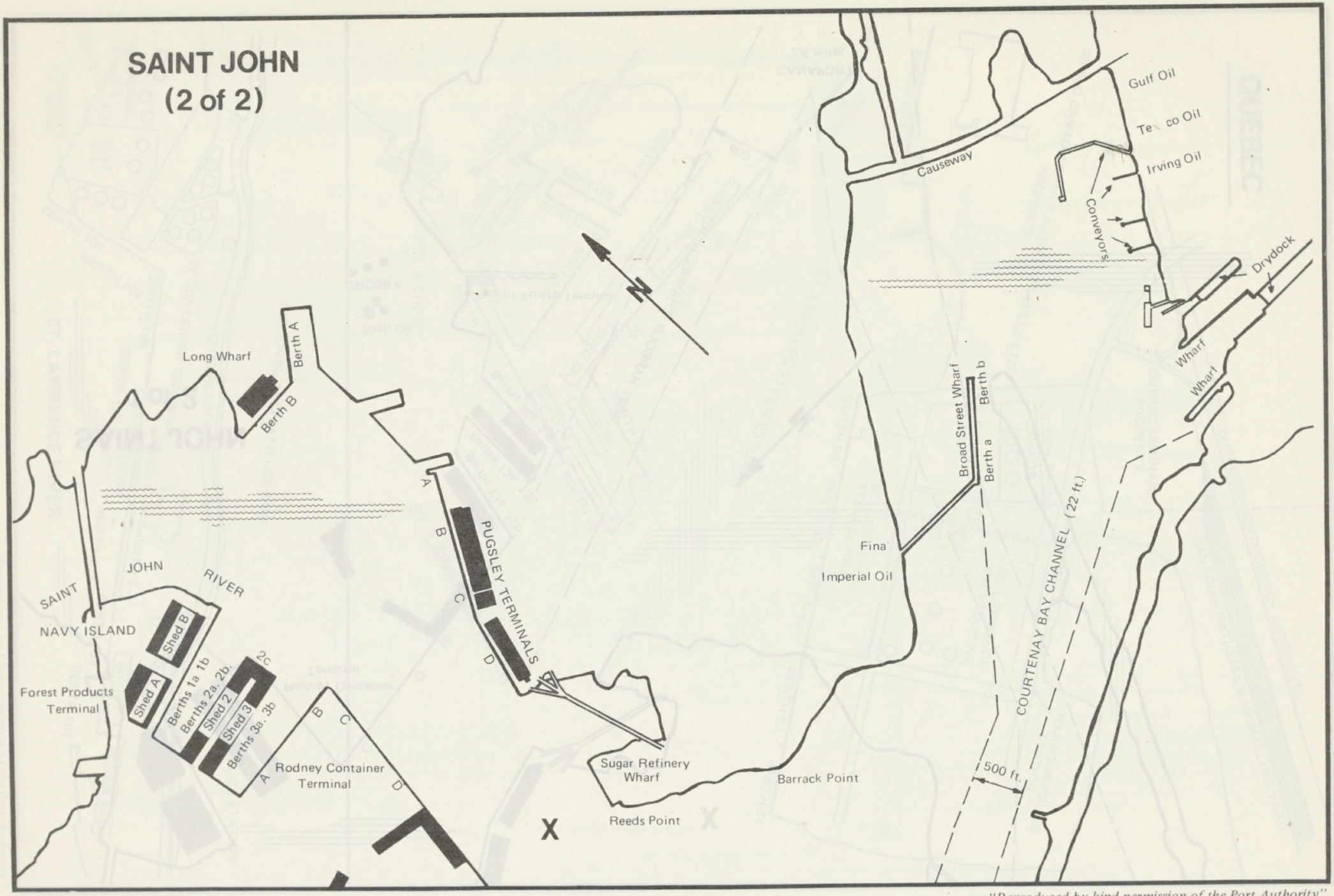
SAINT JOHN
(2 of 2)



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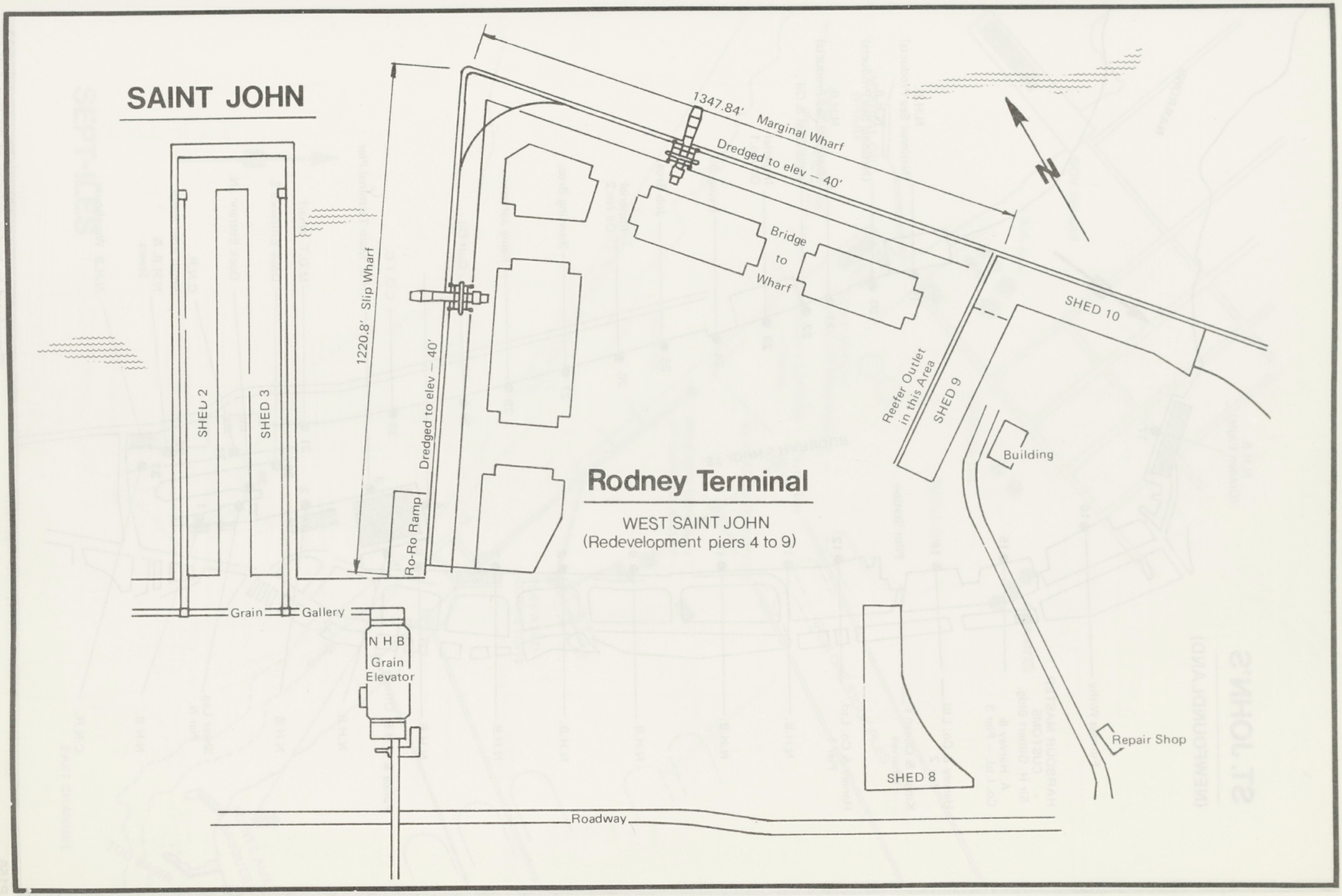

P155

CANADA

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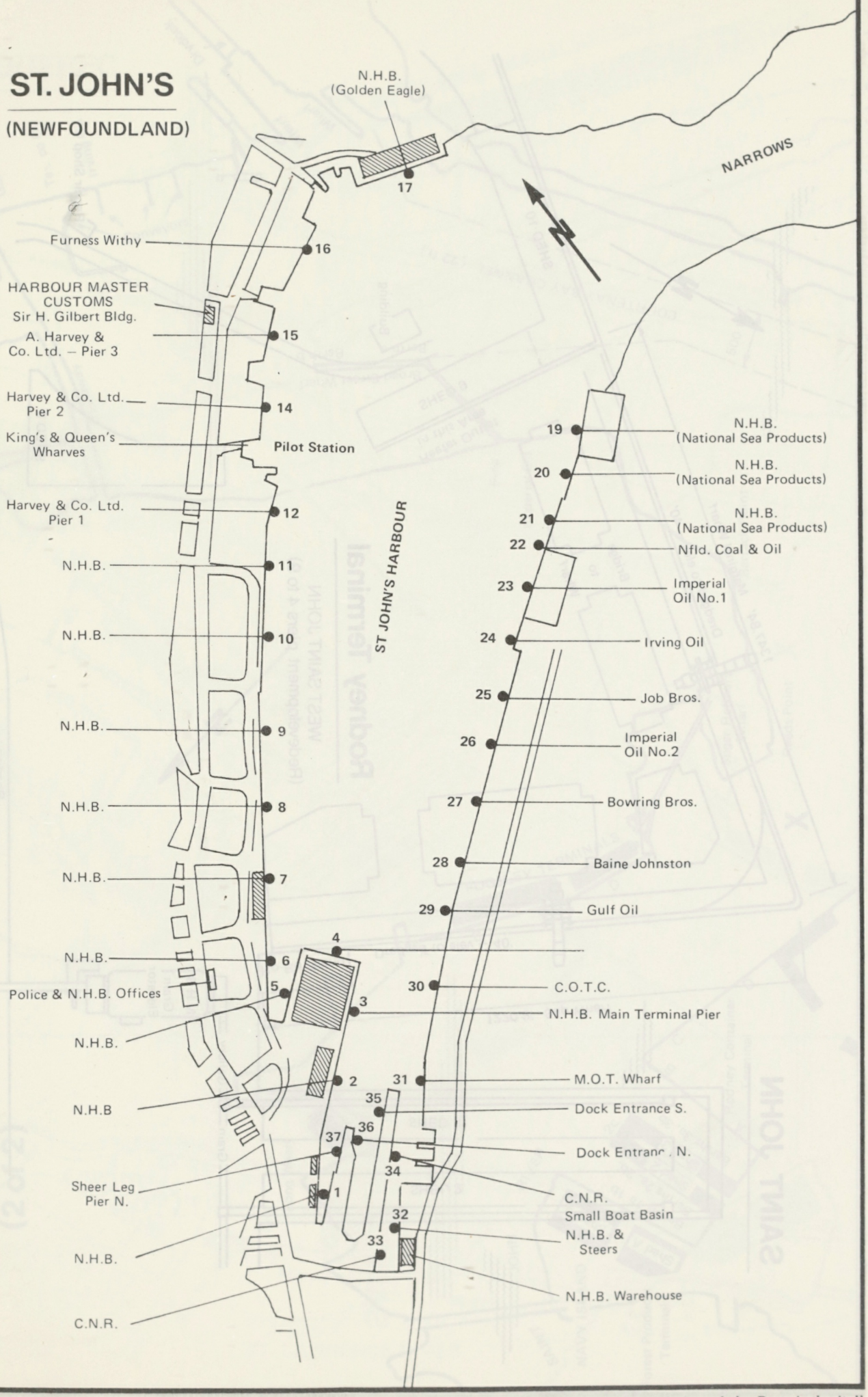
ST. JOHN'S

(NEWFOUNDLAND)



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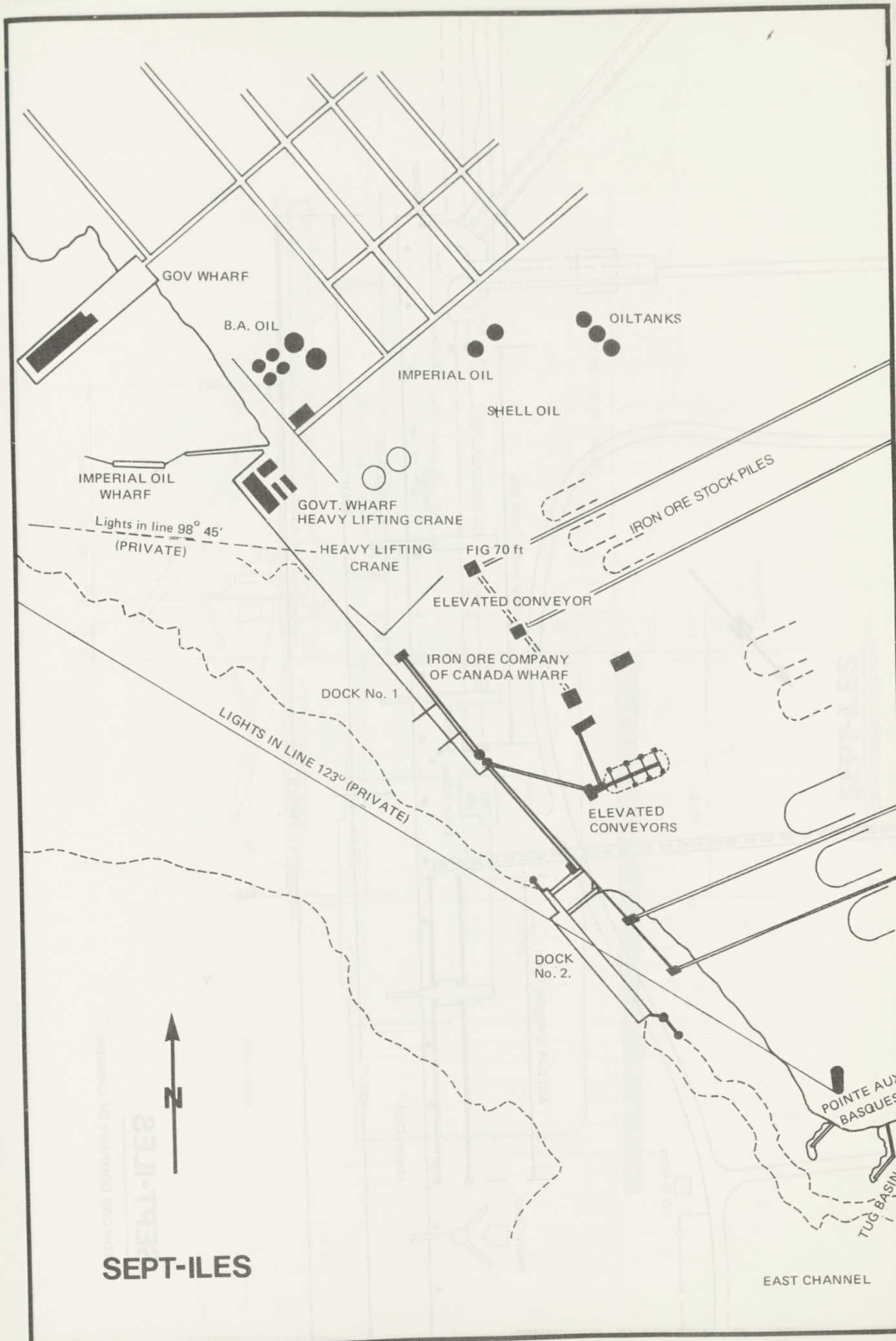

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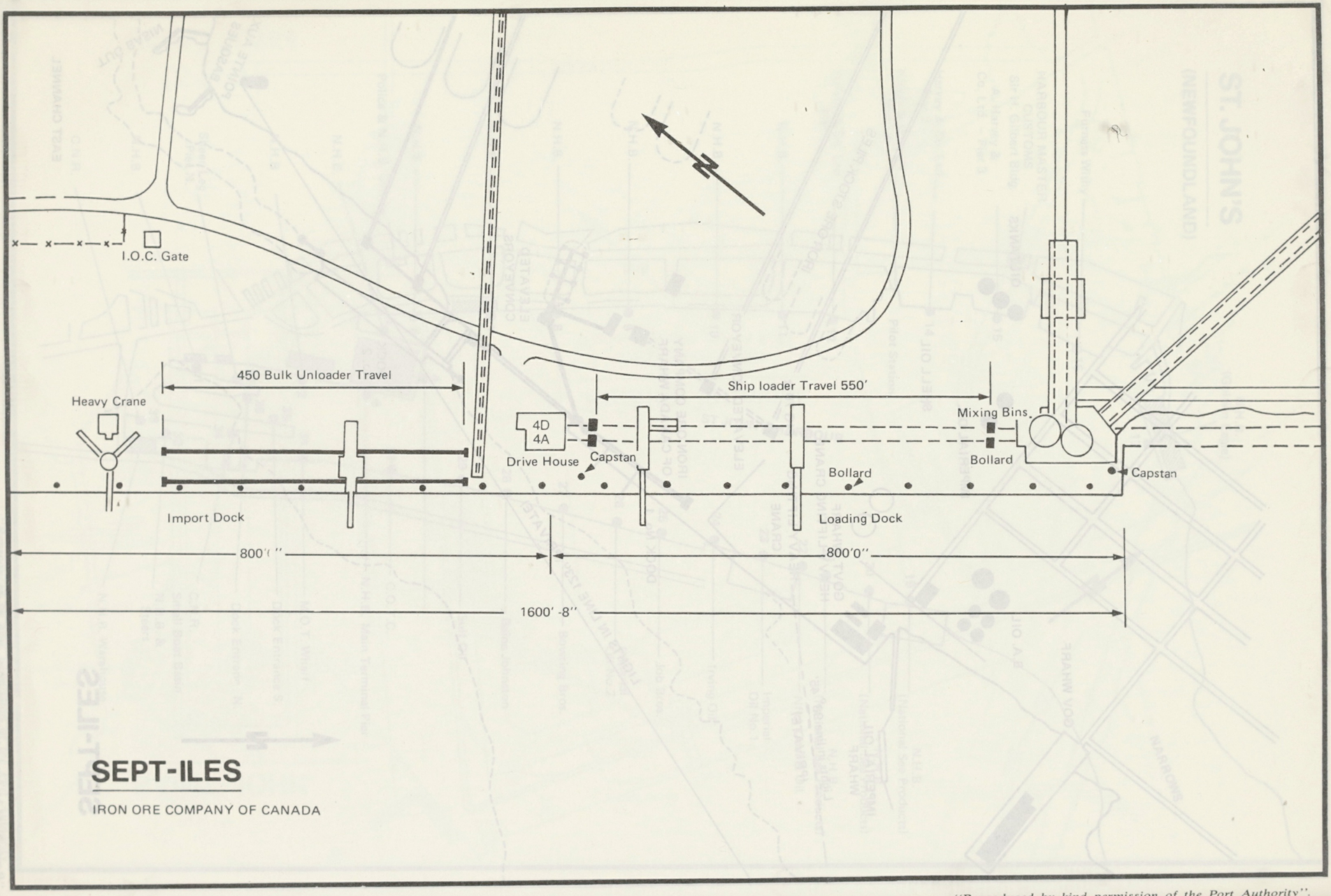

SEPT-ILES

IRON ORE COMPANY OF CANADA

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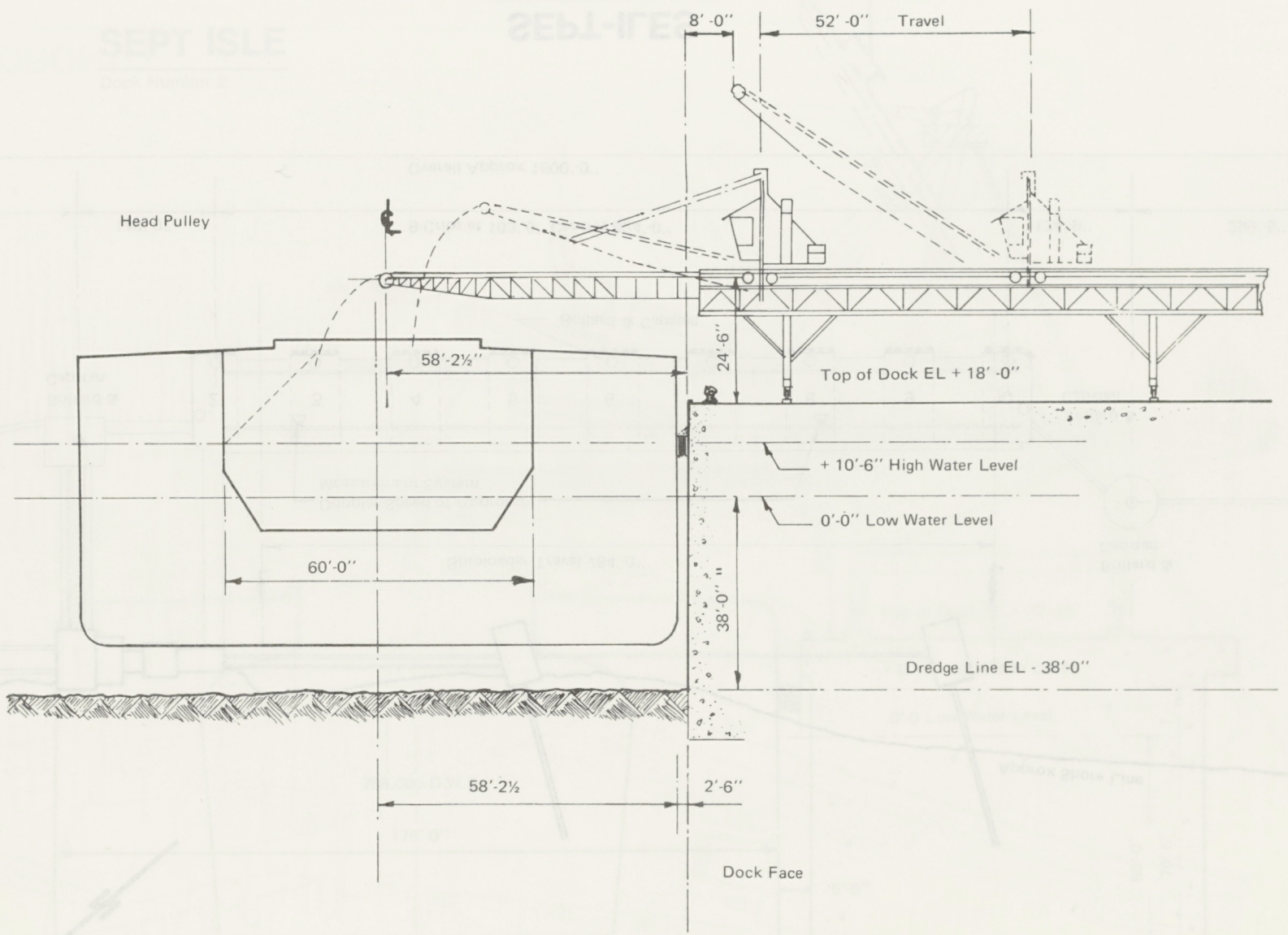

SEPT-ILES

Dock–Number1 (Old dock)

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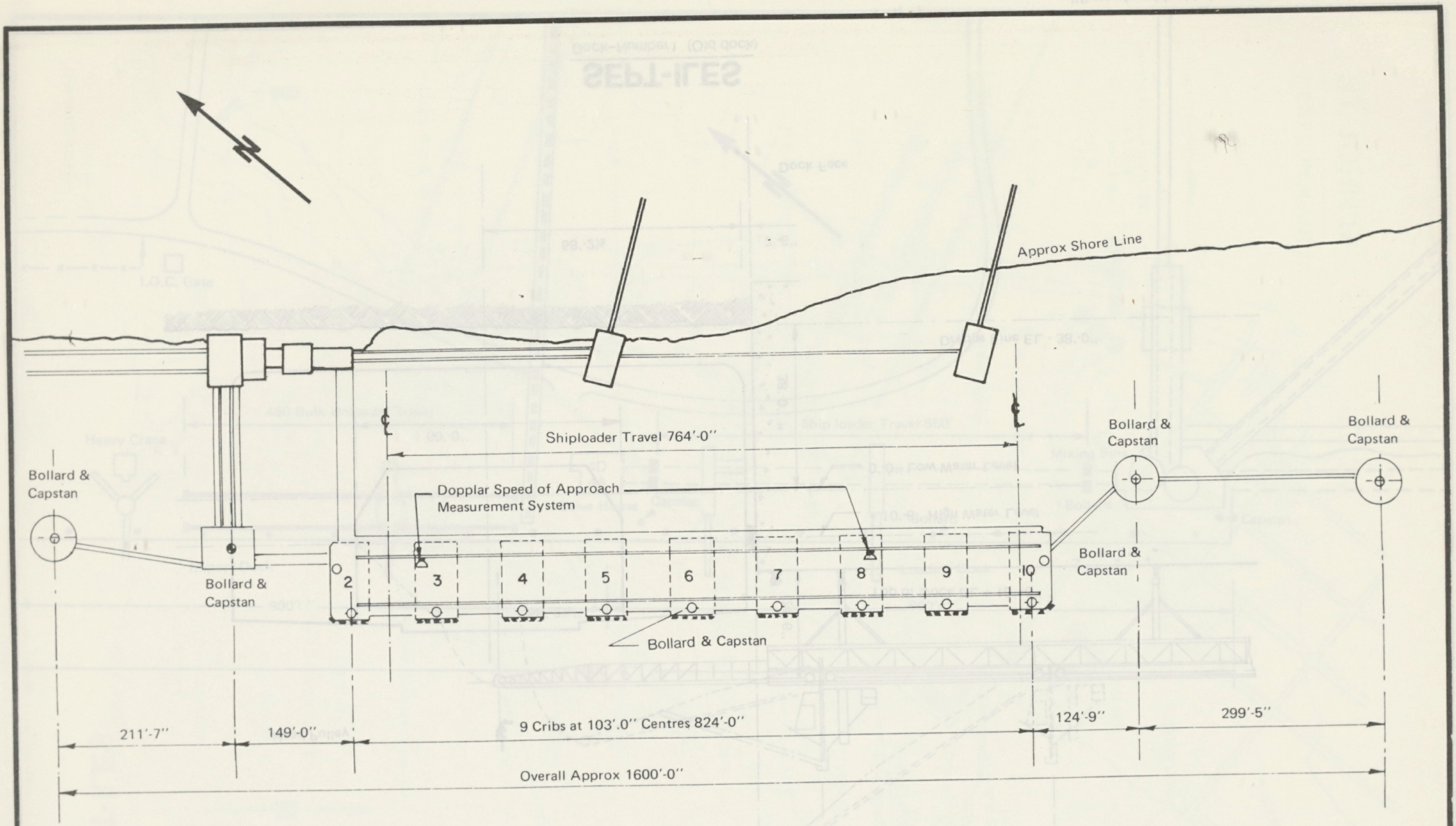
CANADA



SEPT-ILES

Dock–Number 2

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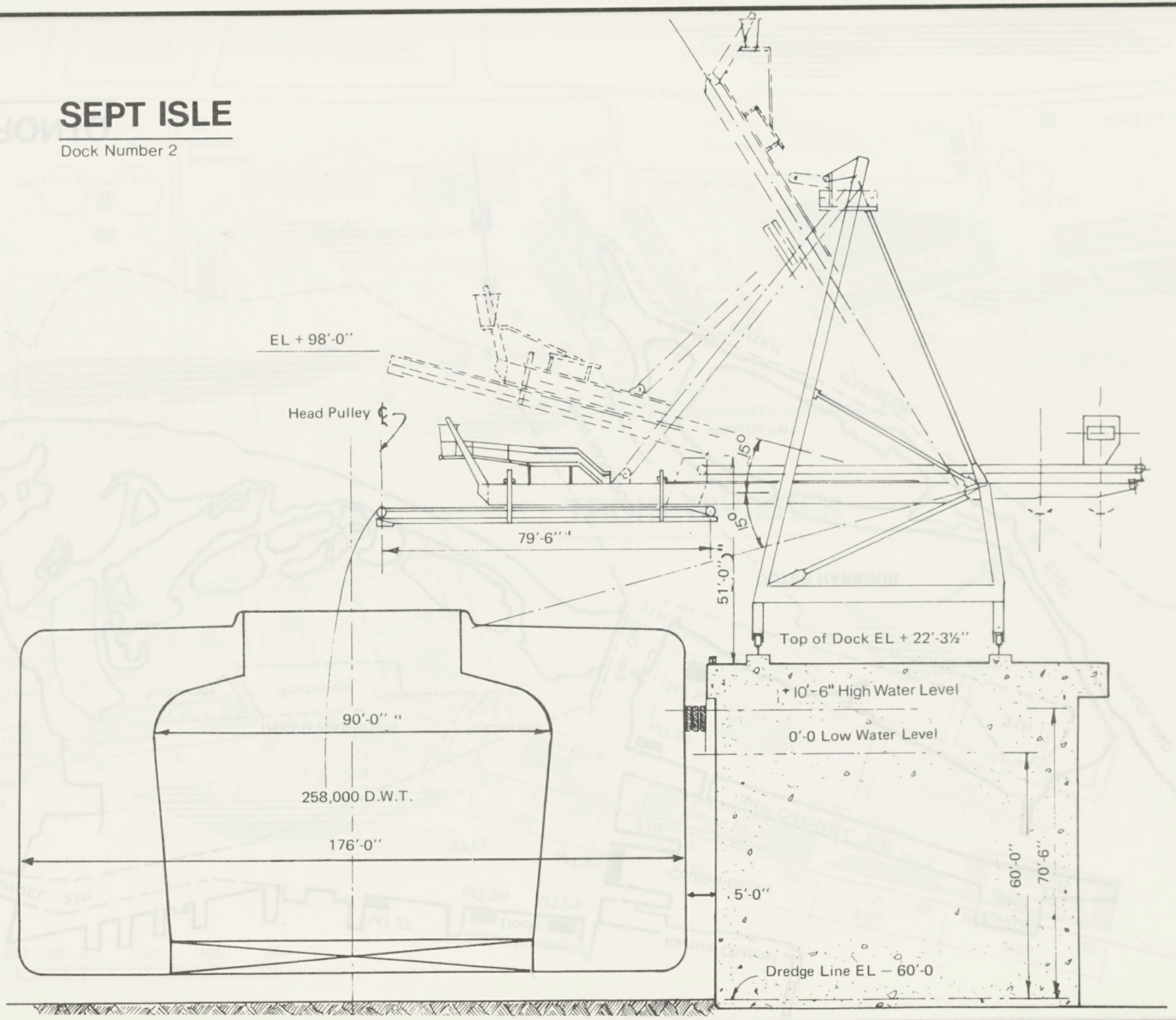
SEPT ISLE

Dock Number 2



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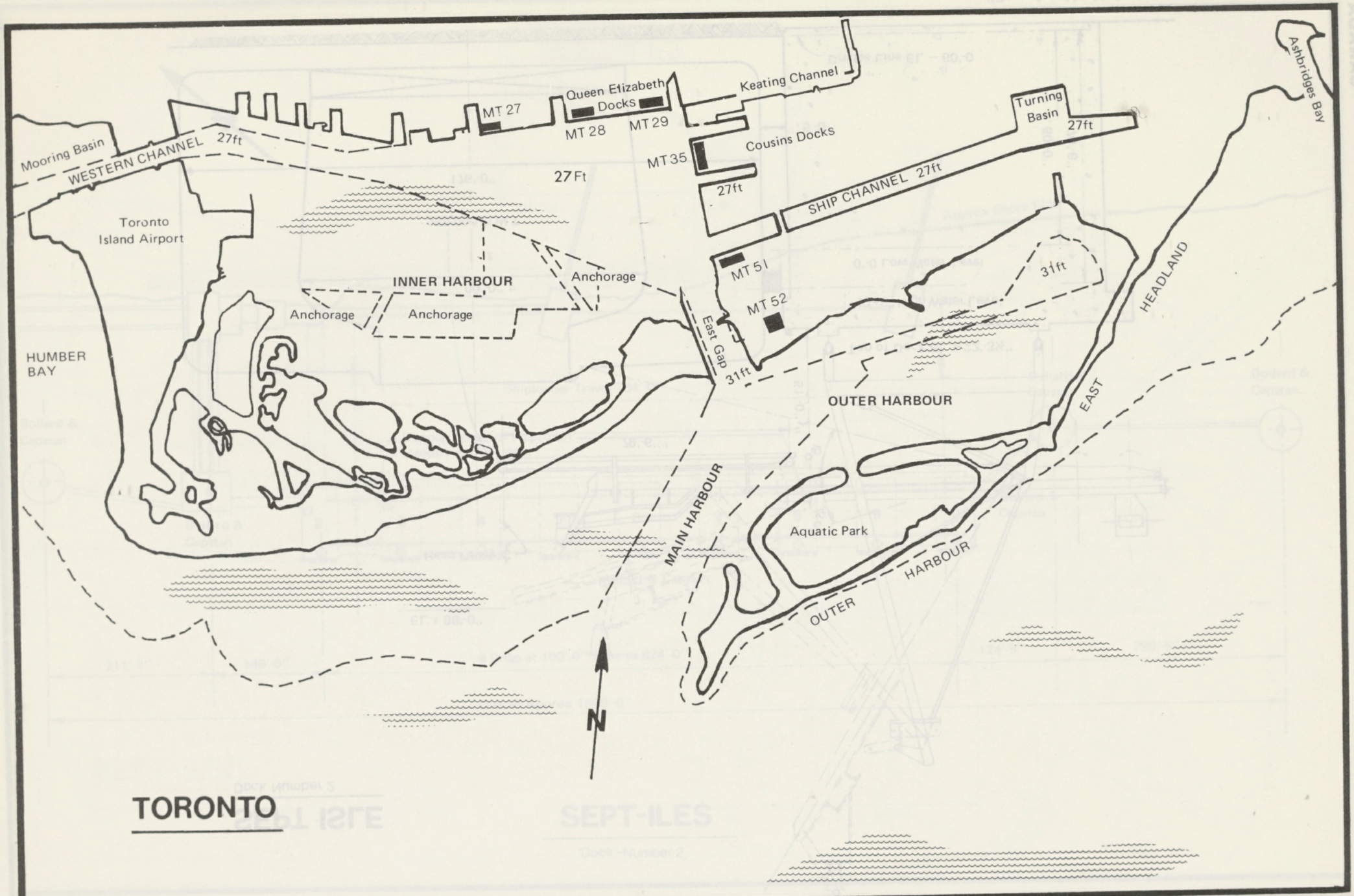
Mooring Basin
WESTERN CHANNEL 27ft
Toronto
Island Airport
HUMBER
BAY
INNER HARBOUR
Anchorage
Anchorage
Anchorage
MT 27
Queen Elizabeth
Docks
MT 28
MT 29
Keating Channel
MT 35
Cousins Docks
27ft
27 Ft
Turning
Basin
27ft
SHIP CHANNEL 27ft
MT 51
MT 52
East Gap
31ft
31ft
HEADLAND
OUTER HARBOUR
EAST
MAIN HARBOUR
Aquatic Park
OUTER
HARBOUR
Ashbridges Bay
N

TORONTO

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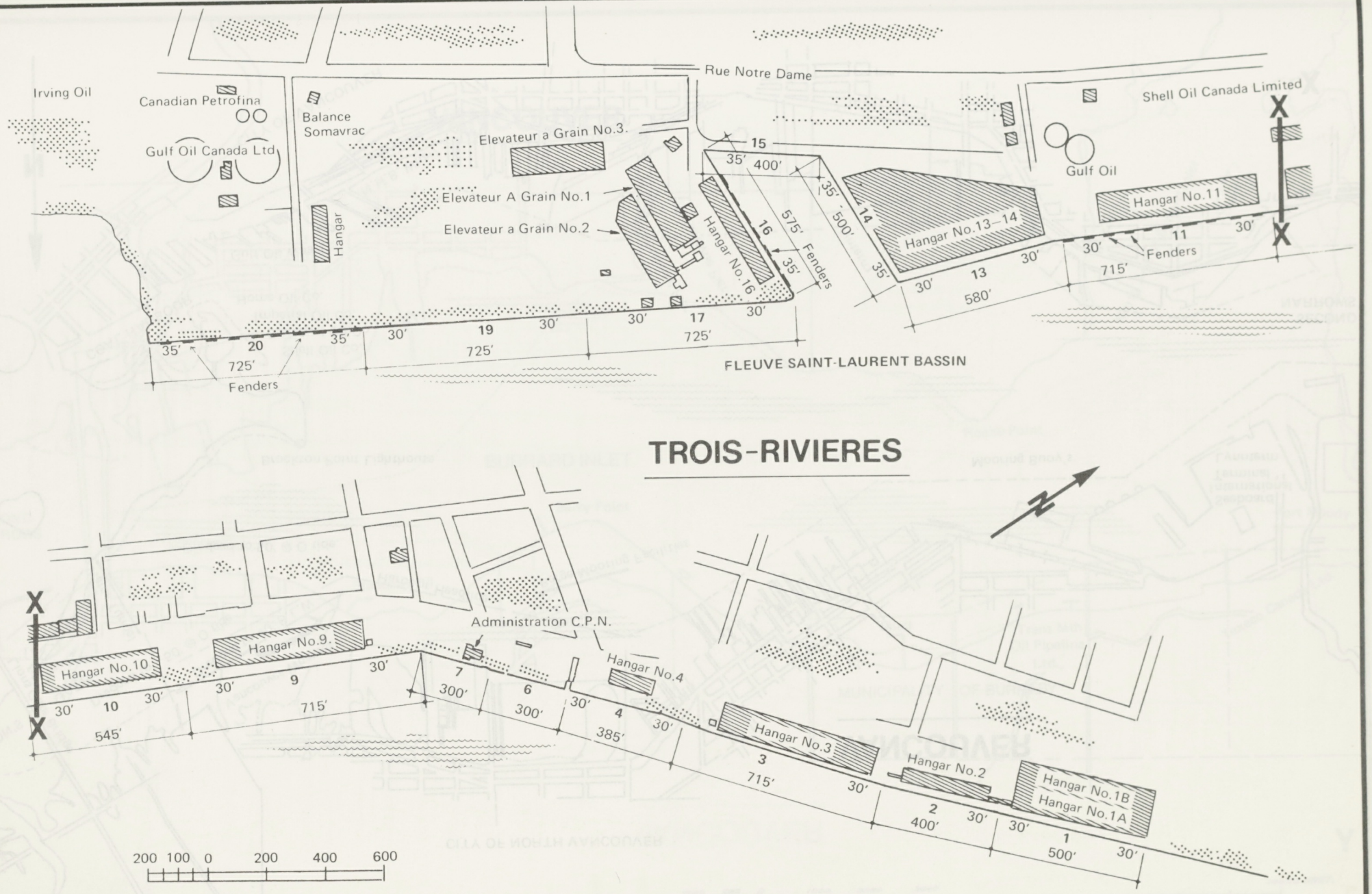

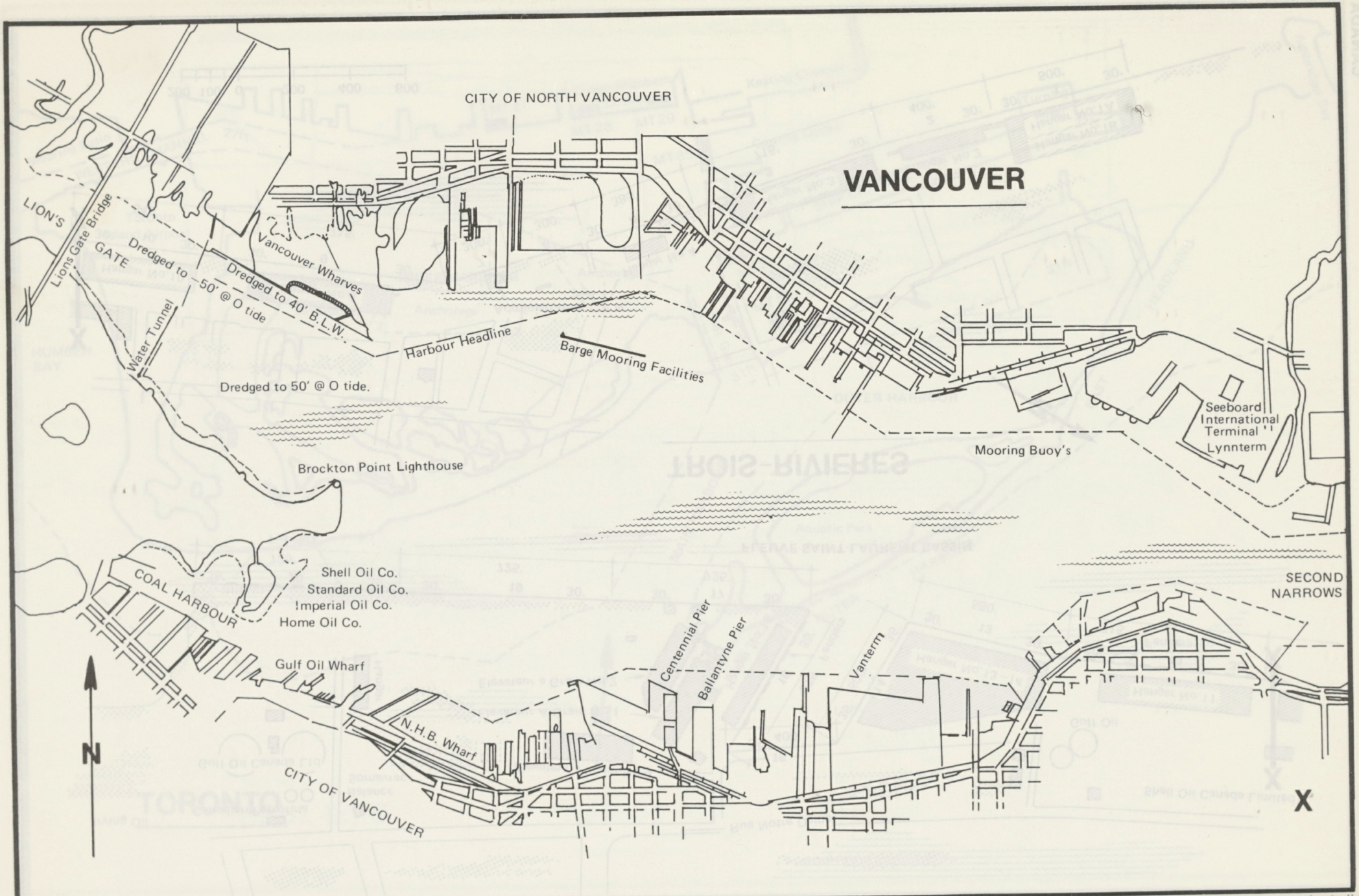
VANCOUVER
CITY OF NORTH VANCOUVER
LION'S GATE
Lions Gate Bridge
Dredged to 50' @ O tide
Dredged to 40' B.L.W.
Vancouver Wharves
Water Tunnel
Harbour Headline
Barge Mooring Facilities
Dredged to 50' @ O tide.
Brockton Point Lighthouse
Mooring Buoy's
Seeboard International Terminal
Lynnterm
SECOND NARROWS
COAL HARBOUR
Shell Oil Co.
Standard Oil Co.
Imperial Oil Co.
Home Oil Co.
Gulf Oil Wharf
Centennial Pier
Ballantyne Pier
Vanterm
N.H.B. Wharf
CITY OF VANCOUVER
N
X

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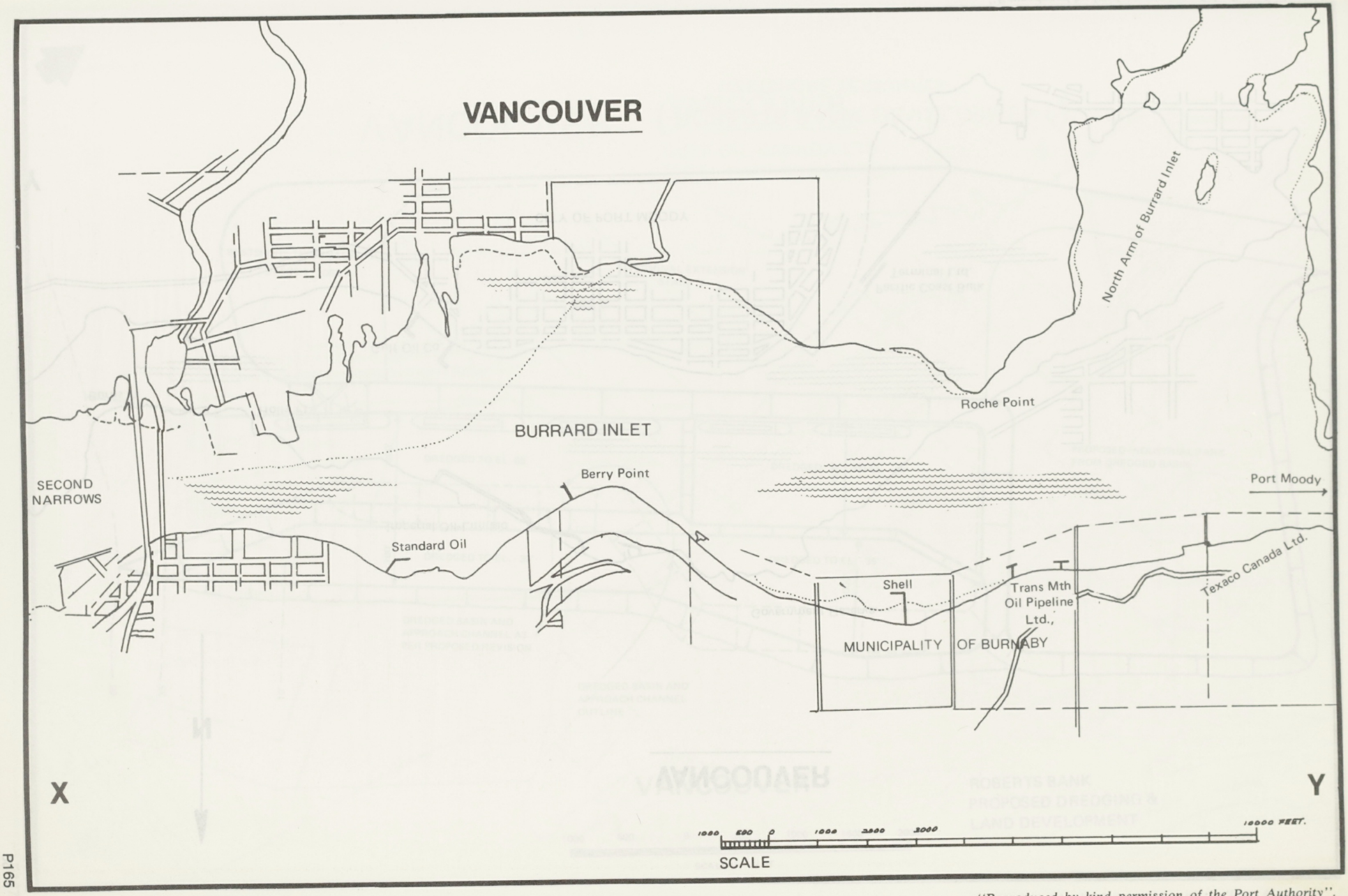

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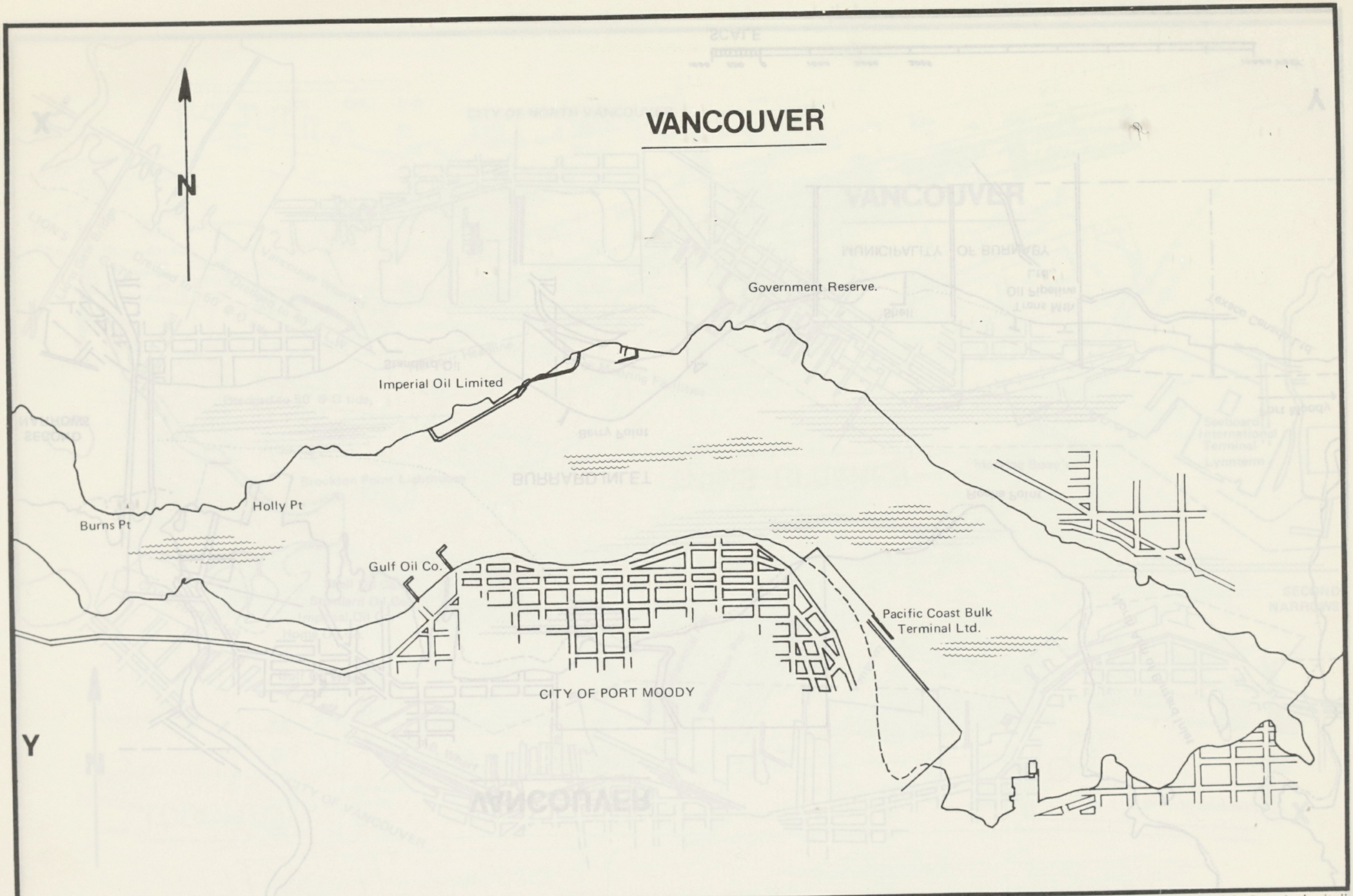

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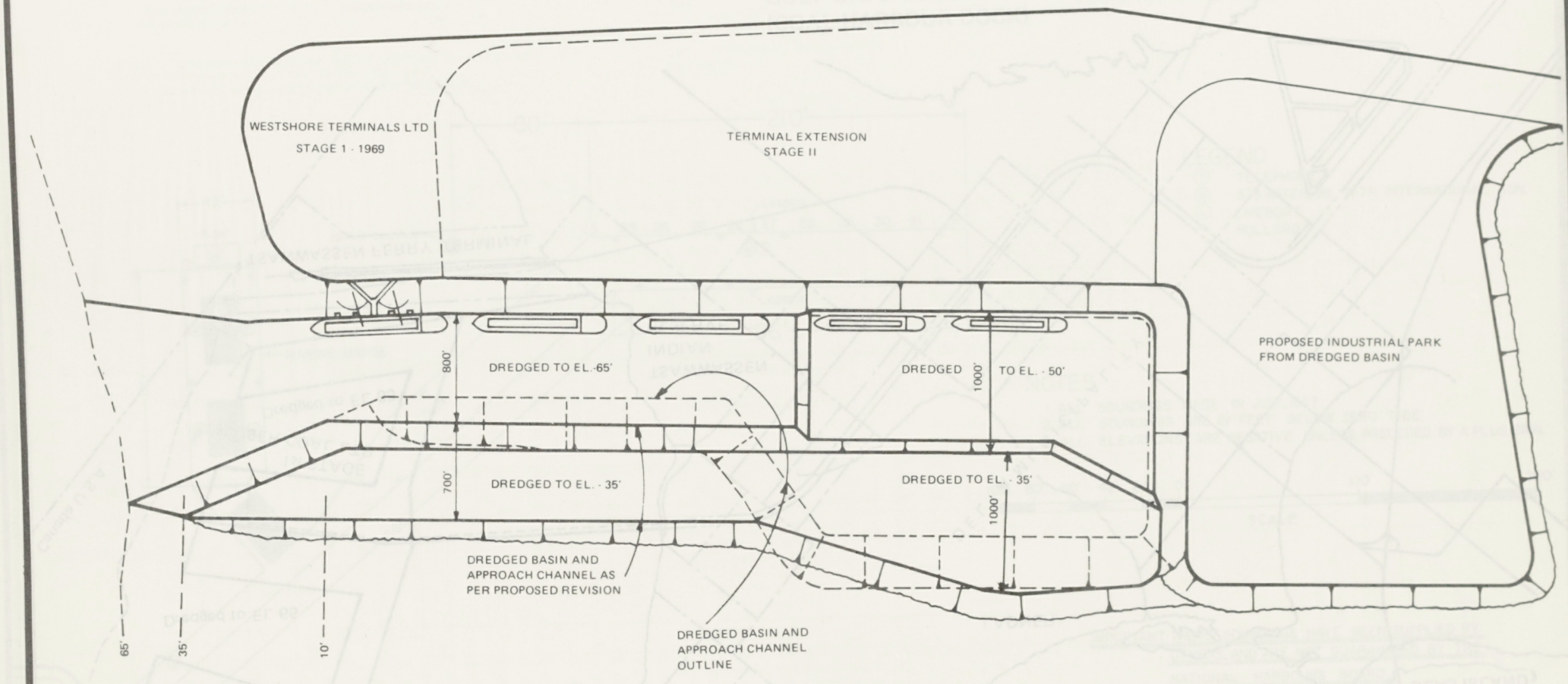

VANCOUVER

ROBERTS BANK
PROPOSED DREDGING & LAND DEVELOPMENT

1000 500 0 500 1000 1500 2000

SCALE OF FEET

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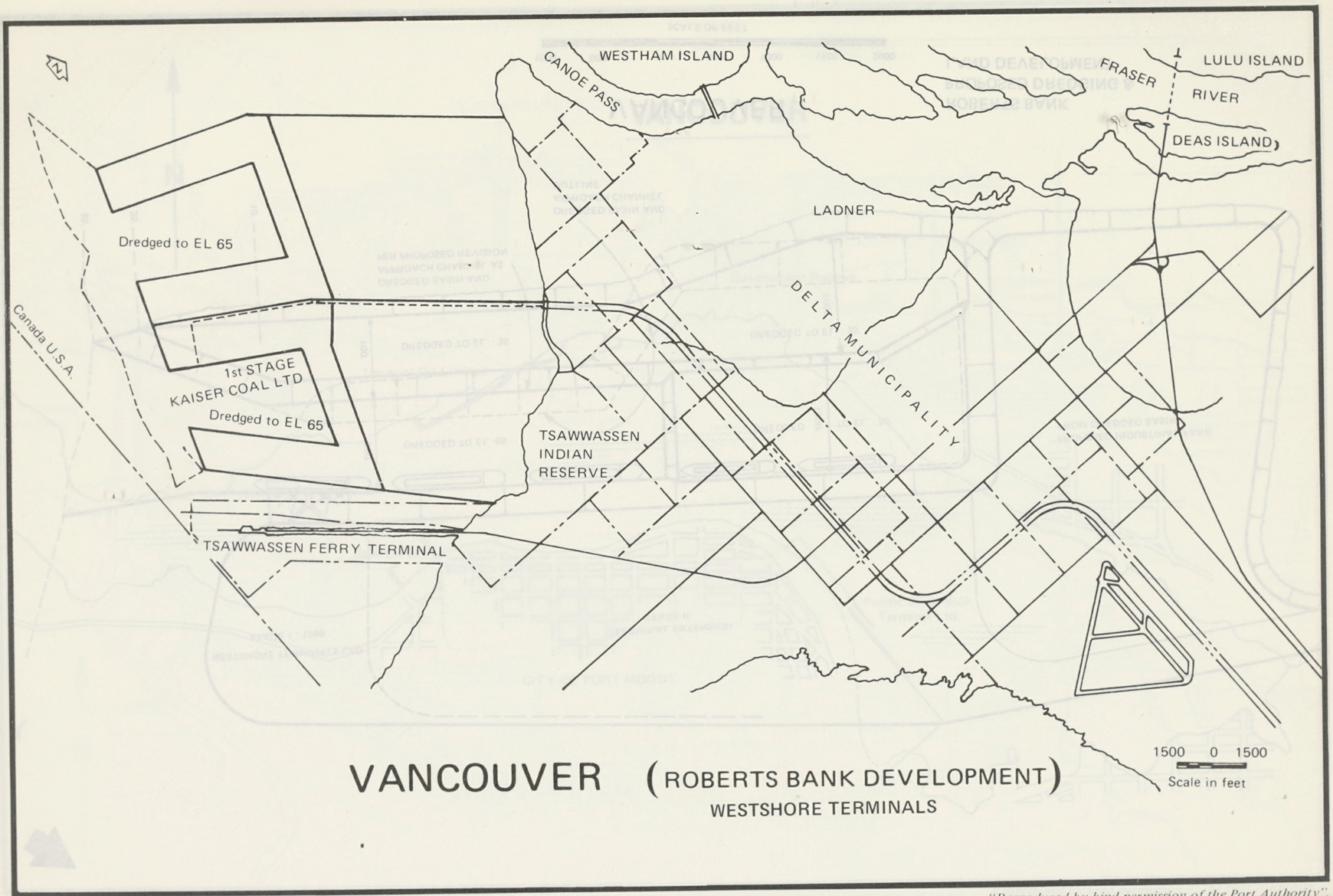

VANCOUVER (ROBERTS BANK DEVELOPMENT)

WESTSHORE TERMINALS

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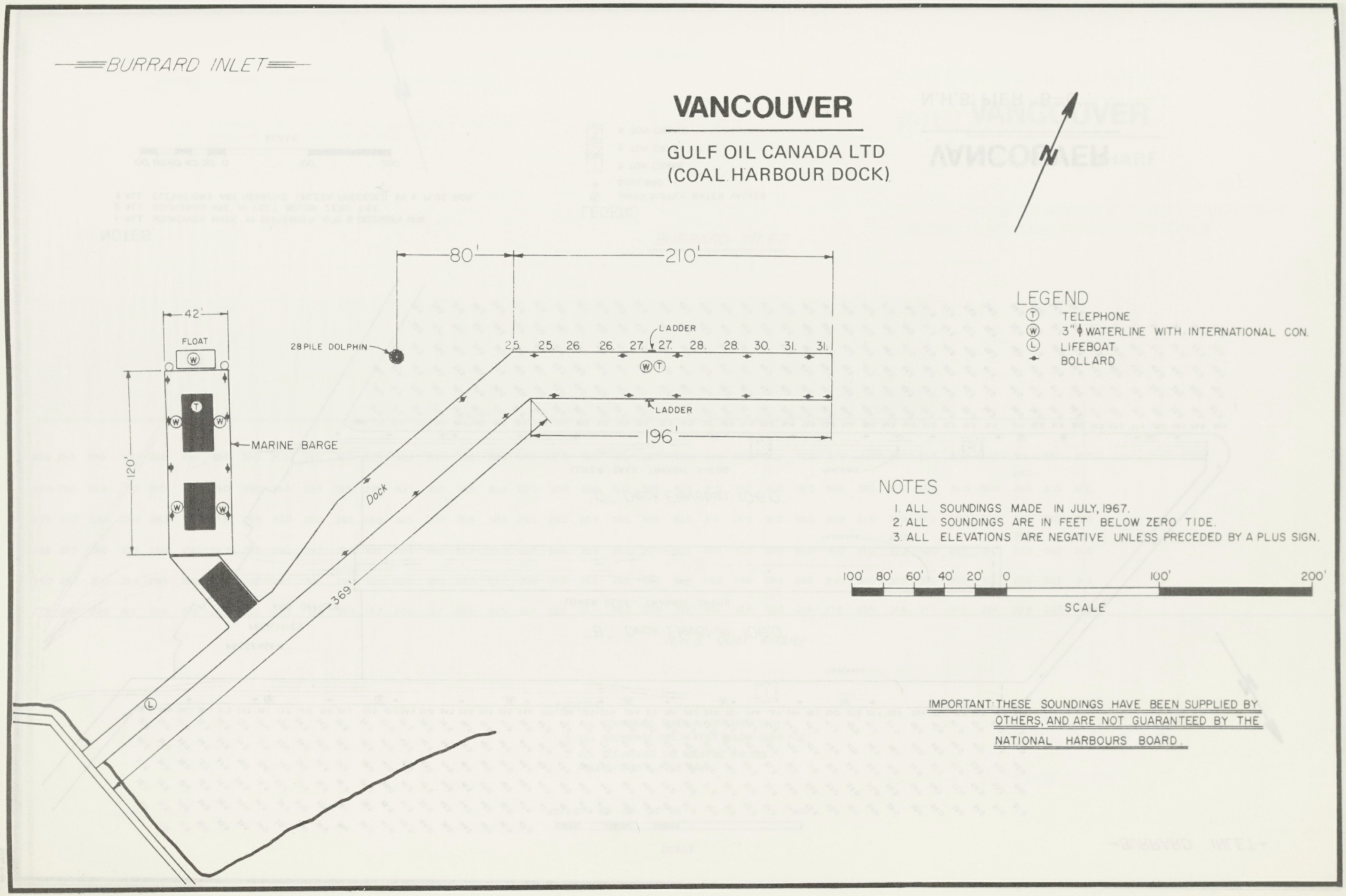

P169

CANADA

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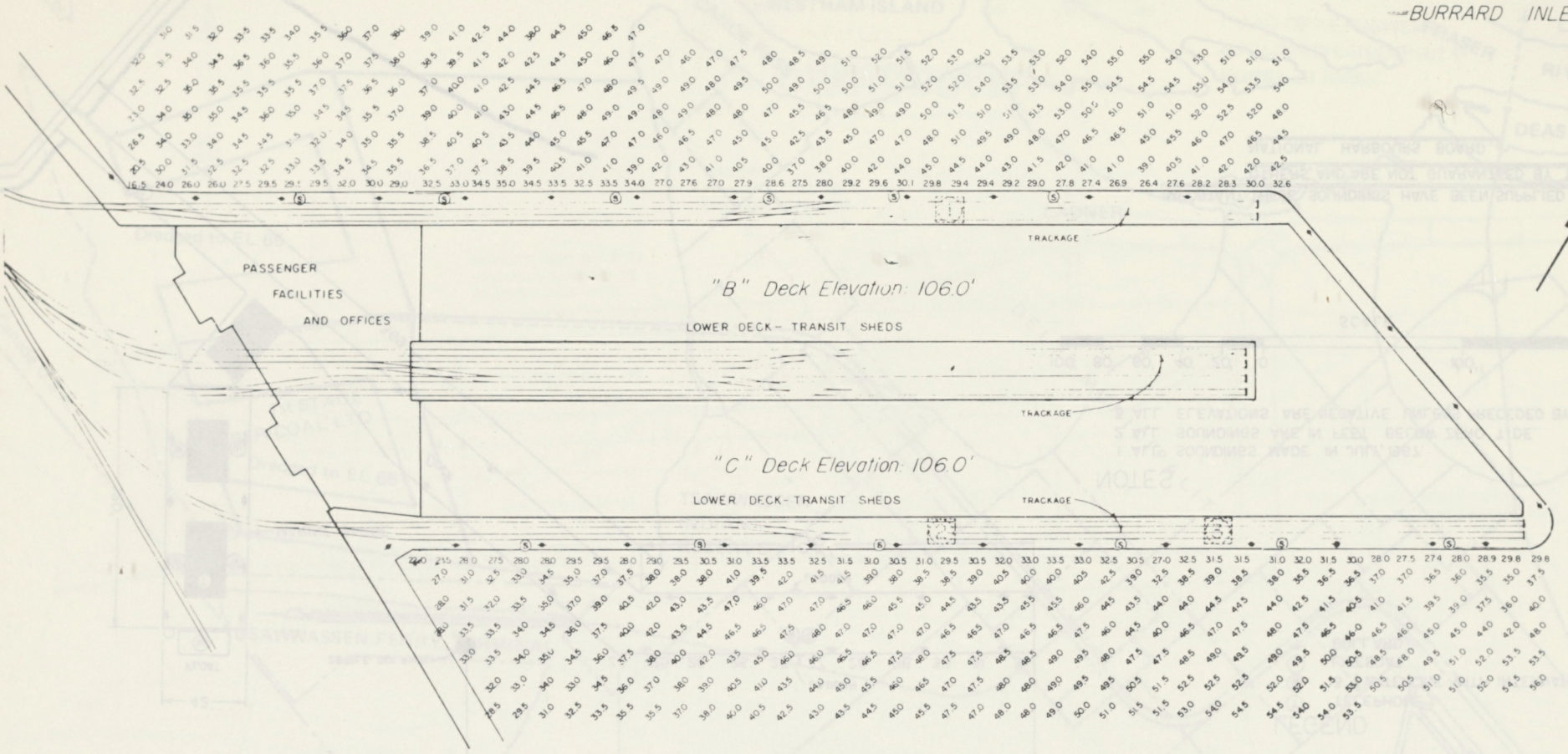

NOTES

1. ALL SOUNDINGS MADE IN SEPTEMBER, 1970 & DECEMBER 1974
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100' 80' 60' 40' 20' 0 100' 200'

SCALE

LEGEND

- (S) SHIPS' SUPPLY WATER VALVES
- BOLLARD
- 5 TON CRANE
- 5 TON CRANE
- 8 TON CRANE

VANCOUVER

N.H.B. PIER "B–C"

CANADA

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VANCOUVER

N.H.B. QUAY WHARF

BURRARD INLET

850'

28.0	29.0	29.0	30.0	29.0	29.0	29.0	29.0	29.0	29.5	30.0	30.5	30.5	30.0	30.5	30.5	31.0	31.0	31.0	31.0	30.0	31.0	31.0	31.0	30.0	32.0	31.0	32.0	33.0	32.5	32.0	31.0	31.0	32.0	32.0
																																28.0		
28.0	28.0	28.5	29.0	29.0	29.0	29.0	29.0	29.0	29.5	29.5	29.0	30.0	30.0	30.5	31.0	30.0	30.0	28.0	31.0	30.5	30.5	31.0	31.0	31.0	32.0	32.0	32.0	31.5	31.5	31.0	30.0	30.0	31.0	31.0
27.5	27.0	28.0	28.0	28.5	28.0	27.5	28.0	28.0	29.0	28.0	29.0	29.5	30.0	30.5	30.0	29.0	29.0	28.5	30.5	30.5	30.5	31.0	31.0	31.0	30.0	30.0	31.0	31.0	31.0	30.0	30.0	30.0	29.0	29.5
																												29.0				29.0		28.5
28.5	28.5	28.0	28.5	28.0	29.0	28.0	28.5	29.0	29.5	29.0	30.0	29.0	29.0	29.5	30.0	29.5	29.0	29.5	29.5	30.0	30.5	31.0	30.5	28.0	32.0	31.0	31.0	31.0	30.0	29.5	31.0	30.0	30.5	30.5
28.0	28.5	29.0	29.0	29.0	29.0	29.0	30.0	29.0	29.5	29.0	30.0	30.0	30.0	29.5	29.5	30.0	30.0	29.5	28.5	29.0	30.0	29.5	29.0	29.0	28.0	31.0	30.0	30.5	30.0	30.5	30.0	30.0	30.5	31.5
27.9	20.0	20.5	19.2	20.4	20.5	20.7	20.1	21.0	19.8	20.3	19.7	20.5	19.7	20.9	20.5	21.7	22.0	21.1	20.3	20.4	19.5	18.1	19.6	20.5	21.4	21.6	23.0	21.6	21.7	21.7	21.6	20.8	20.7	20.8

N.H.B. QUAY WHARF

NOTES

1. ALL SOUNDINGS TAKEN IN SEPTEMBER, 1970
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100' 80' 60' 40' 20' 0 100'

SCALE

P171

CANADA

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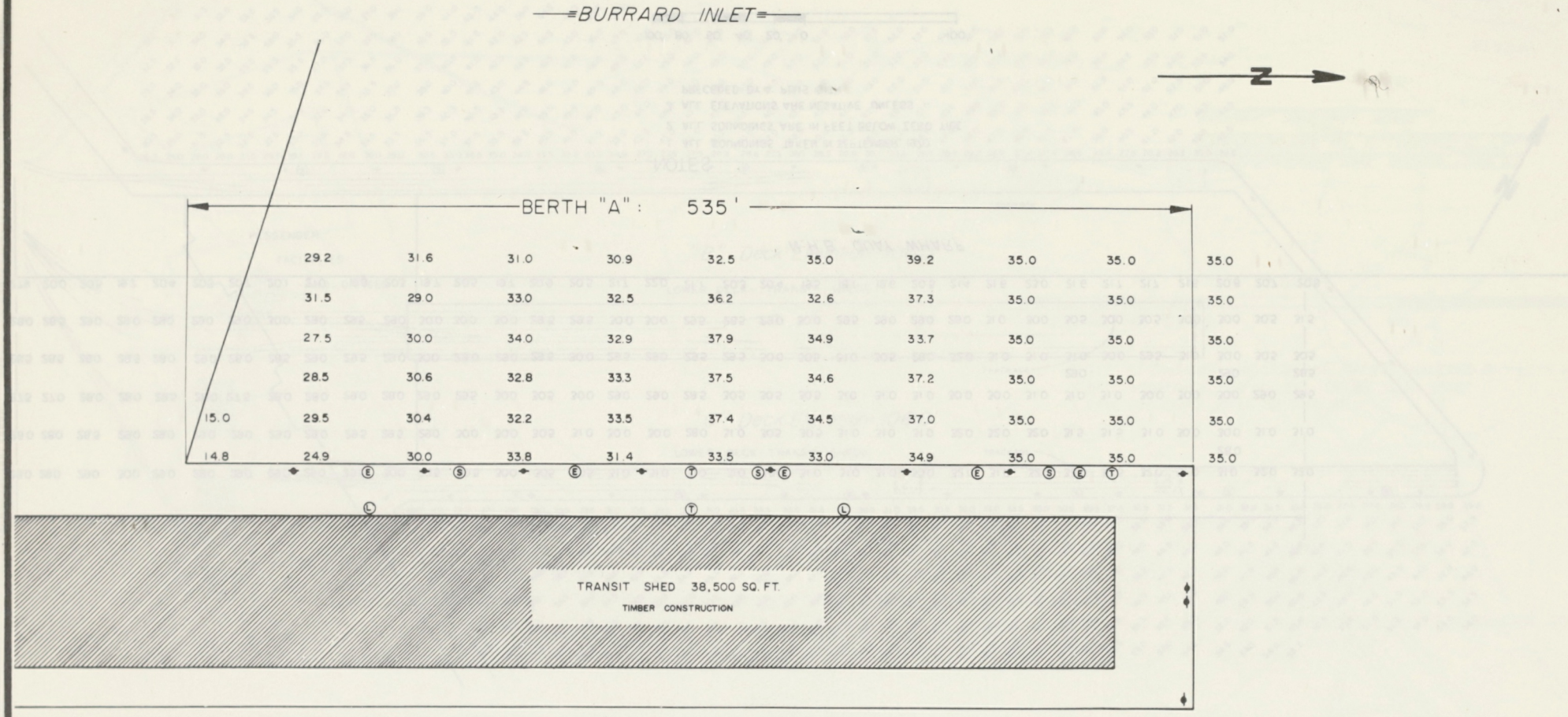

IMPORTANT THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

NOTES

1. ALL SOUNDINGS MADE IN JULY, 1967.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100' 80' 60' 40' 20' 0 100'

SCALE

LEGEND

- (E) ELECTRICAL OUTLET
- (S) SHIPS' WATER SUPPLY
- (T) TELEPHONE
- (L) LIFE RING
- BOLLARD

VANCOUVER

WESTERN WATER TERMINALS

CANADA

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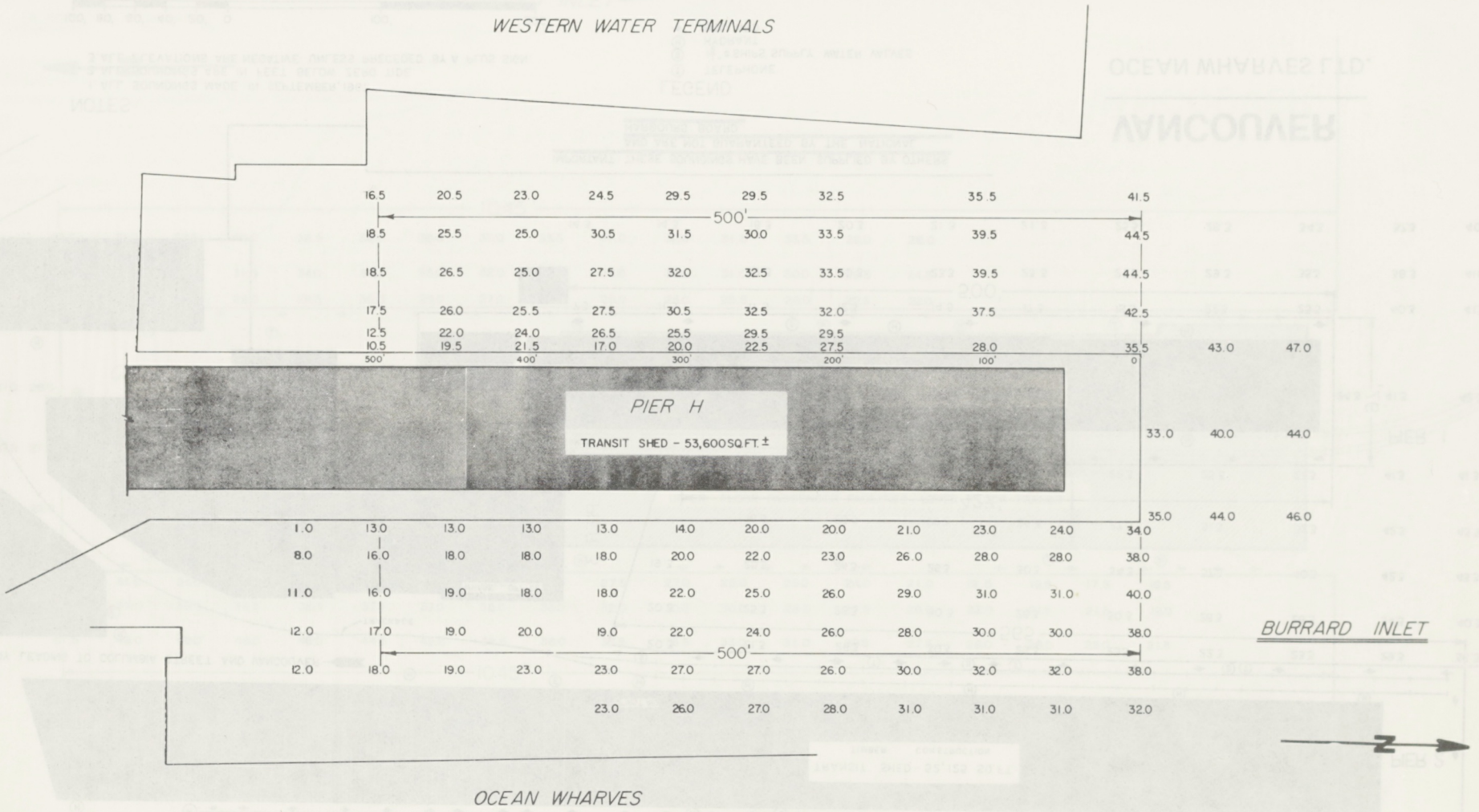

VANCOUVER

N.H.B. PIER "H"

100 80 60 40 20 0 100

SCALE

NOTES

1. ALL SOUNDINGS MADE IN AUG. 1969, MAY 1970
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

P173

CANADA

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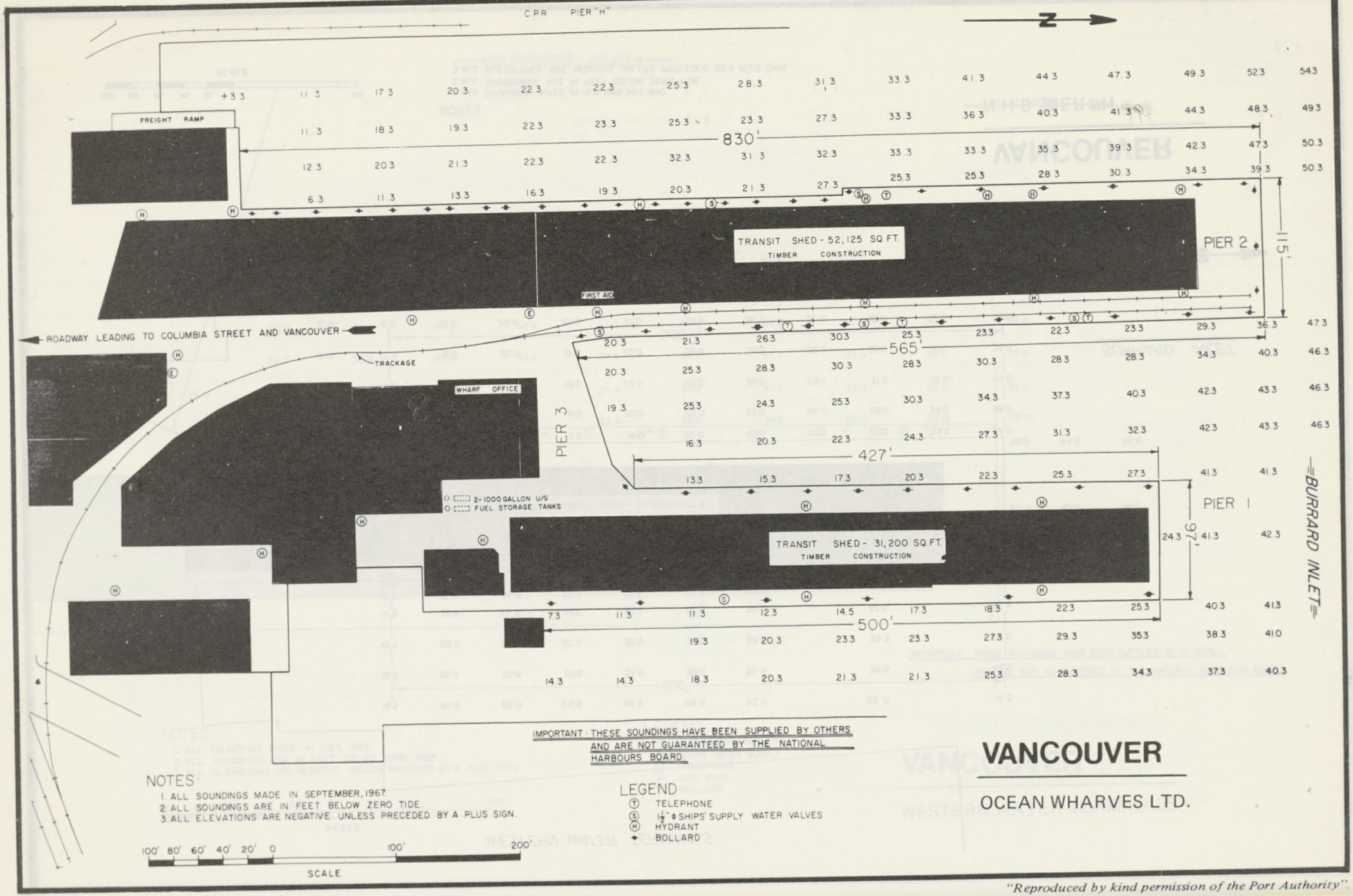

VANCOUVER

OCEAN WHARVES LTD.

CANADA

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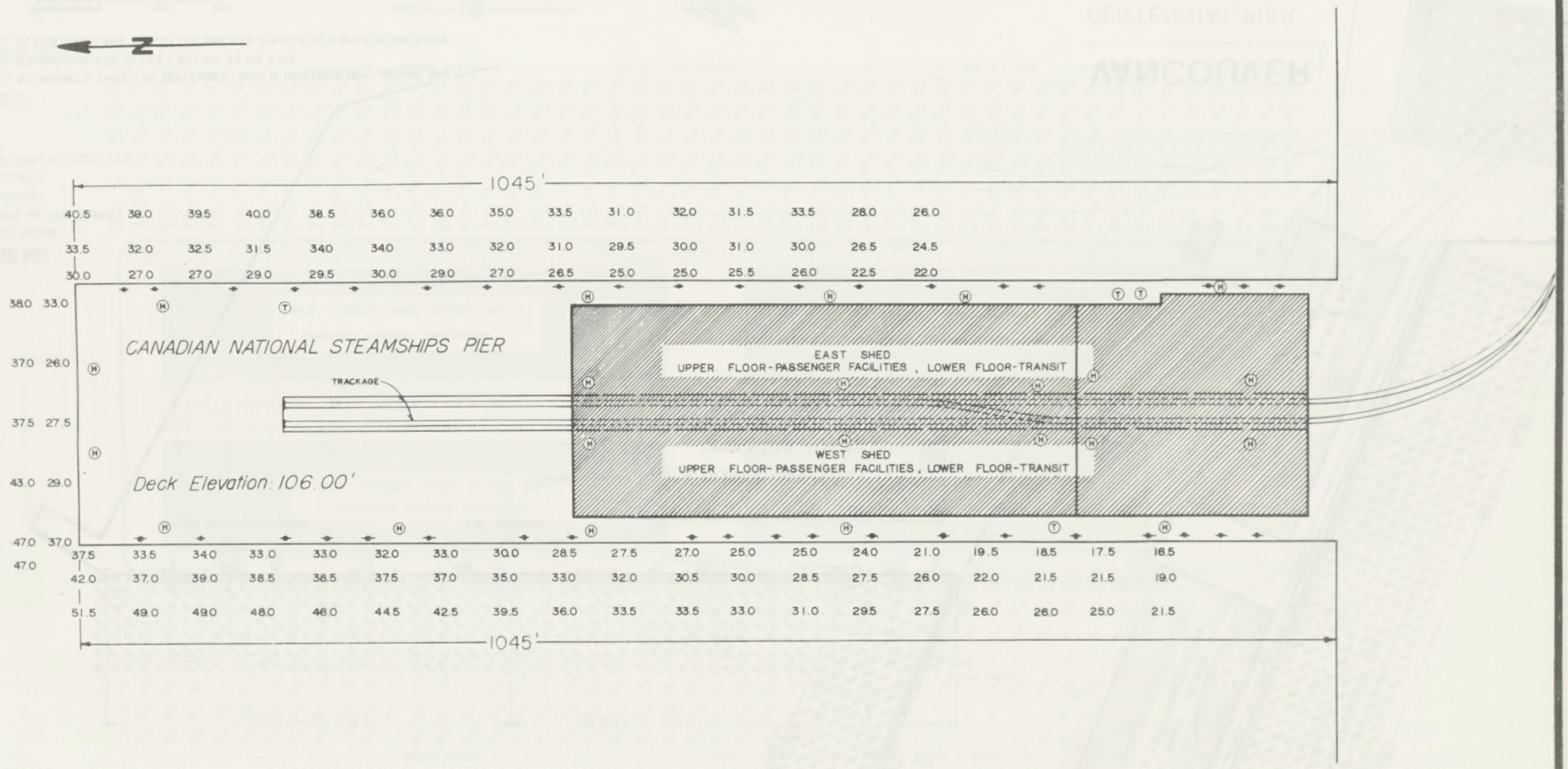

LEGEND

- (H) HYDRANT
- (T) TELEPHONE
- BOLLARD

100' 80' 60' 40' 20' 0 100' 200'

SCALE

NOTES

1. ALL SOUNDINGS TAKEN IN MAY, 1960.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

VANCOUVER

CANADIAN NATIONAL STEAMSHIPS

P175

CANADA

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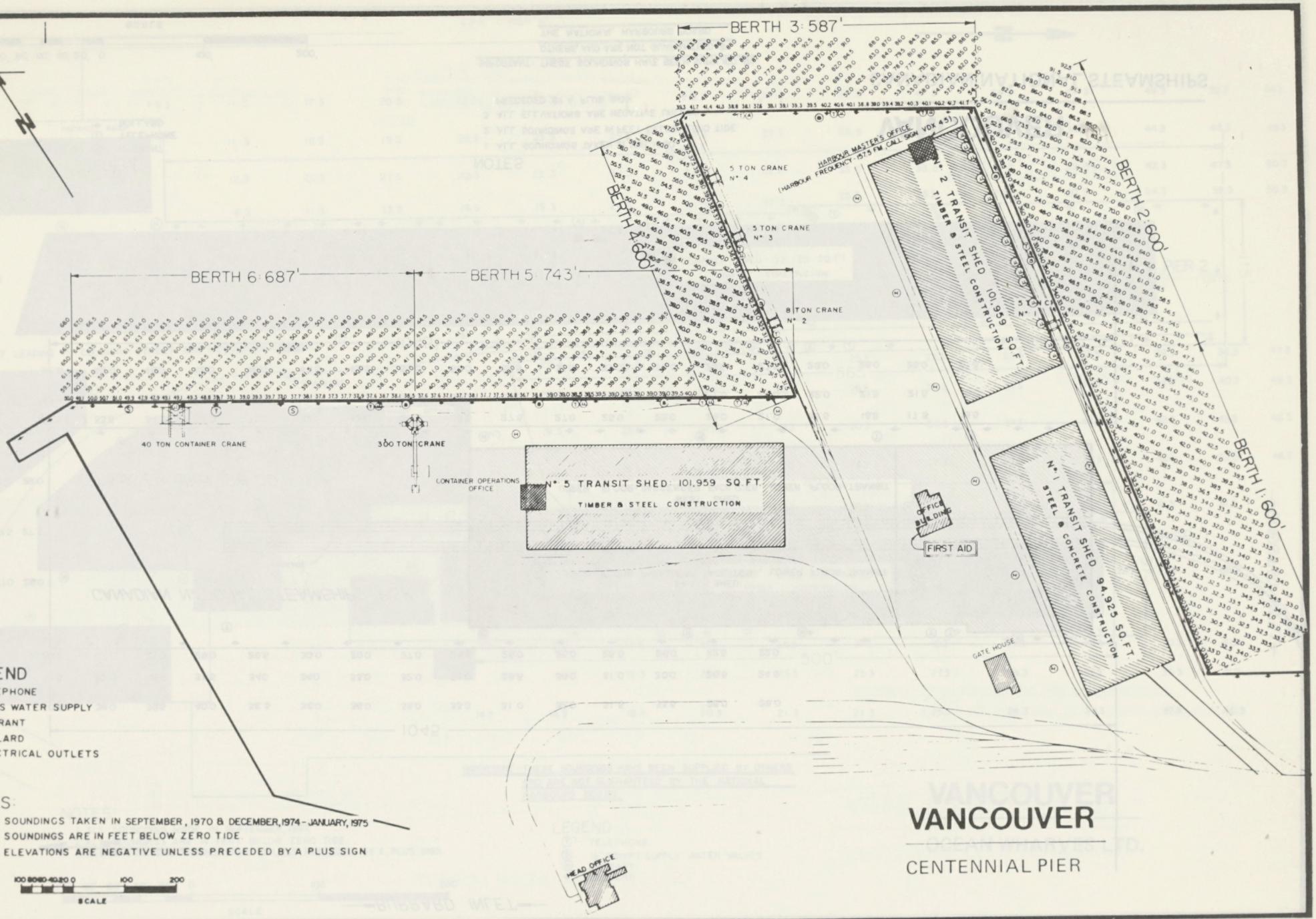

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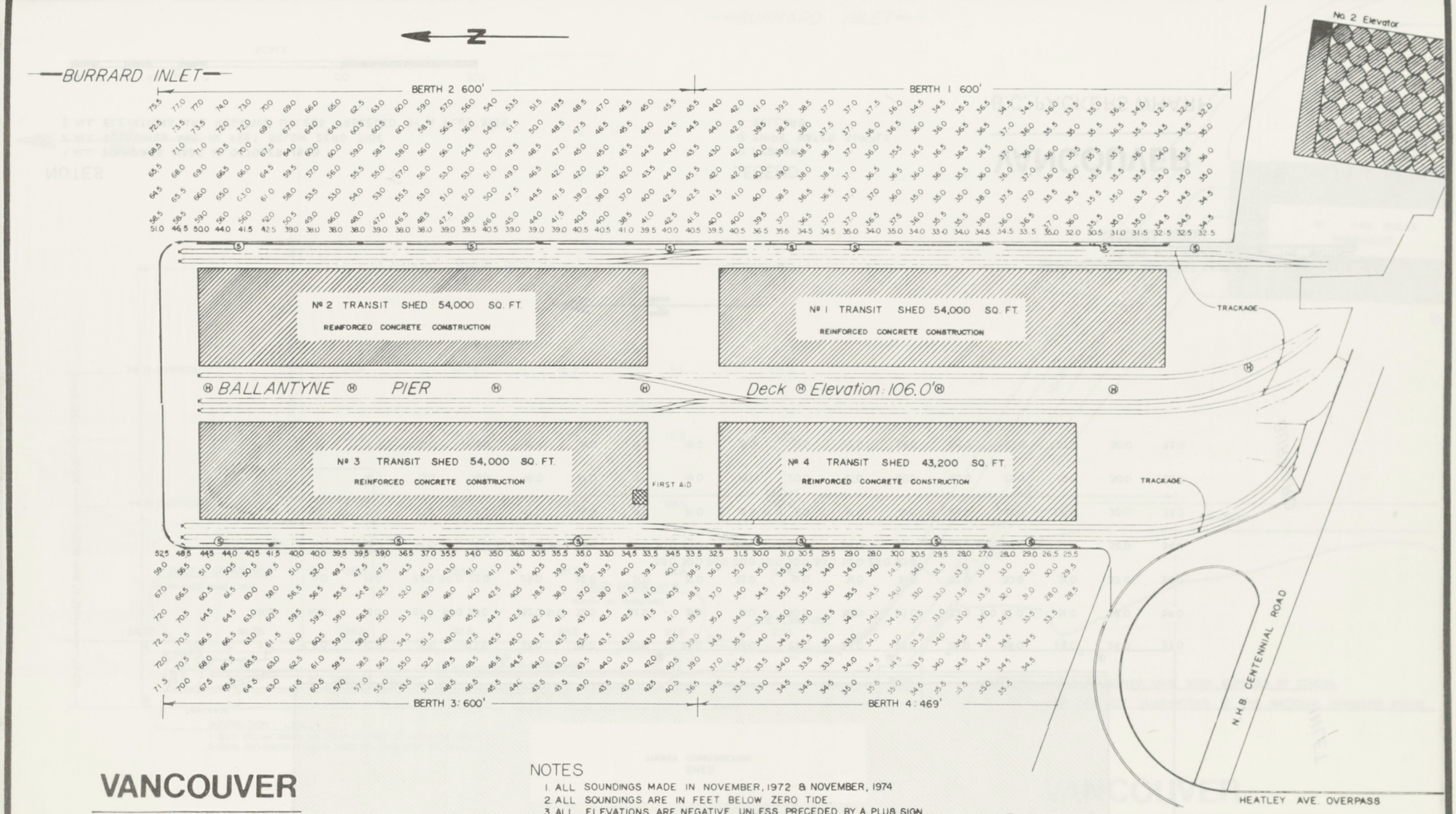

VANCOUVER

BALLANTYNE PIER

NOTES

1. ALL SOUNDINGS MADE IN NOVEMBER, 1972 & NOVEMBER, 1974
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100 80 60 40 20 0 100 200

SCALE

LEGEND

- (H) HYDRANT
- (S) SHIPS' WATER SUPPLY
- BOLLARD

P177

CANADA

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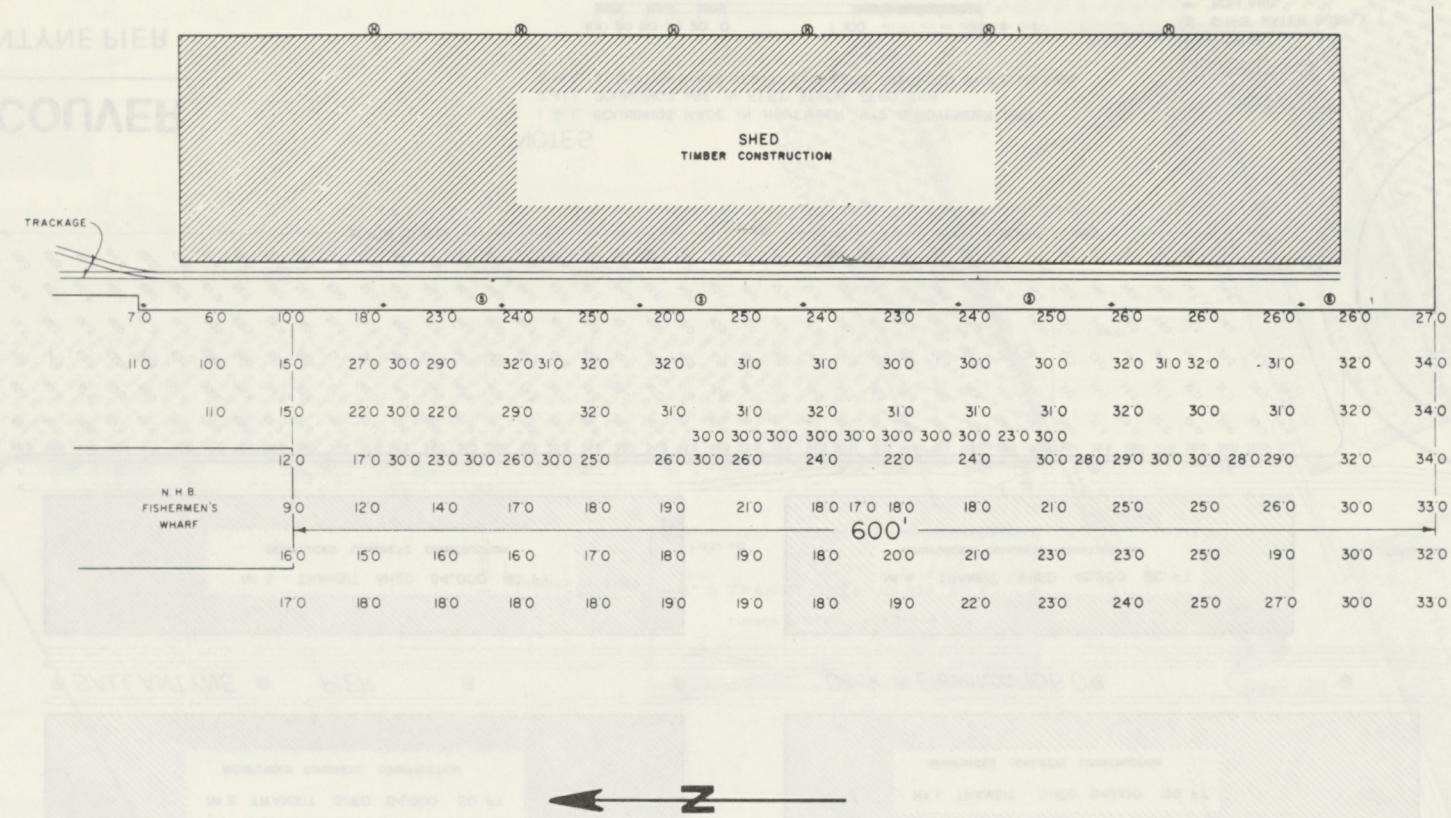

IMPORTANT THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD

NOTES

1. ALL SOUNDINGS MADE IN OCTOBER 1963
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100 80 60 40 20 0 100 200
SCALE

LEGEND

- ⓗ HYDRANT
- ⓦ SHIPS' WATER SUPPLY
- • BOLLARD

VANCOUVER

B.C. PACKERS WHARF

CANADA

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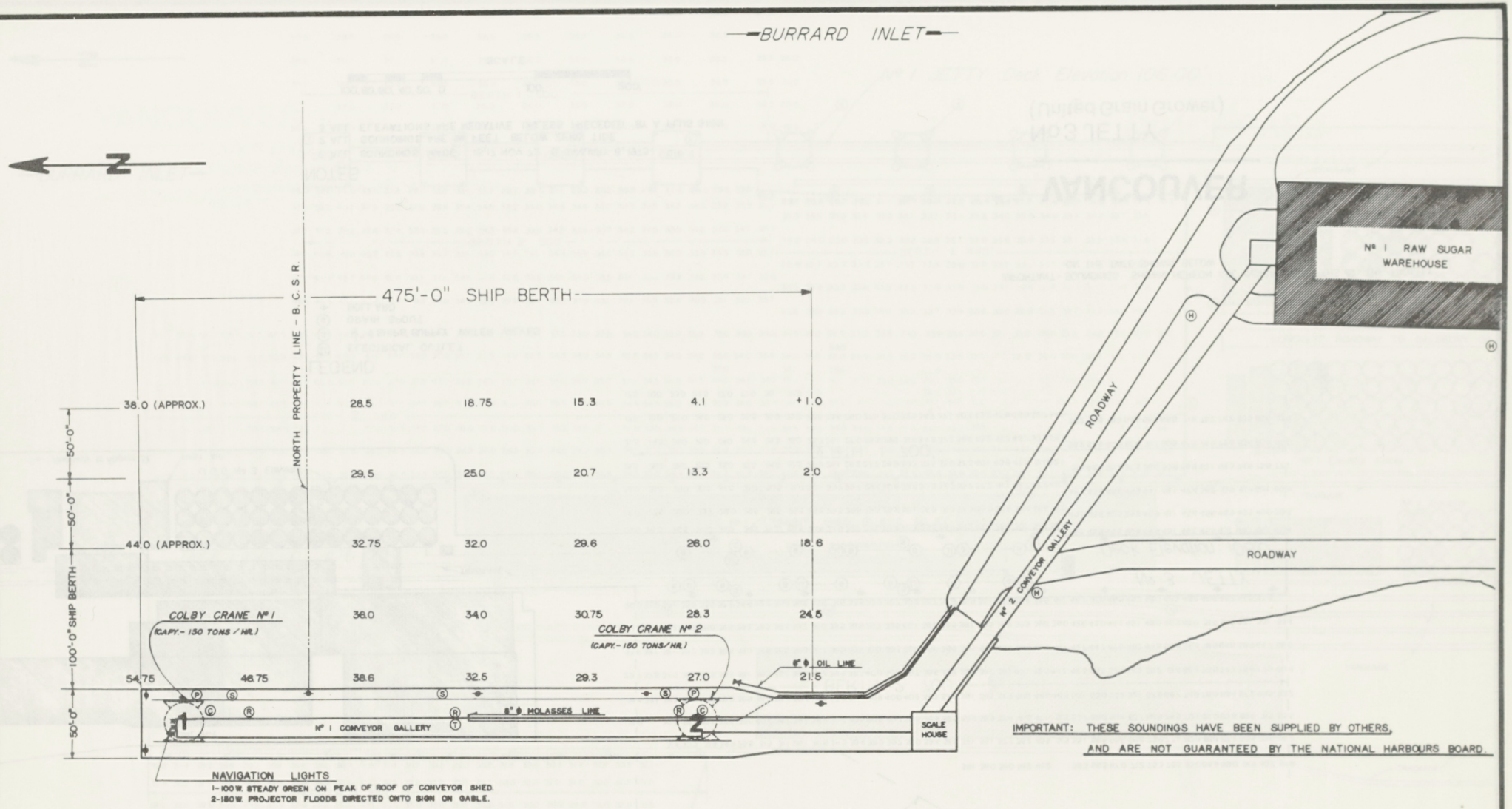

VANCOUVER

B.C. SUGAR REFINING CO. LTD.

NOTES

1. ALL SOUNDINGS MADE IN APRIL, 1967. (CURRENT TIDE TABLES)
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100' 80' 60' 40' 20' 0 100' 200'

SCALE

LEGEND

- (T) TELEPHONE
- (S) 2" ϕ SHIPS' SUPPLY WATER VALVES
- (H) HYDRANT
- (R) RACK WITH 100'-0" X 2" ϕ FIRE HOSE.
- BOLLARD
- (P) 10-POWER OUTLETS - 440V. - 3 PHASE.
- (C) 10 CONVENIENCE OUTLETS 110V. SINGLE PHASE.

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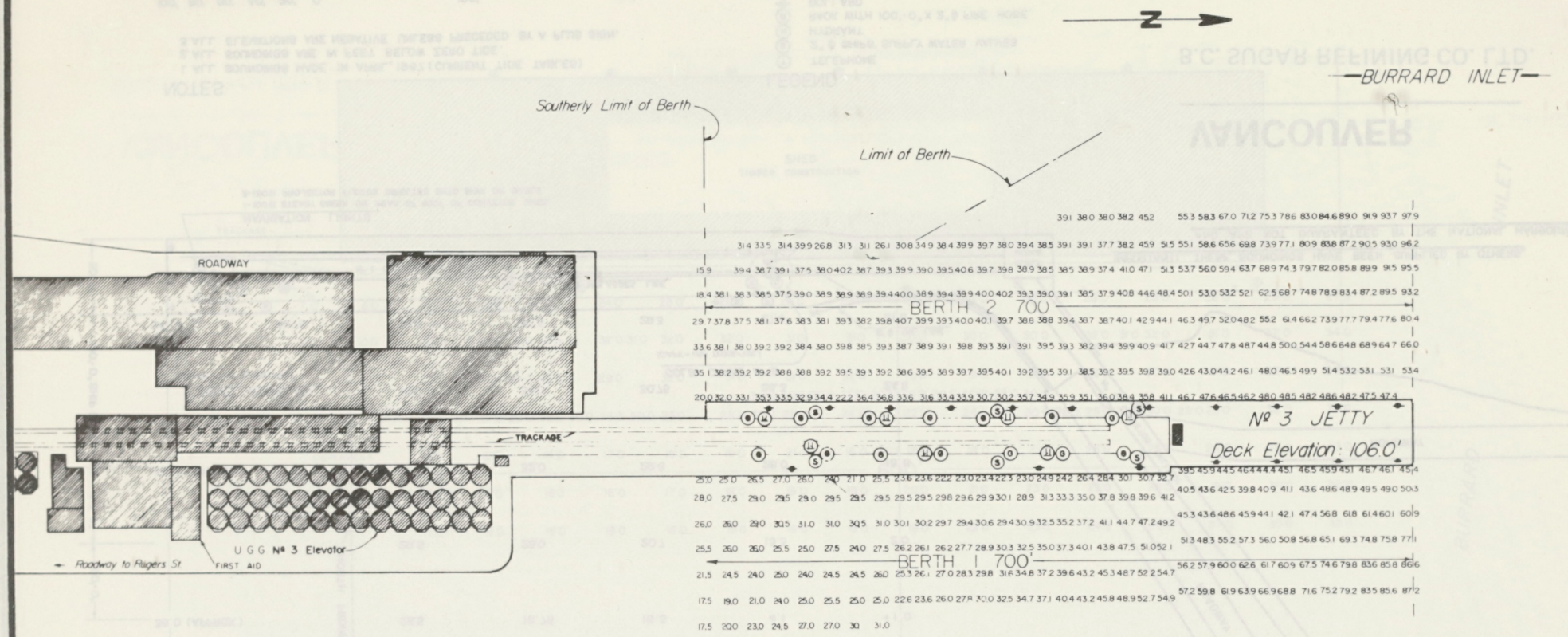
CANADA



LEGEND

- ELECTRICAL OUTLET
- ½" ϕ SHIPS' SUPPLY WATER VALVES
- GRAIN SPOUT
- BOLLARD

IMPORTANT - SOUNDINGS SHOWN HEREON ARE INDICATIVE DEPTHS AT THE FACILITY ON THE DATE SHOWN BELOW

NOTES

1. ALL SOUNDINGS MADE 16,17 NOV 72 & JANUARY 8, 1975
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100' 80' 60' 40' 20' 0 100' 200'

SCALE

VANCOUVER

No 3 JETTY
(United Grain Grower)

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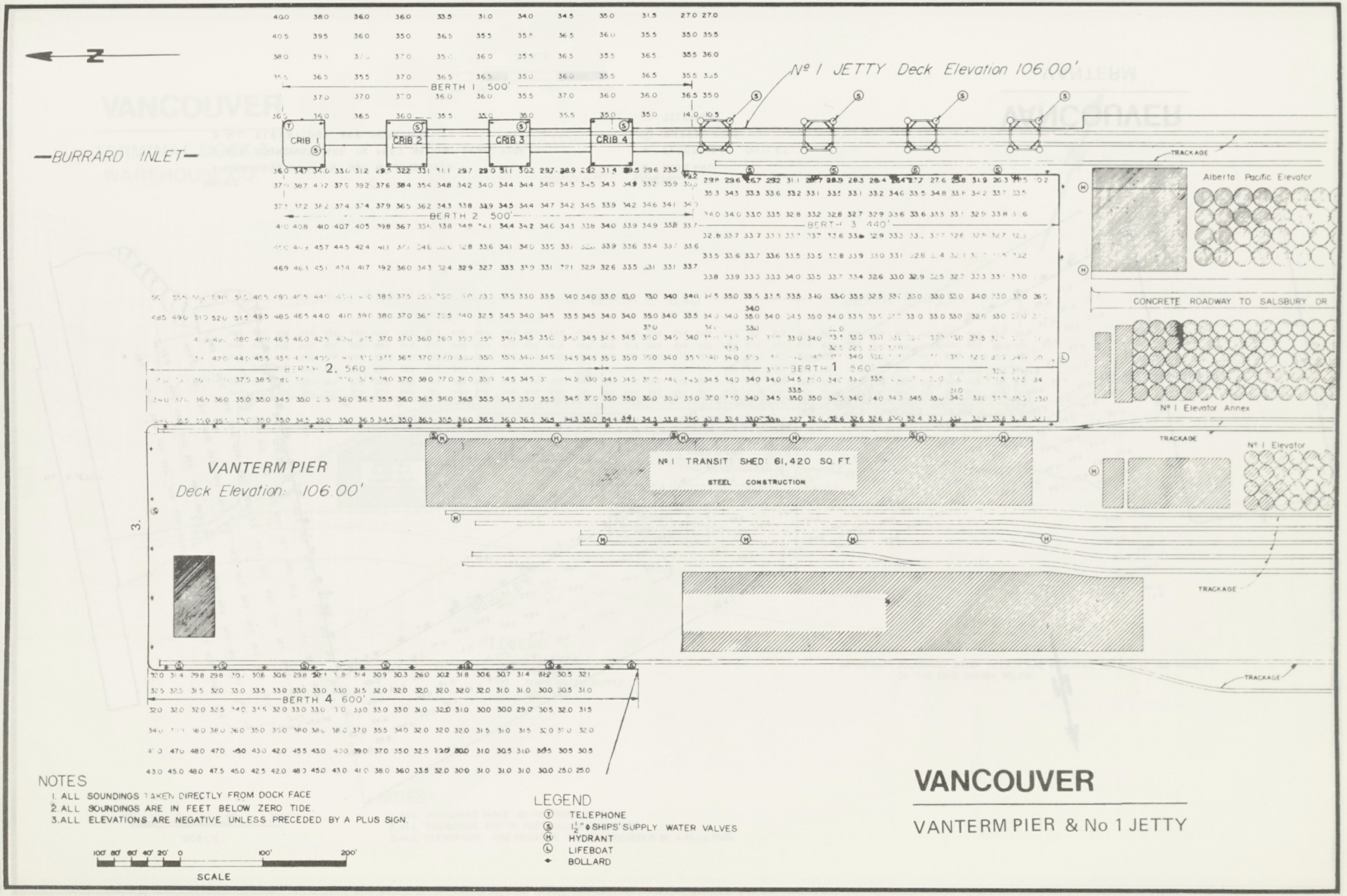

NOTES

1. ALL SOUNDINGS TAKEN DIRECTLY FROM DOCK FACE
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

SCALE 100' 80' 60' 40' 20' 0 100' 200'

LEGEND

- (T) TELEPHONE
- (S) 1½" ⌀ SHIPS' SUPPLY WATER VALVES
- (H) HYDRANT
- (L) LIFEBOAT
- ◆ BOLLARD

VANCOUVER

VANTERM PIER & No 1 JETTY

CANADA

P181

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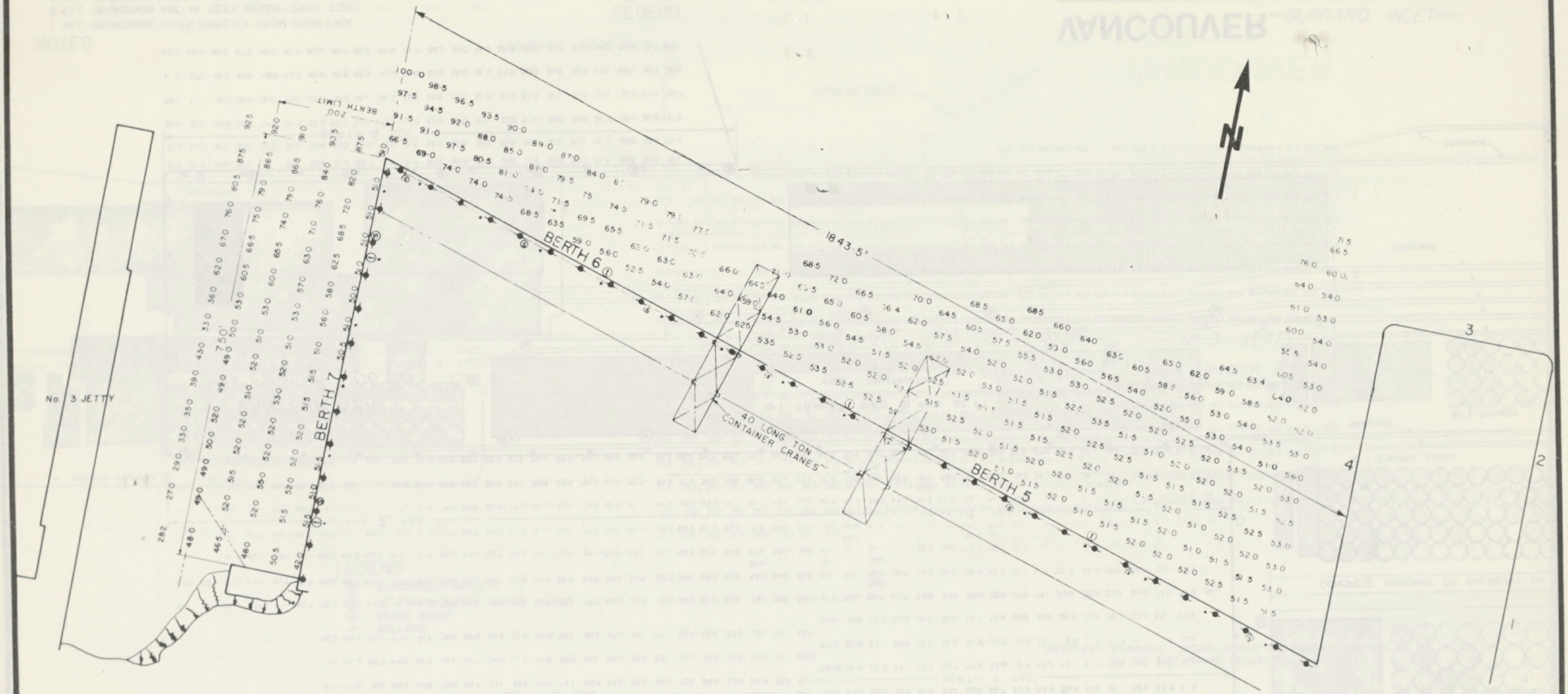

NOTES

1. SOUNDINGS MADE IN MAY & JUNE, 1975.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE.

LEGEND

- BOLLARD
- ELECTRICAL OUTLET
- (S) WATER PITS
- (T) TELEPHONE

100' 50' 0' 100' 200'

SCALE

VANCOUVER

VANTERM

CANADA

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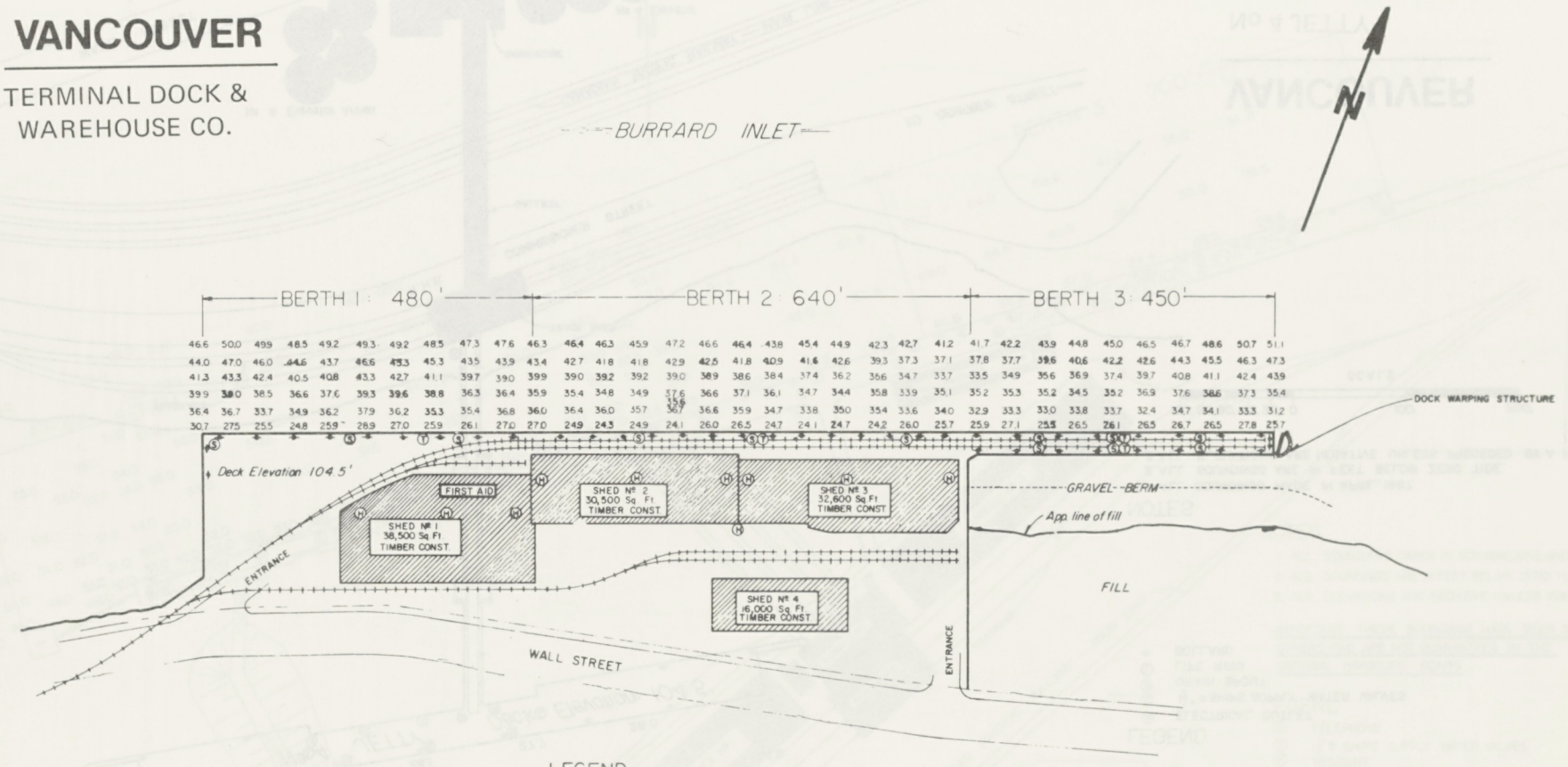
VANCOUVER

TERMINAL DOCK &
WAREHOUSE CO.



LEGEND

- (T) TELEPHONE
- (H) HYDRANT
- (S) SHIPS' WATER SUPPLY
- BOLLARD

IMPORTANT - SOUNDINGS SHOWN HEREON ARE INDICATIVE DEPTHS AT THE FACILITY ON THE DATE SHOWN BELOW.

100 50 0 100 200
SCALE

NOTES

1. ALL SOUNDINGS MADE IN NOVEMBER, 1972
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

CANADA

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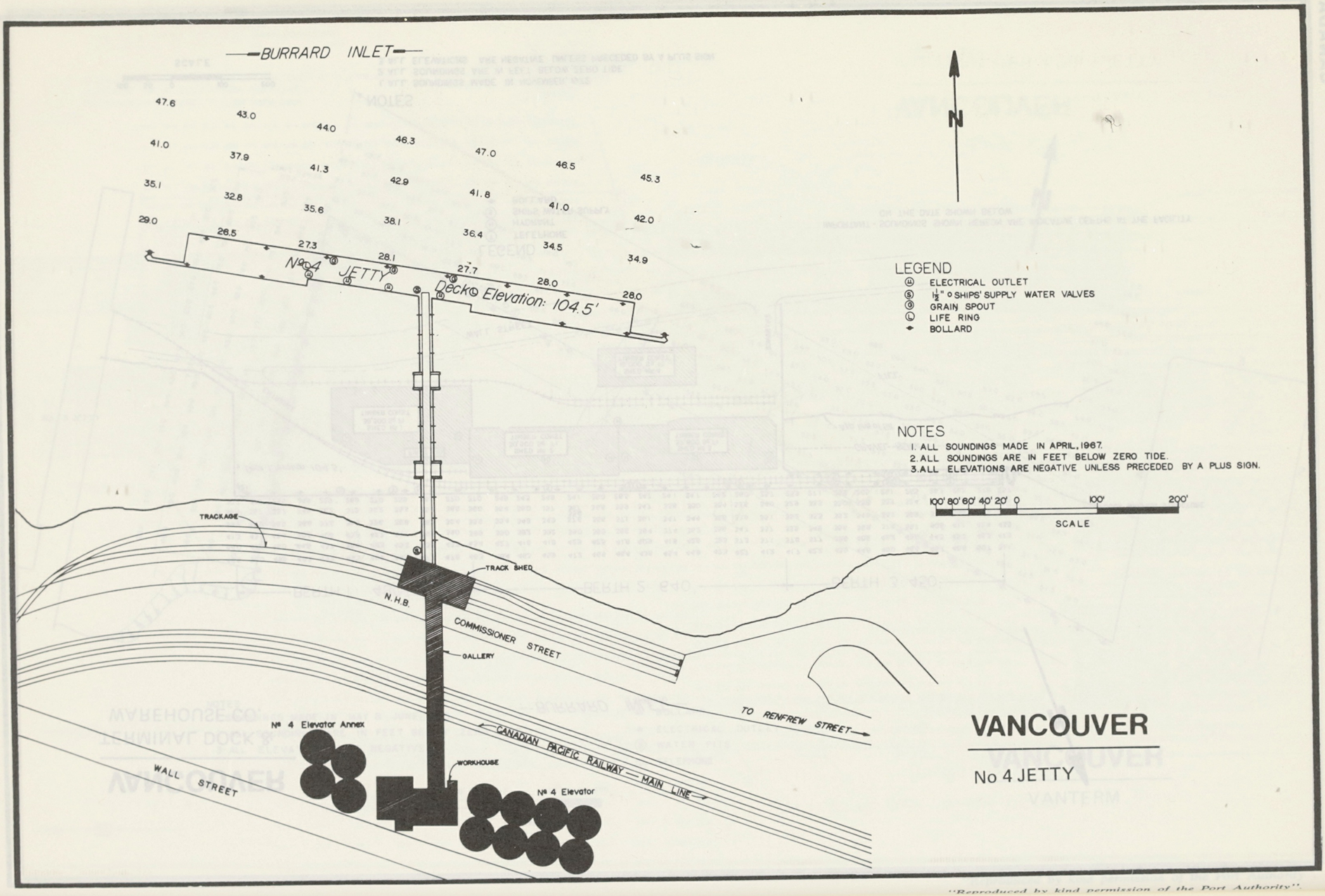

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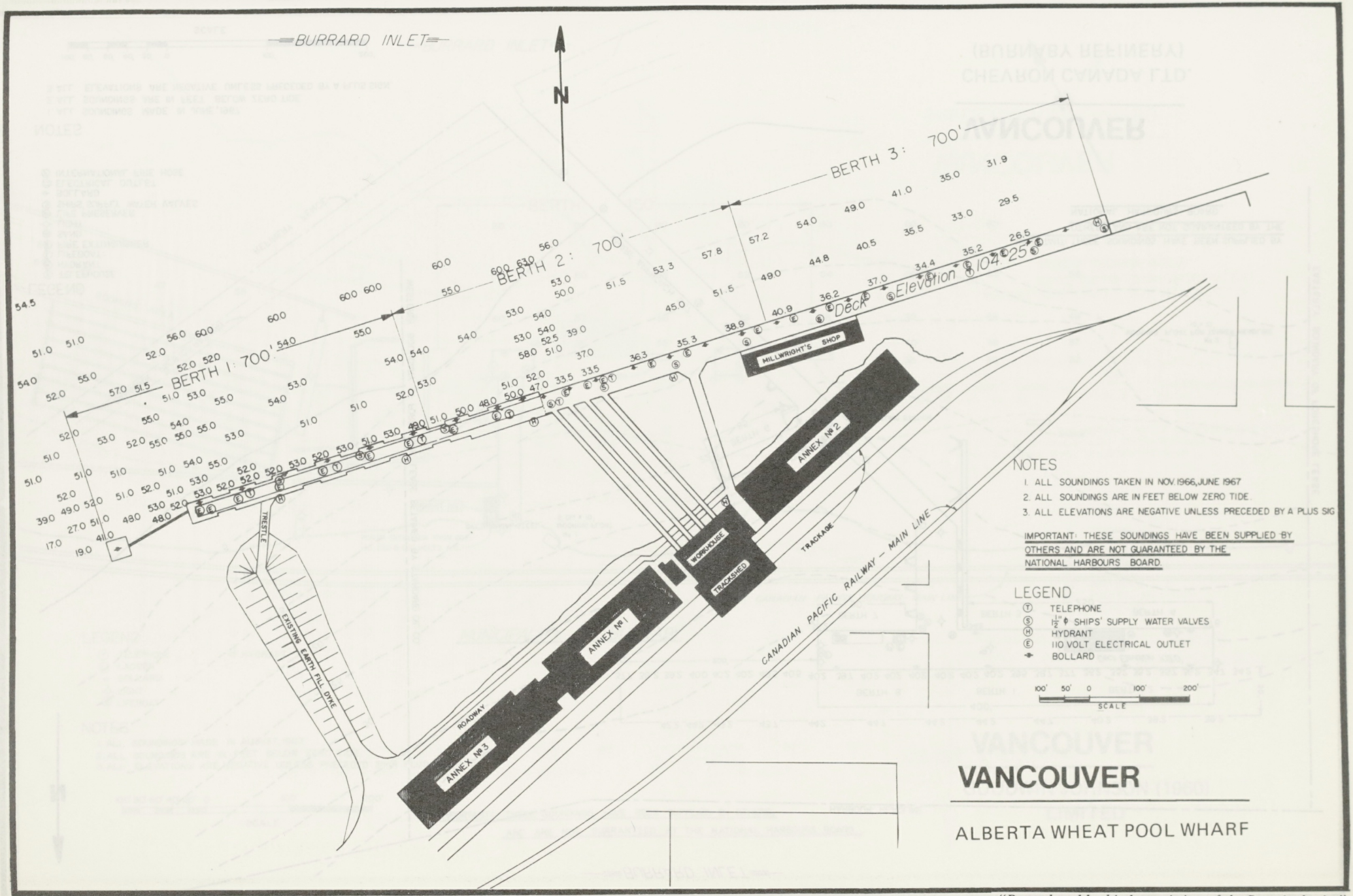

VANCOUVER

ALBERTA WHEAT POOL WHARF

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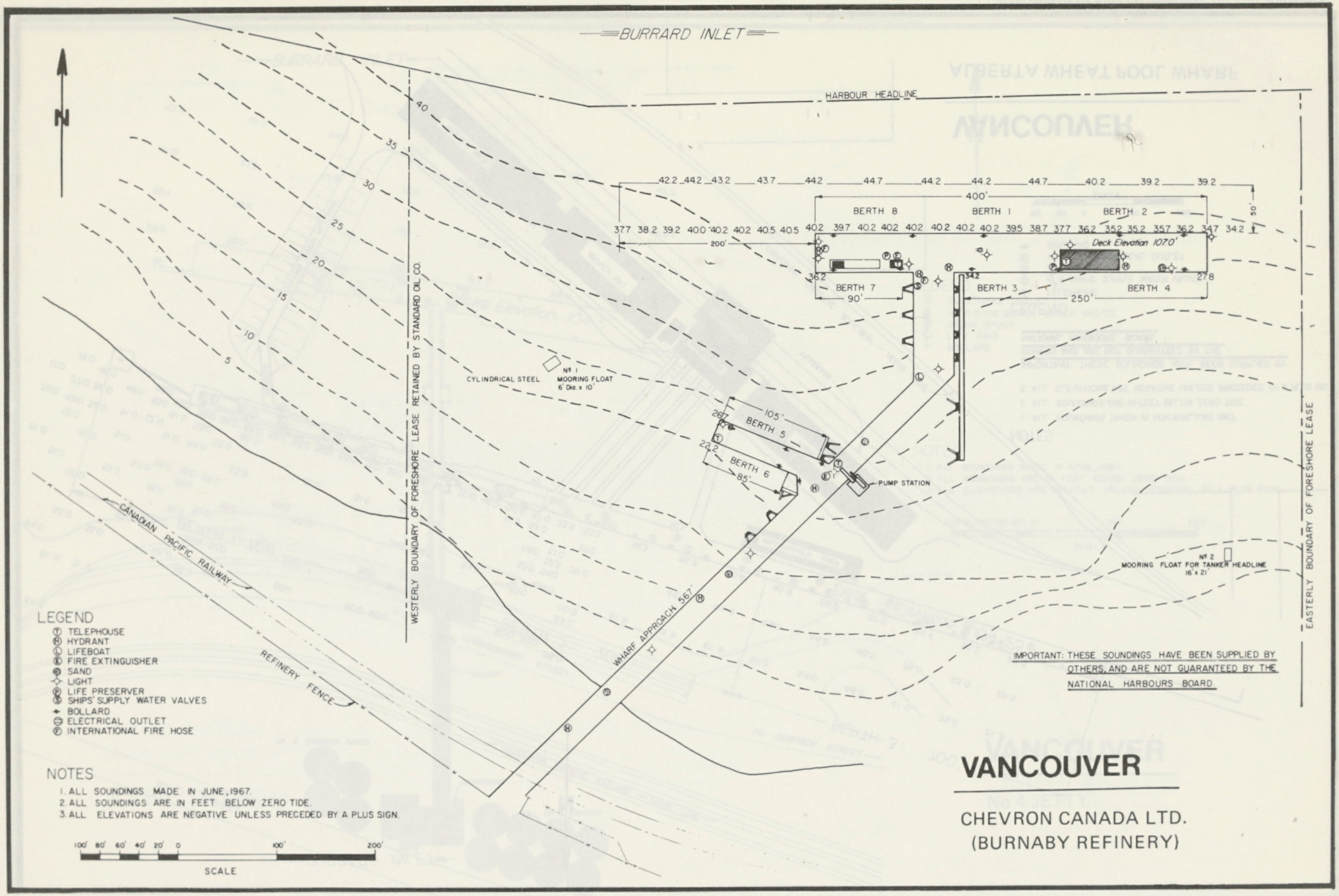

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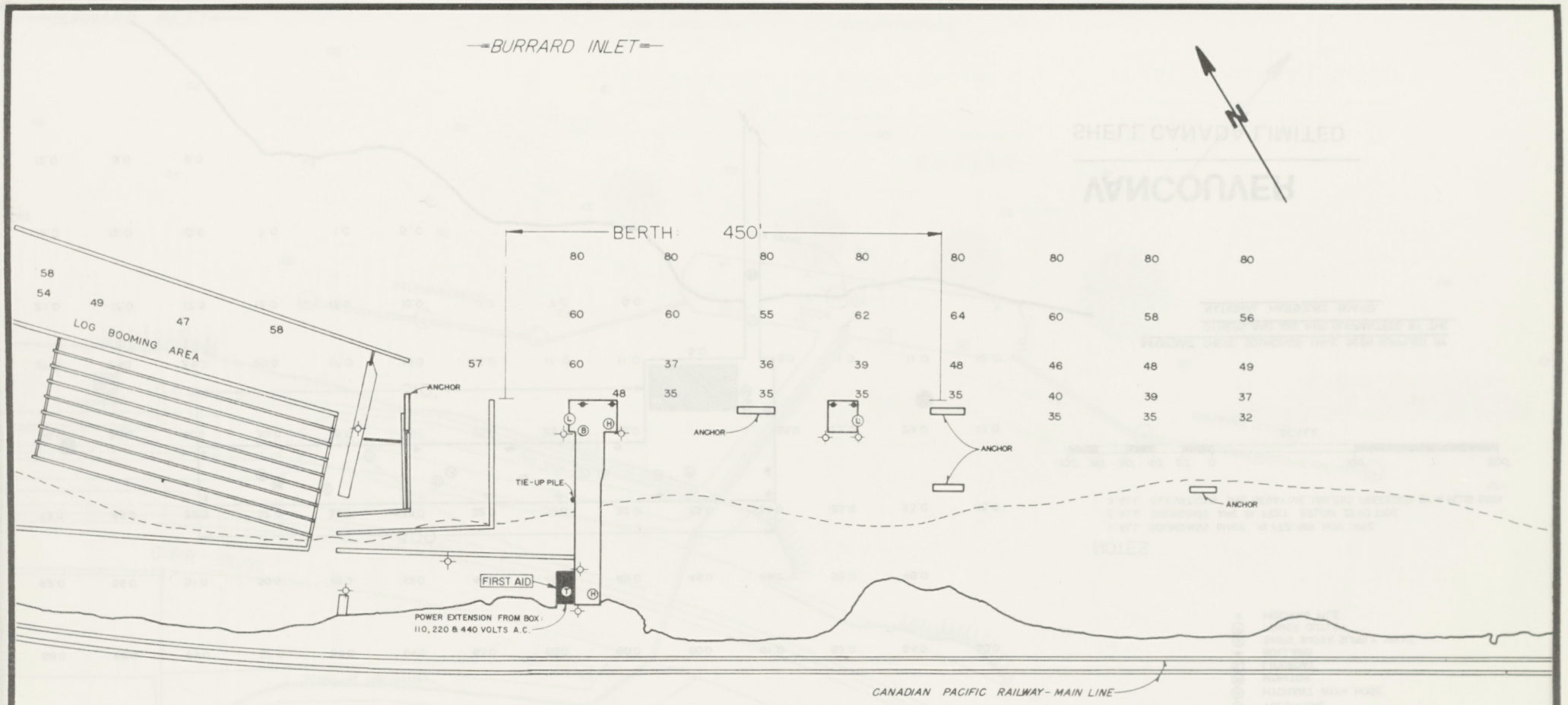
CANADA



MUNICIPALITY OF BURNABY

LEGEND

- (T) TELEPHONE
- (L) LADDER
- BOLLARD
- LIGHT
- (B) LIFEBOAT
- (H) HYDRANT

NOTES

1. ALL SOUNDINGS MADE IN AUGUST, 1967
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100' 80' 60' 40' 20' 0 100' 200'

SCALE

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

VANCOUVER

GOODWIN JOHNSON (1960) LIMITED

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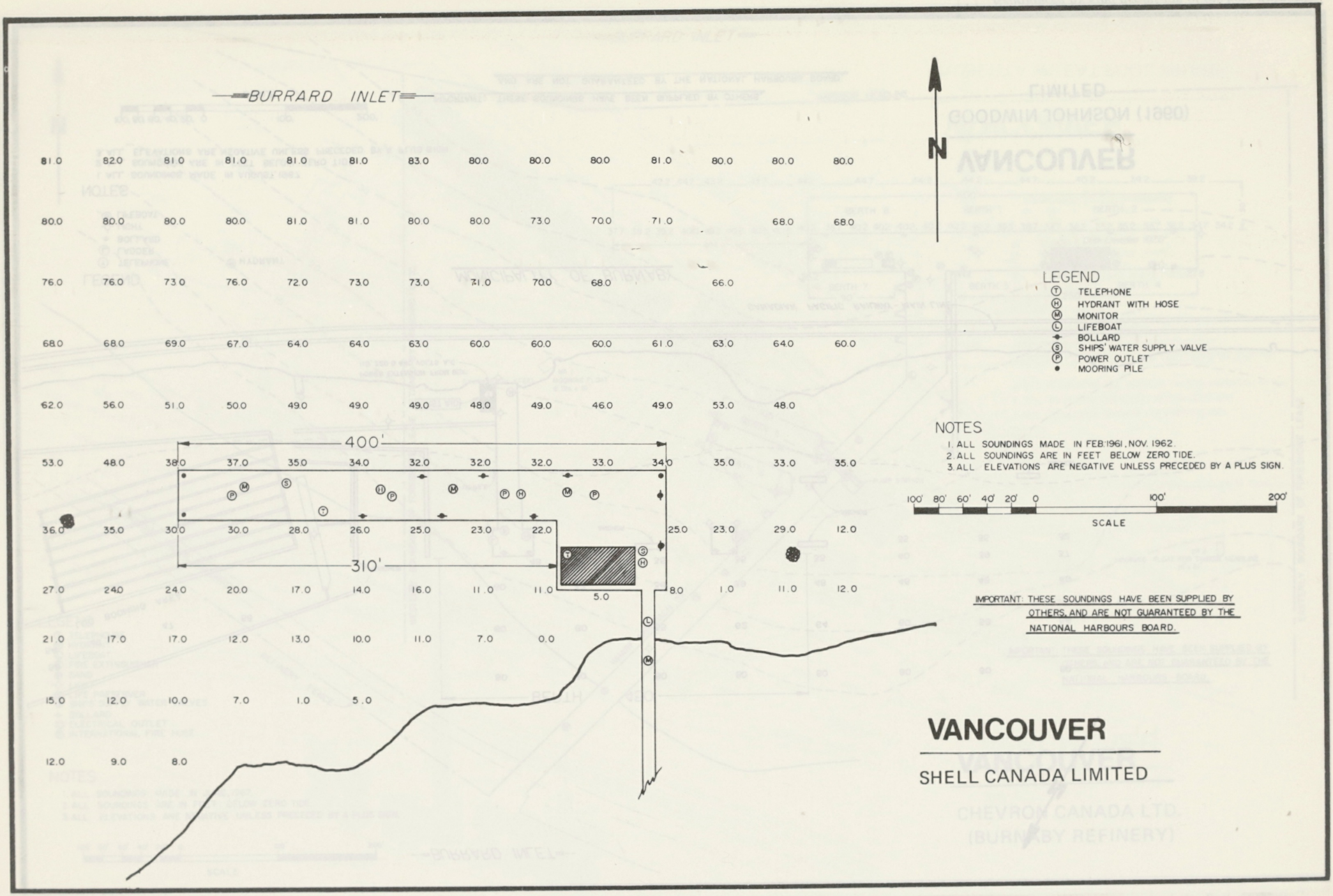
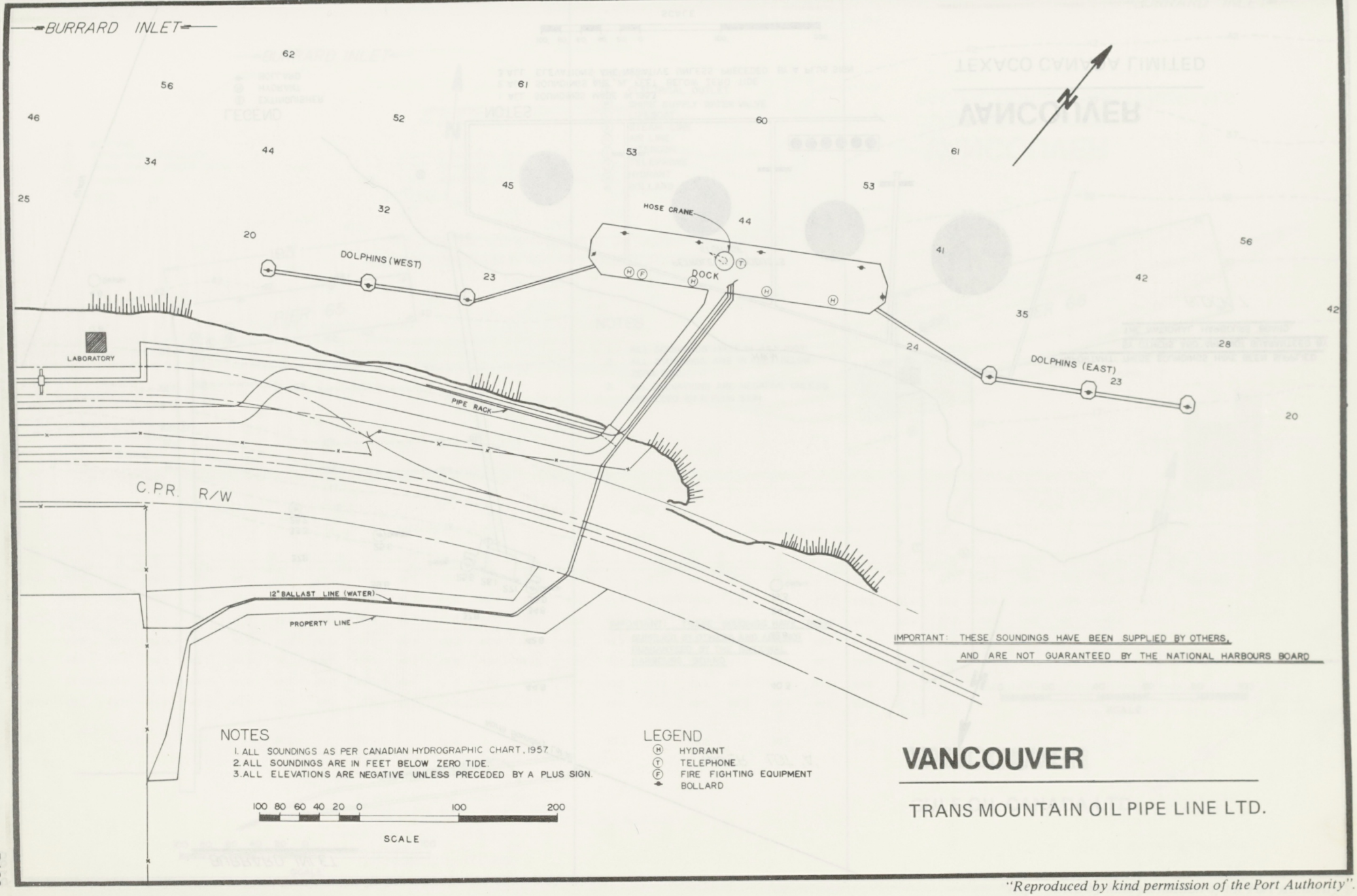

BURRARD INLET
81.0 82.0 81.0 81.0 81.0 81.0 83.0 80.0 80.0 80.0 81.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 81.0 81.0 80.0 80.0 73.0 70.0 71.0 68.0 68.0
76.0 76.0 73.0 76.0 72.0 73.0 73.0 71.0 70.0 68.0 66.0
68.0 68.0 69.0 67.0 64.0 64.0 63.0 60.0 60.0 60.0 61.0 63.0 64.0 60.0
62.0 56.0 51.0 50.0 49.0 49.0 49.0 48.0 49.0 46.0 49.0 53.0 48.0
53.0 48.0 38.0 37.0 35.0 34.0 32.0 32.0 32.0 33.0 34.0 35.0 33.0 35.0
400'
36.0 35.0 30.0 30.0 28.0 26.0 25.0 23.0 22.0 25.0 23.0 29.0 12.0
310'
27.0 24.0 24.0 20.0 17.0 14.0 16.0 11.0 11.0 5.0 8.0 1.0 11.0 12.0
21.0 17.0 17.0 12.0 13.0 10.0 11.0 7.0 0.0
15.0 12.0 10.0 7.0 1.0 5.0
12.0 9.0 8.0
N
LEGEND
T TELEPHONE
H HYDRANT WITH HOSE
M MONITOR
L LIFEBOAT
BOLLARD
S SHIPS' WATER SUPPLY VALVE
P POWER OUTLET
MOORING PILE
NOTES
1. ALL SOUNDINGS MADE IN FEB. 1961, NOV. 1962.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.
100' 80' 60' 40' 20' 0 100' 200'
SCALE
IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.
VANCOUVER
SHELL CANADA LIMITED

CANADA



P189

CANADA

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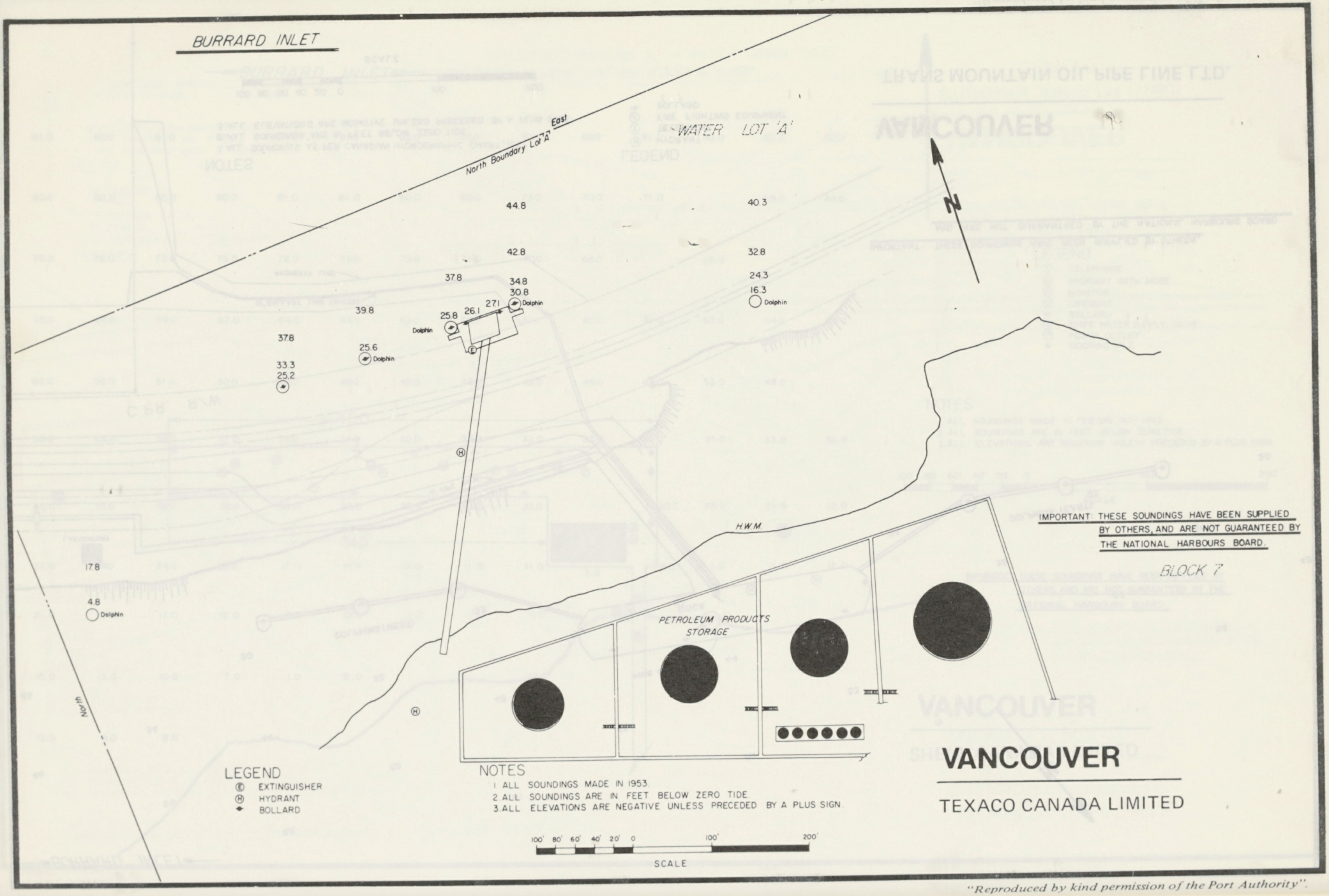

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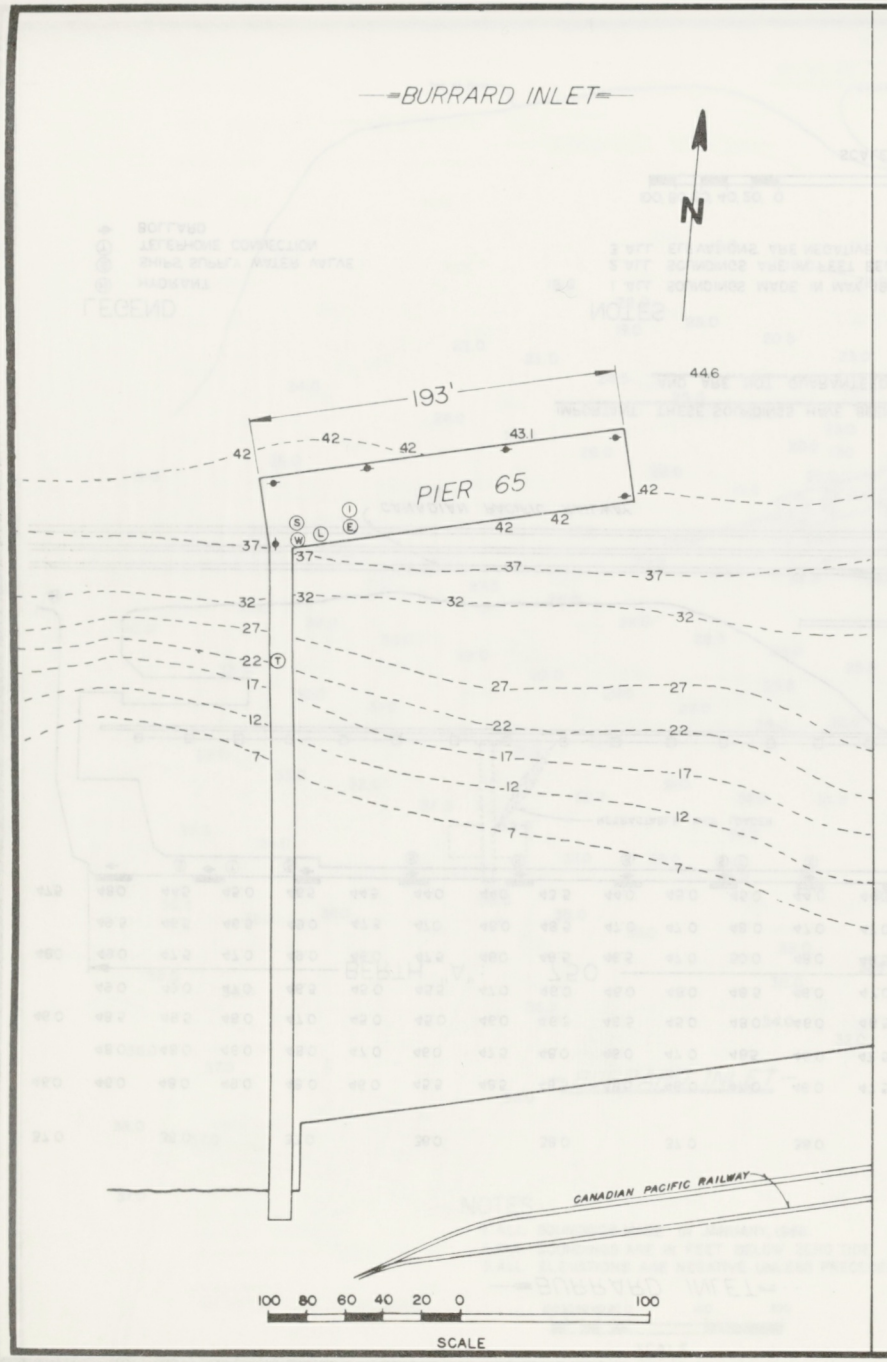


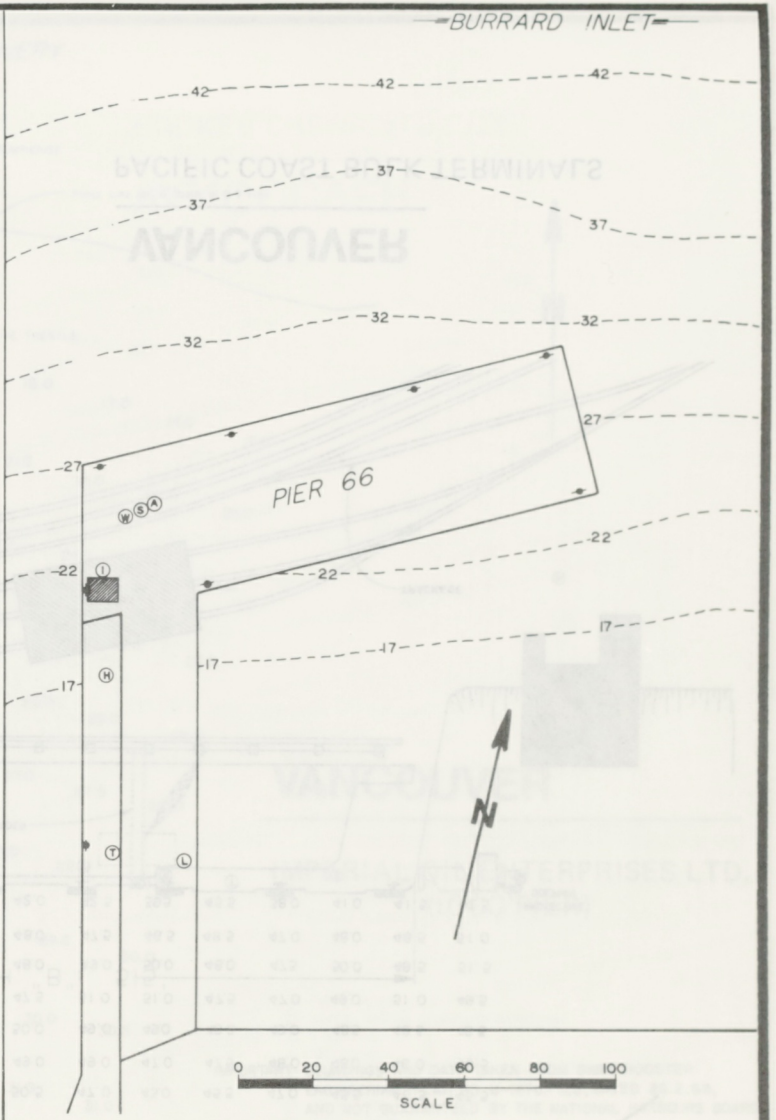
LEGEND

- (E) ELECTRICAL OUTLET
- (W) SHIPS' SUPPLY WATER VALVE
- (L) LIFEBOAT
- (S) STEAM LINE
- (A) AIR LINE
- (I) INTERCOM
- (T) TELEPHONE
- (H) HYDRANT
- BOLLARD

NOTES

1. ALL SOUNDINGS MADE IN JULY, 1967.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

IMPORTANT: THESE SOUDINGS HAVE BEEN SUPPLIED BY OTHERS AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.



VANCOUVER

GULF OIL CANADA LTD.

P191

CANADA

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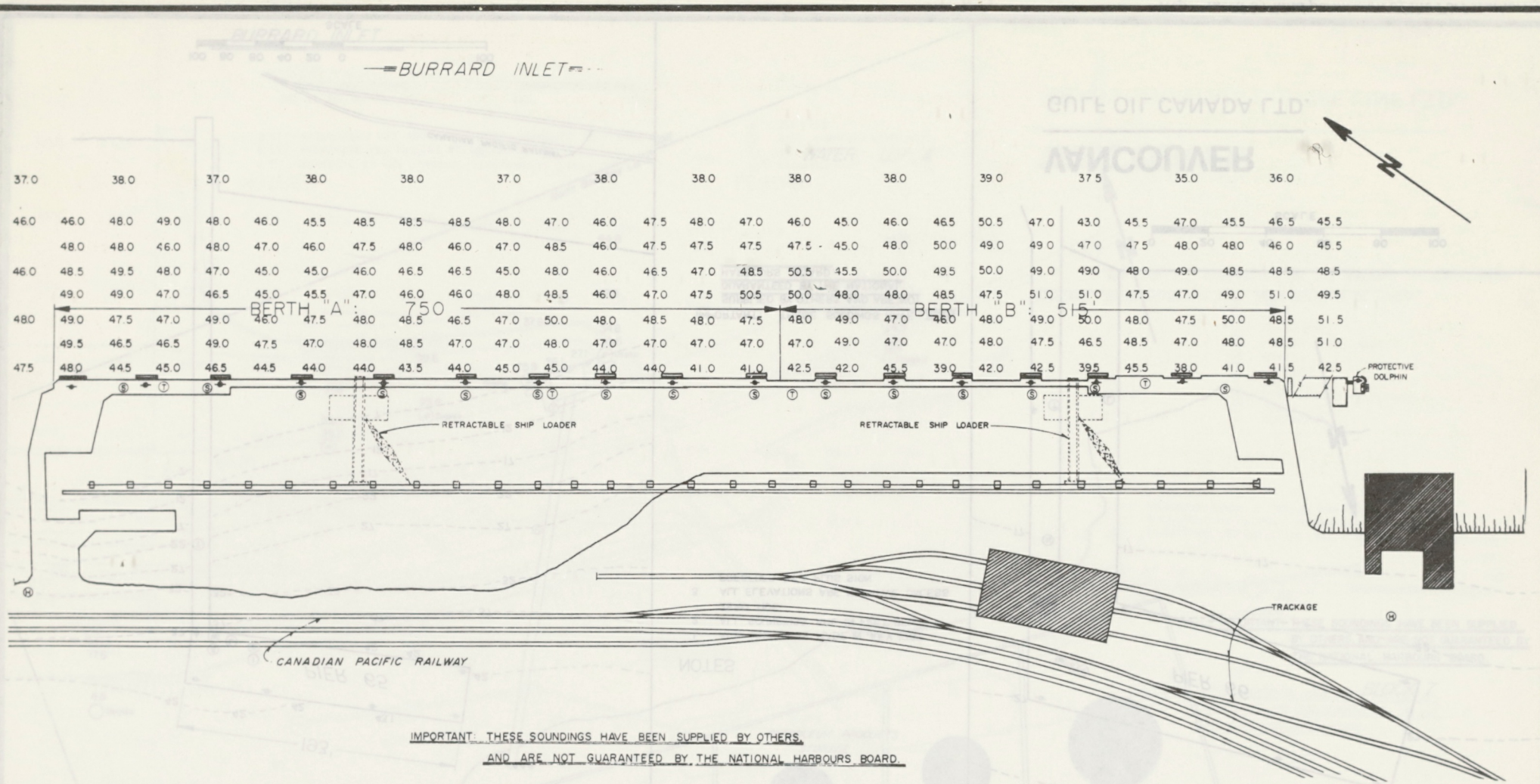

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

LEGEND

- (H) HYDRANT
- (S) SHIPS' SUPPLY WATER VALVE
- (T) TELEPHONE CONNECTION
- BOLLARD

NOTES

1. ALL SOUNDINGS MADE IN MAY, 1967, JUNE, 1969.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100' 80' 60' 40' 20' 0 100' 200'

SCALE

VANCOUVER

PACIFIC COAST BULK TERMINALS

CANADA

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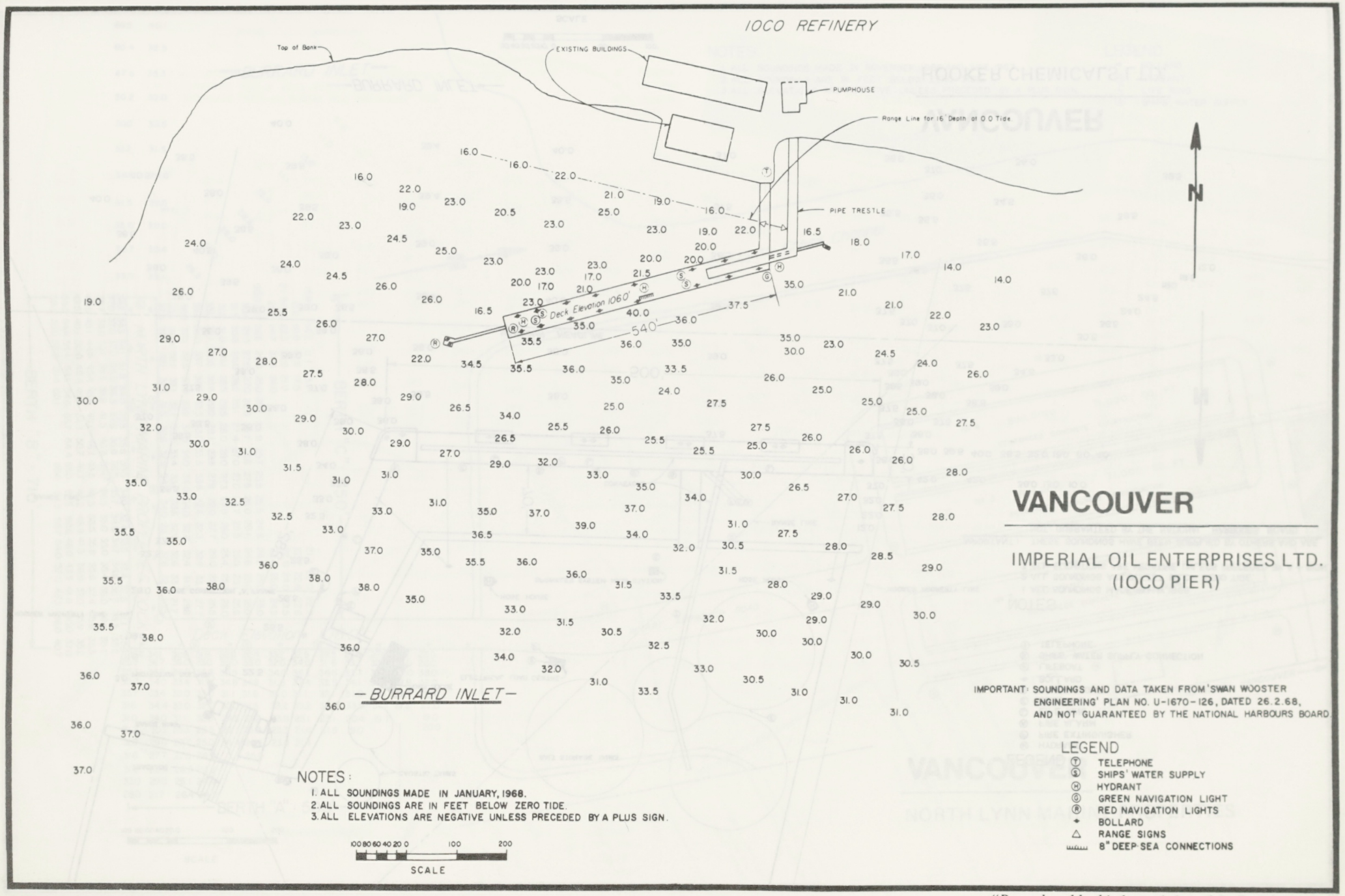

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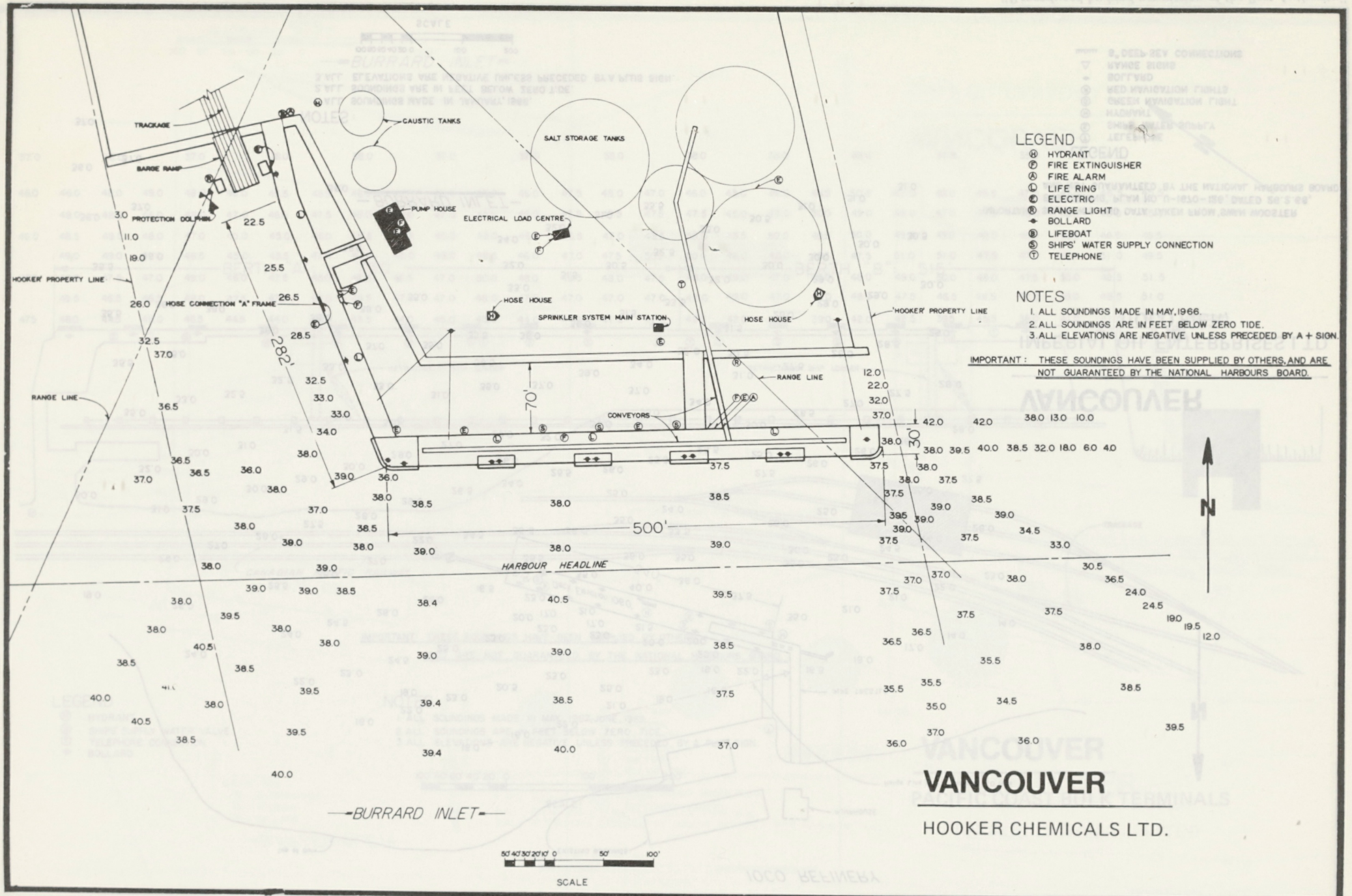
CANADA



LEGEND

- (H) HYDRANT
- (F) FIRE EXTINGUISHER
- (A) FIRE ALARM
- (L) LIFE RING
- (E) ELECTRIC
- (R) RANGE LIGHT
- BOLLARD
- (B) LIFEBOAT
- (S) SHIPS' WATER SUPPLY CONNECTION
- (T) TELEPHONE

NOTES

1. ALL SOUNDINGS MADE IN MAY, 1966.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A + SIGN.

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

VANCOUVER

HOOKER CHEMICALS LTD.

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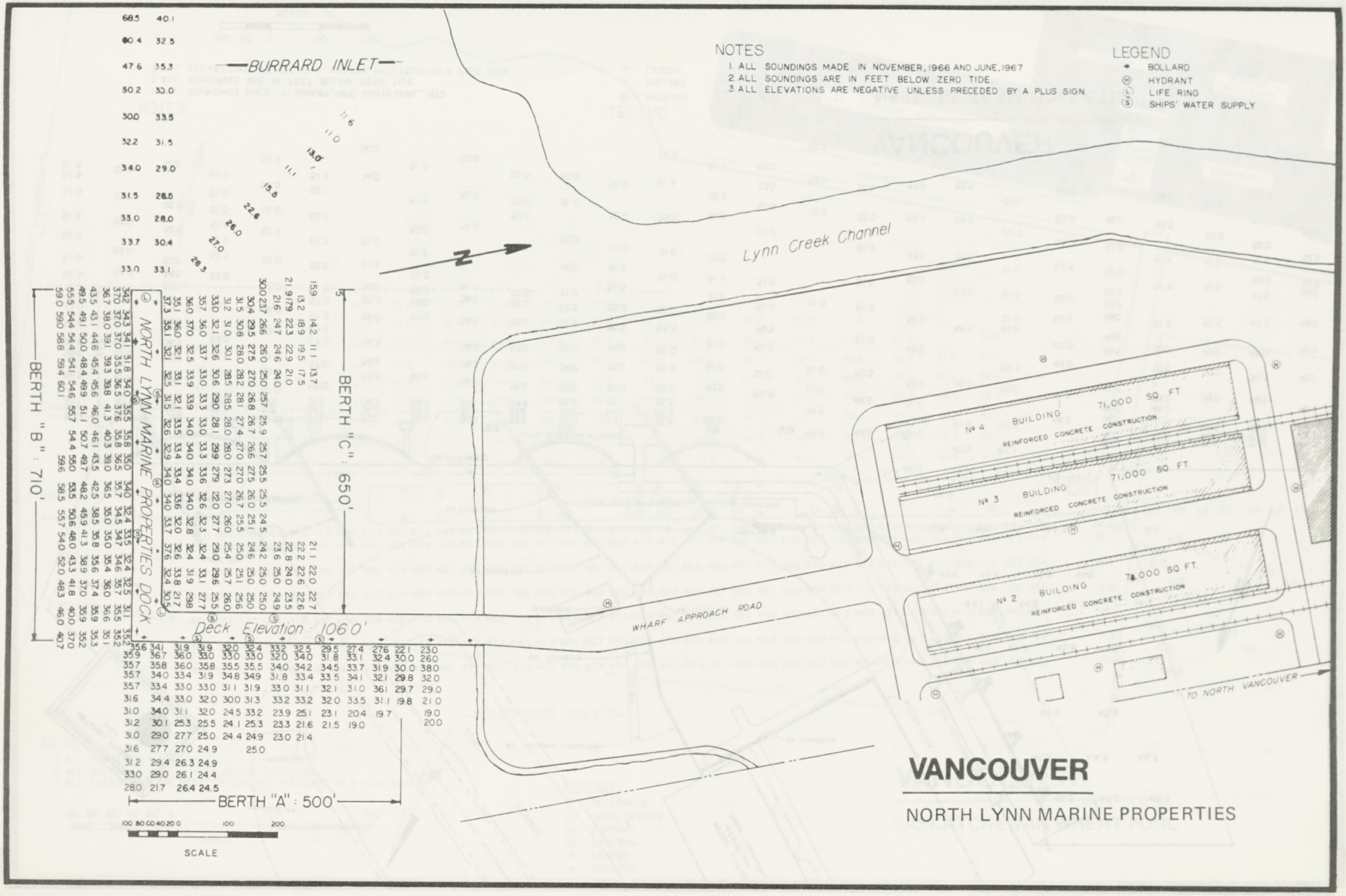

VANCOUVER

NORTH LYNN MARINE PROPERTIES

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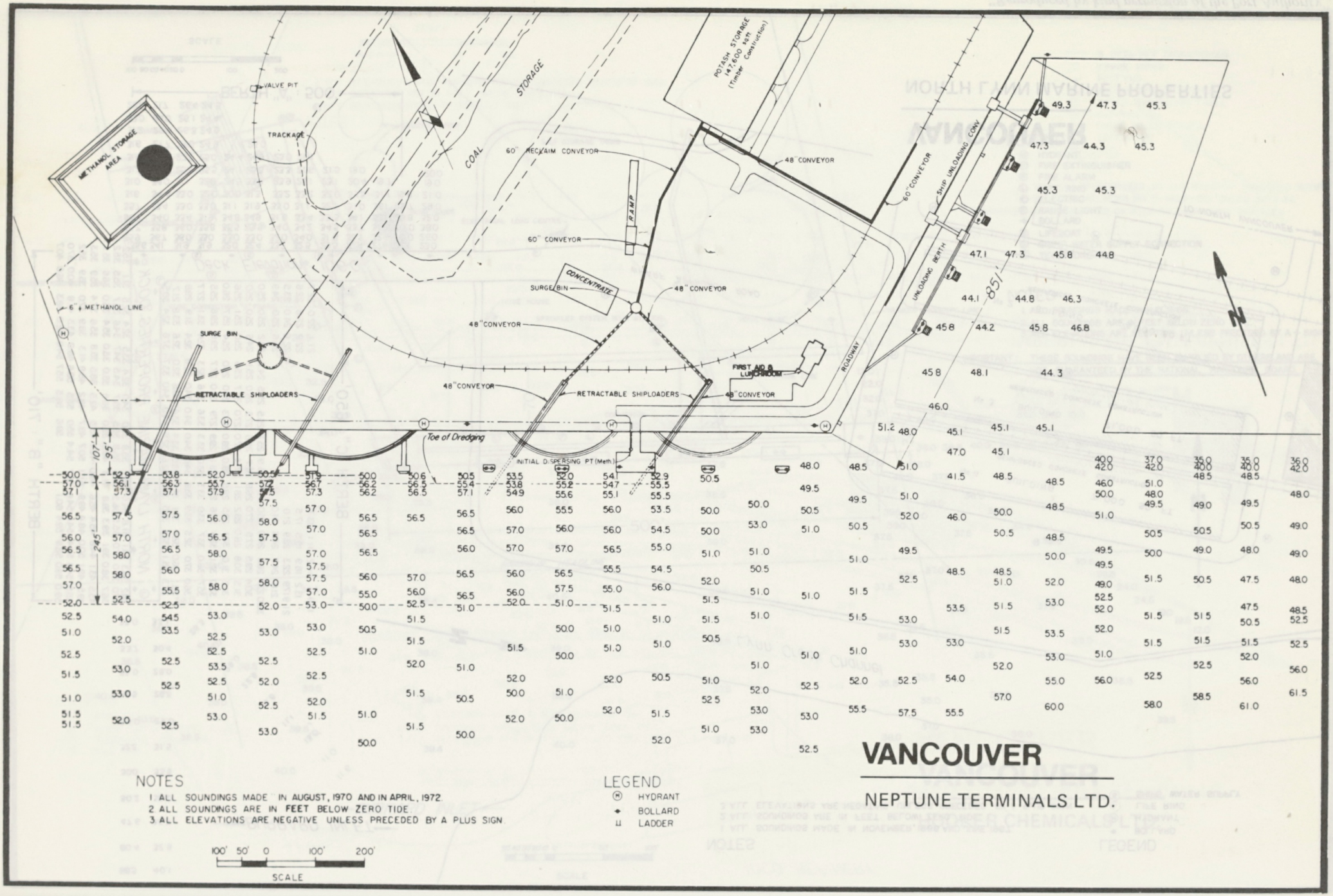

NOTES

1. ALL SOUNDINGS MADE IN AUGUST, 1970 AND IN APRIL, 1972.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100' 50' 0 100' 200'
SCALE

LEGEND

- (H) HYDRANT
- ◆ BOLLARD
- ⊔ LADDER

VANCOUVER

NEPTUNE TERMINALS LTD.

CANADA

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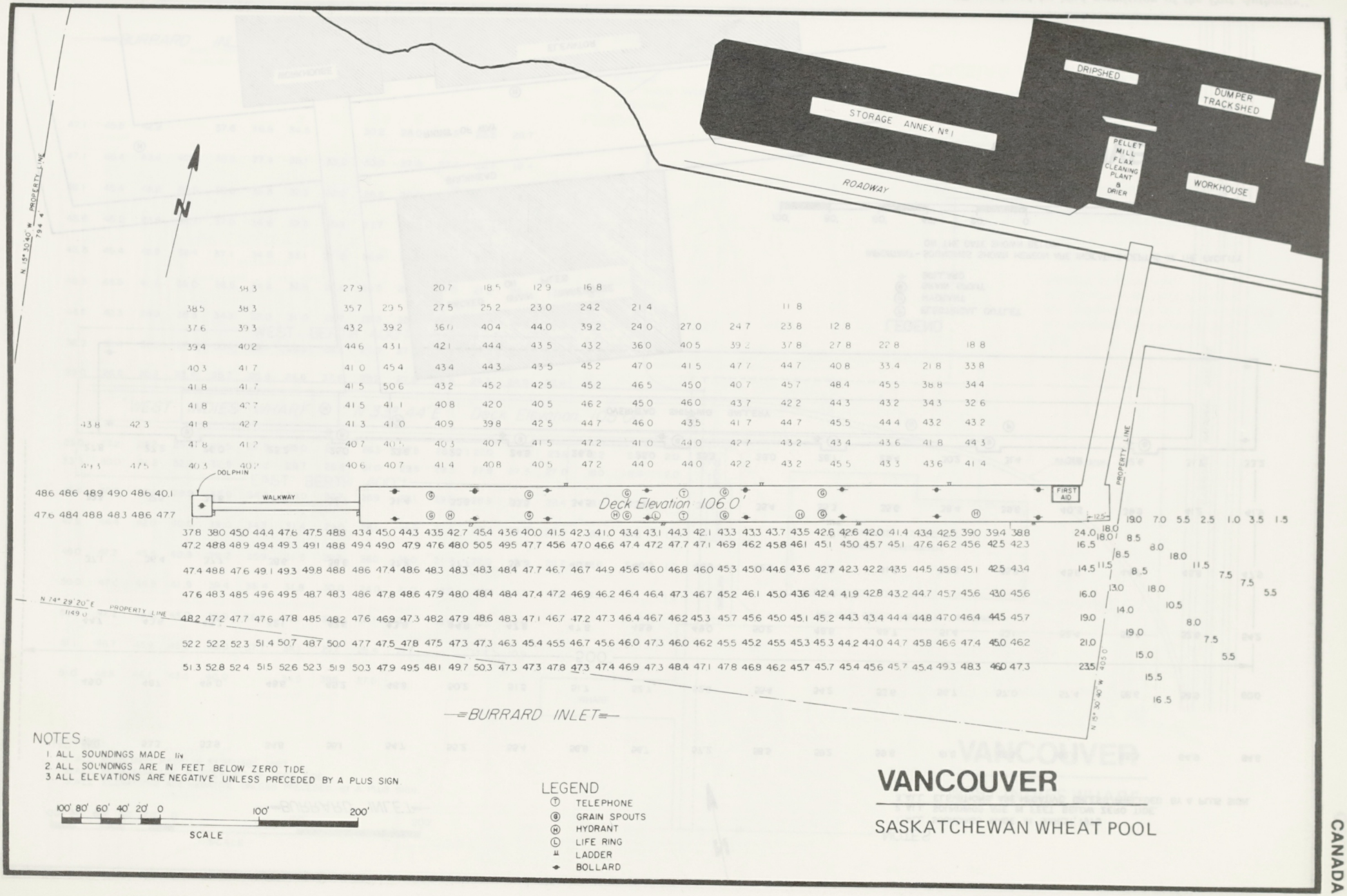

NOTES

1. ALL SOUNDINGS MADE IN
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100' 80' 60' 40' 20' 0 100' 200'
SCALE

LEGEND

- (T) TELEPHONE
- (G) GRAIN SPOUTS
- (H) HYDRANT
- (L) LIFE RING
- LADDER
- BOLLARD

VANCOUVER

SASKATCHEWAN WHEAT POOL

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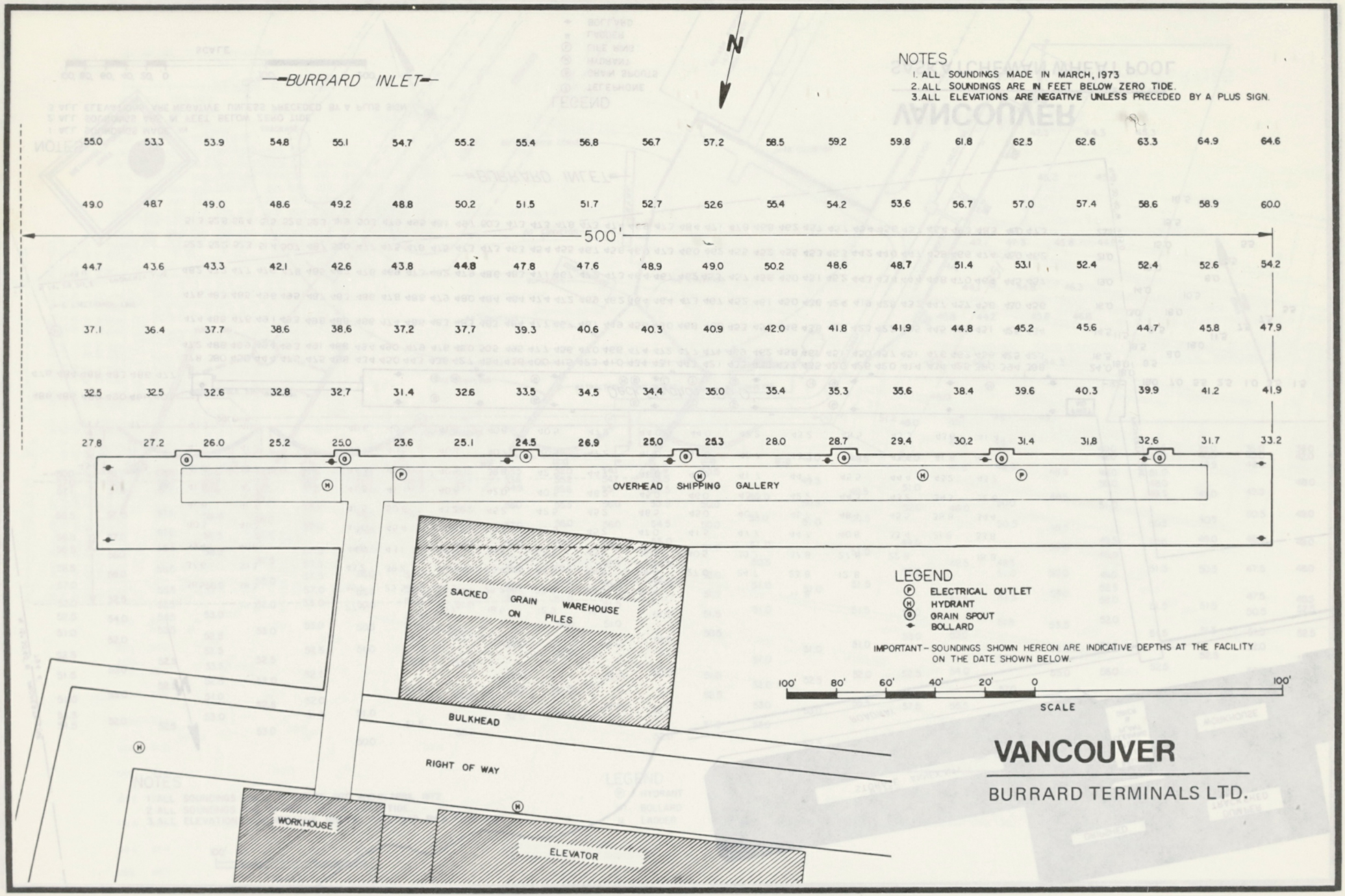

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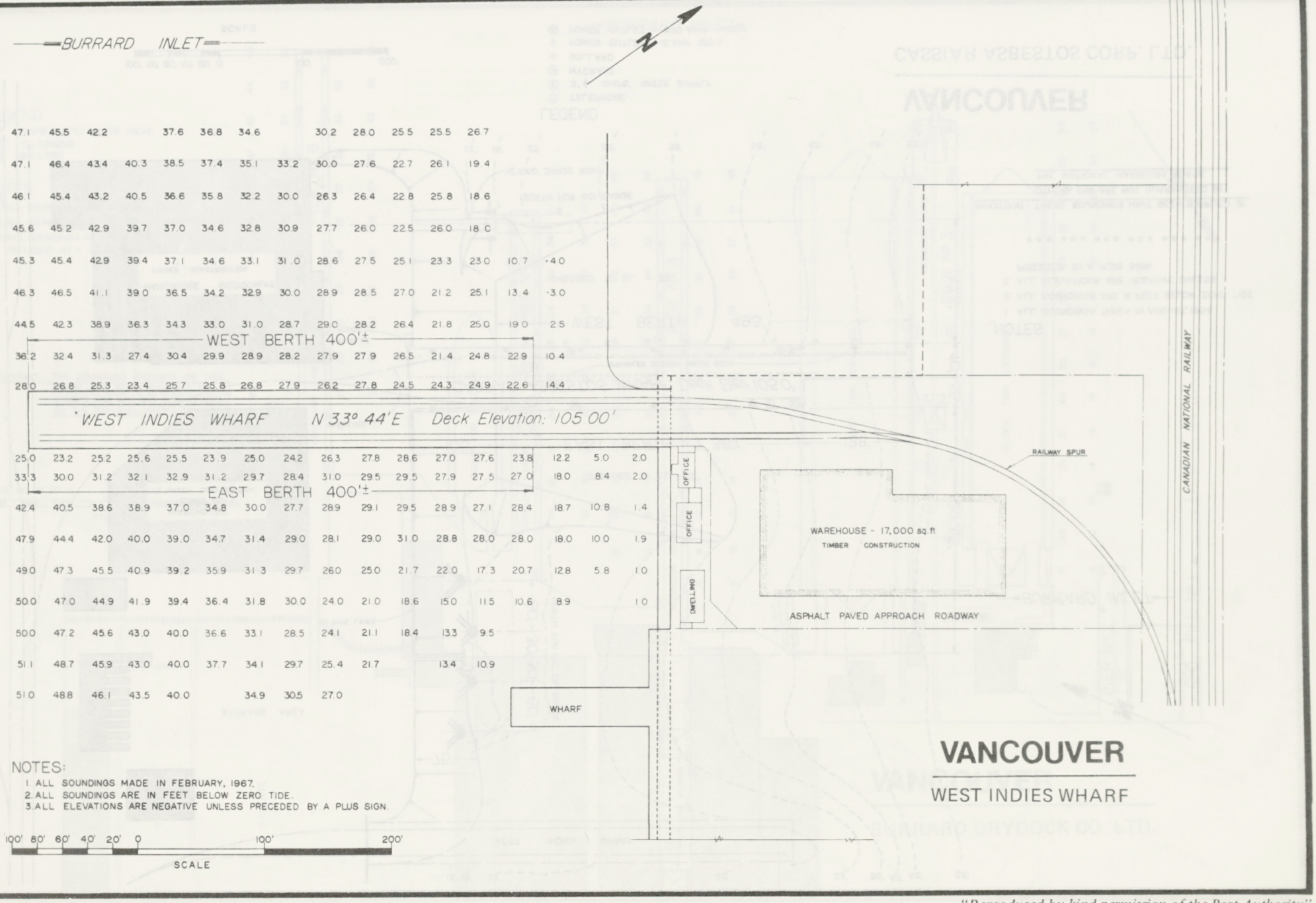

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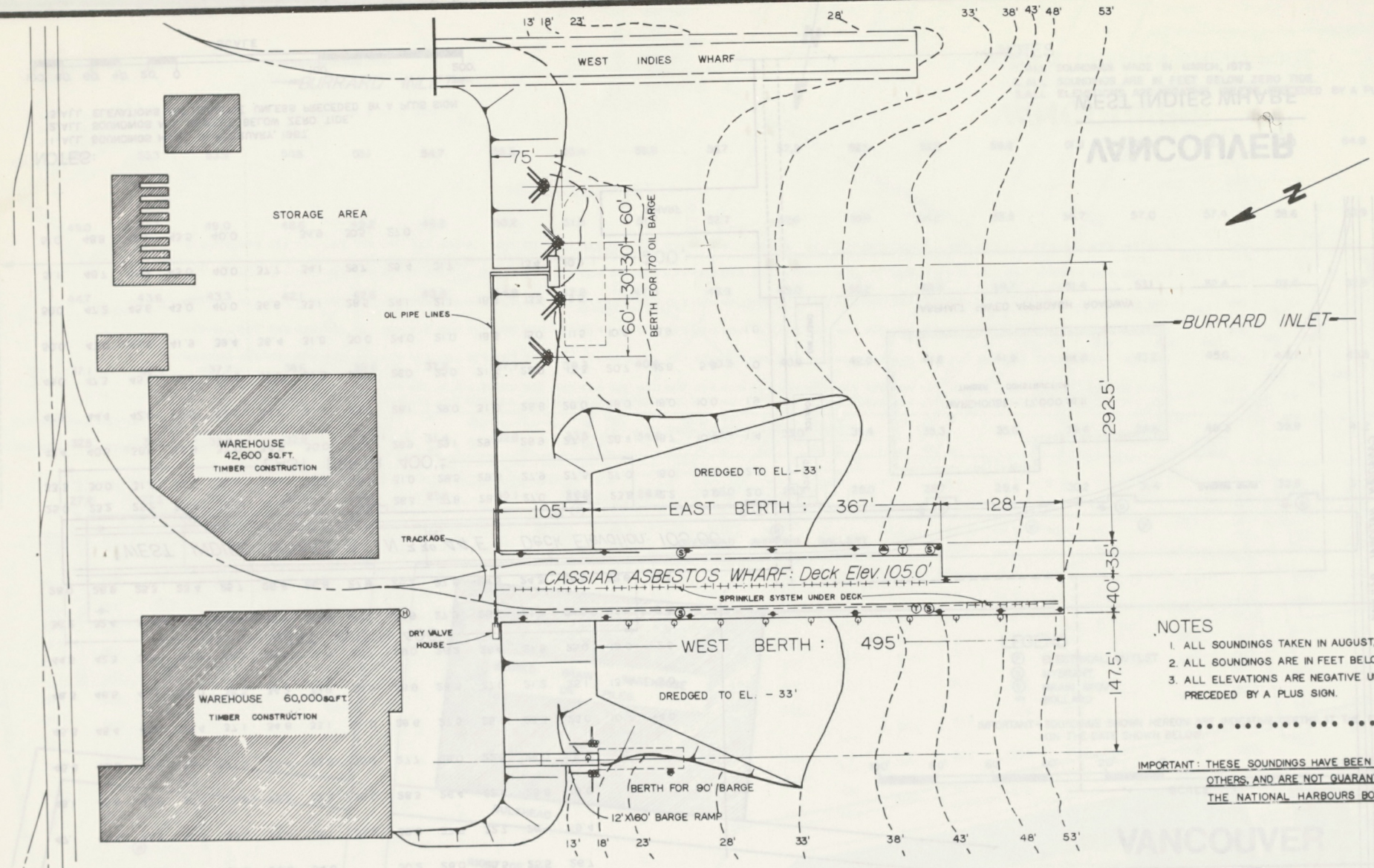

NOTES

1. ALL SOUNDINGS TAKEN IN AUGUST, 1964.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

LEGEND

- (T) TELEPHONE
- (S) 3" ϕ SHIPS' WATER SUPPLY
- (H) HYDRANT
- BOLLARD
- POWER OUTLETS – 15 AMP. 120 V.
- POWER OUTLET – 800 AMP. 400 V.

100' 80' 60' 40' 20' 0 100' 200'

SCALE

VANCOUVER

CASSIAR ASBESTOS CORP. LTD.

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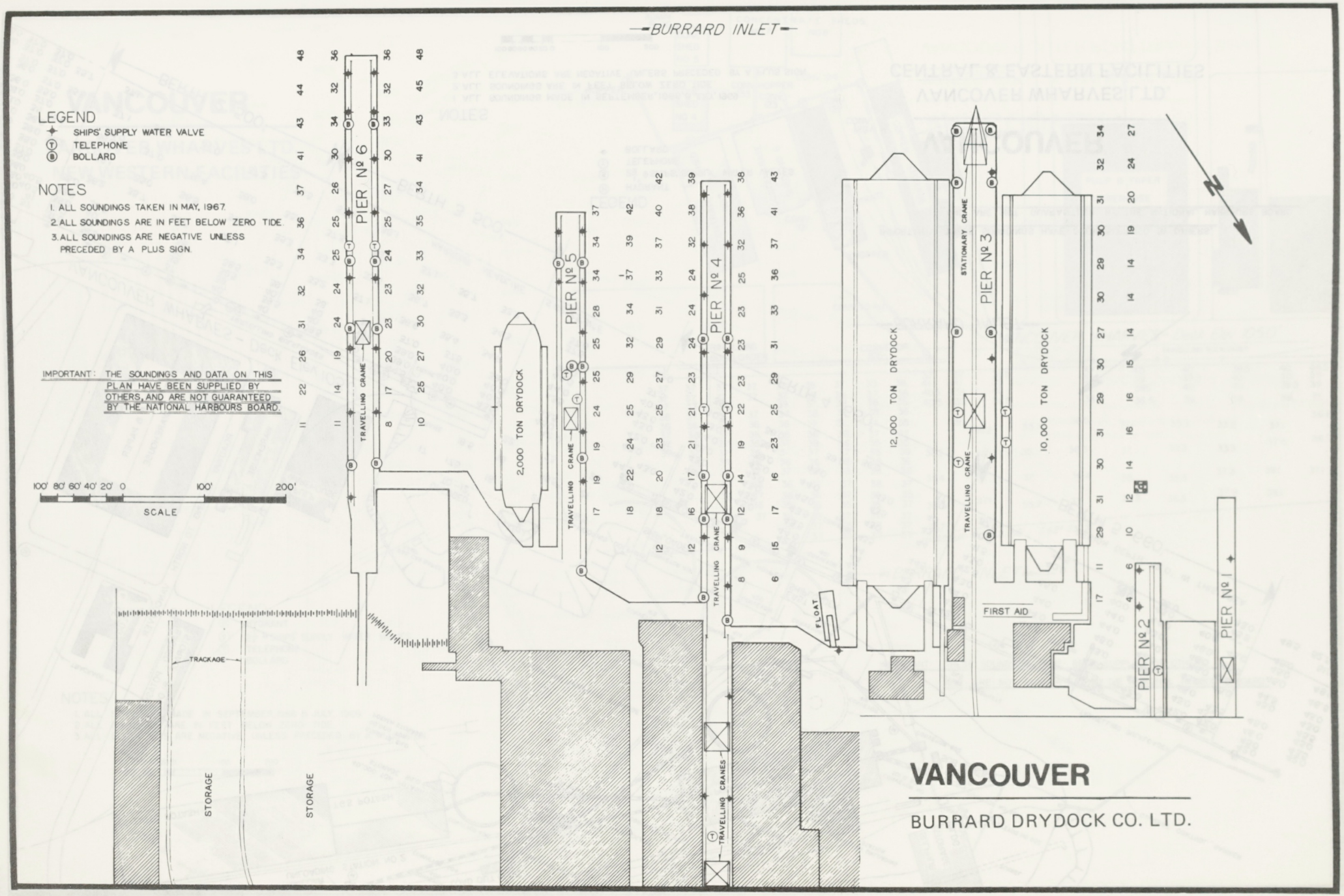

VANCOUVER

BURRARD DRYDOCK CO. LTD.

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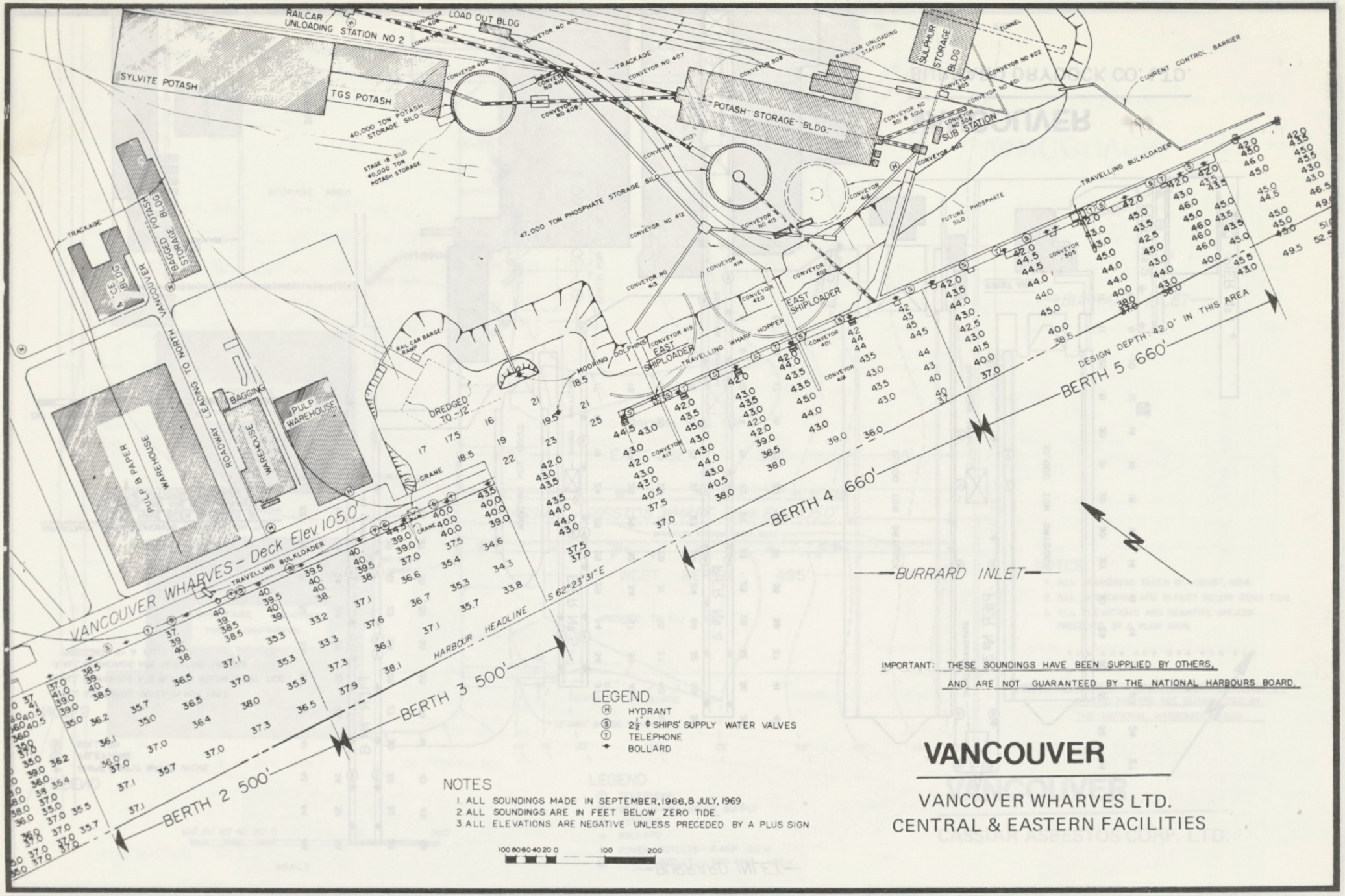

LEGEND

- (H) HYDRANT
- (S) 2½" ϕ SHIPS' SUPPLY WATER VALVES
- (T) TELEPHONE
- BOLLARD

NOTES

1. ALL SOUNDINGS MADE IN SEPTEMBER, 1966, 8 JULY, 1969
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

100 80 60 40 20 0 100 200

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

VANCOUVER

VANCOVER WHARVES LTD.
CENTRAL & EASTERN FACILITIES

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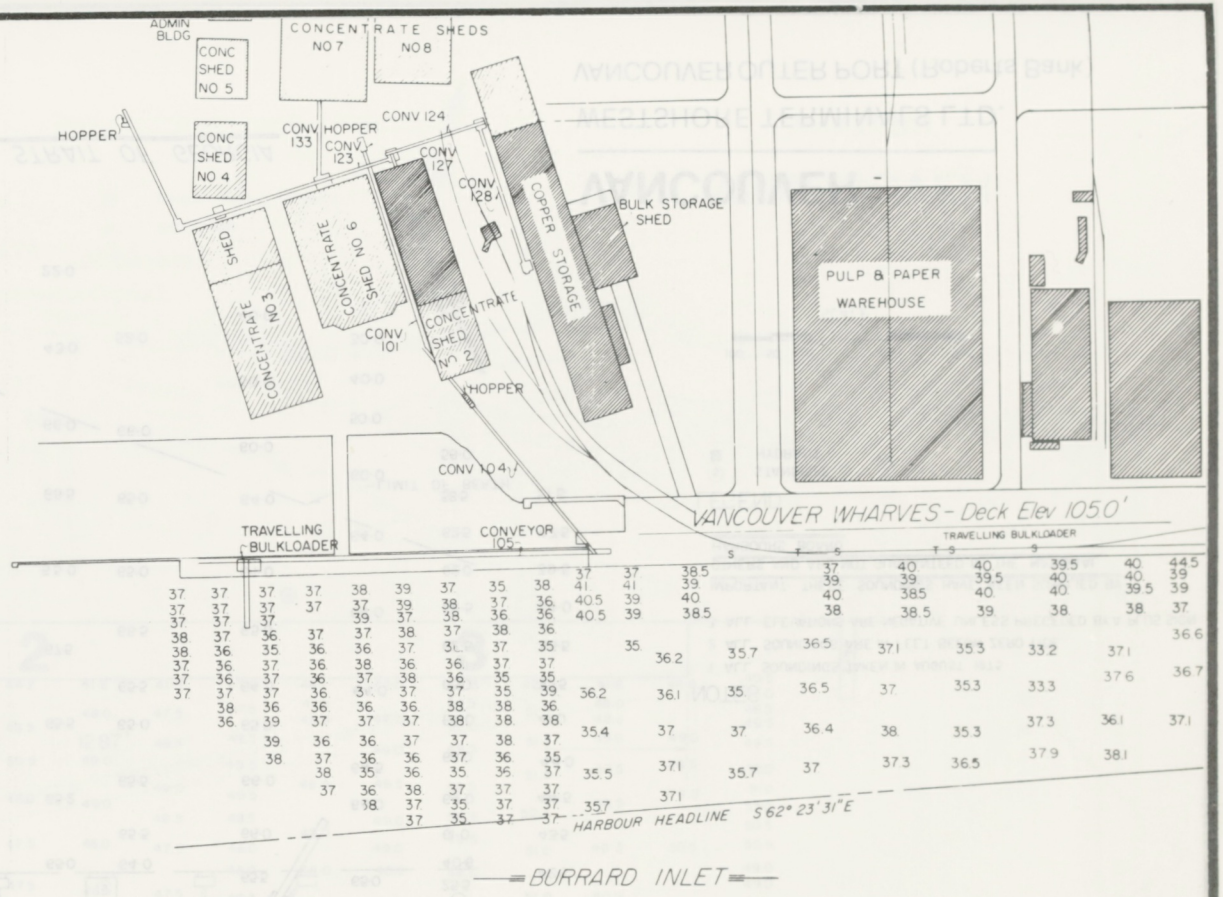
VANCOUVER

VANCOVER WHARVES LTD.
NEW WESTERN FACILITIES



LEGEND

- (H) HYDRANT
- (S) 2½" ϕ SHIPS' SUPPLY WATER VALVES
- (T) TELEPHONE
- BOLLARD

NOTES

1. ALL SOUNDINGS MADE IN SEPTEMBER, 1966 & JULY, 1969.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN.

100 80 60 40 20 0 100 200

IMPORTANT THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS, AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

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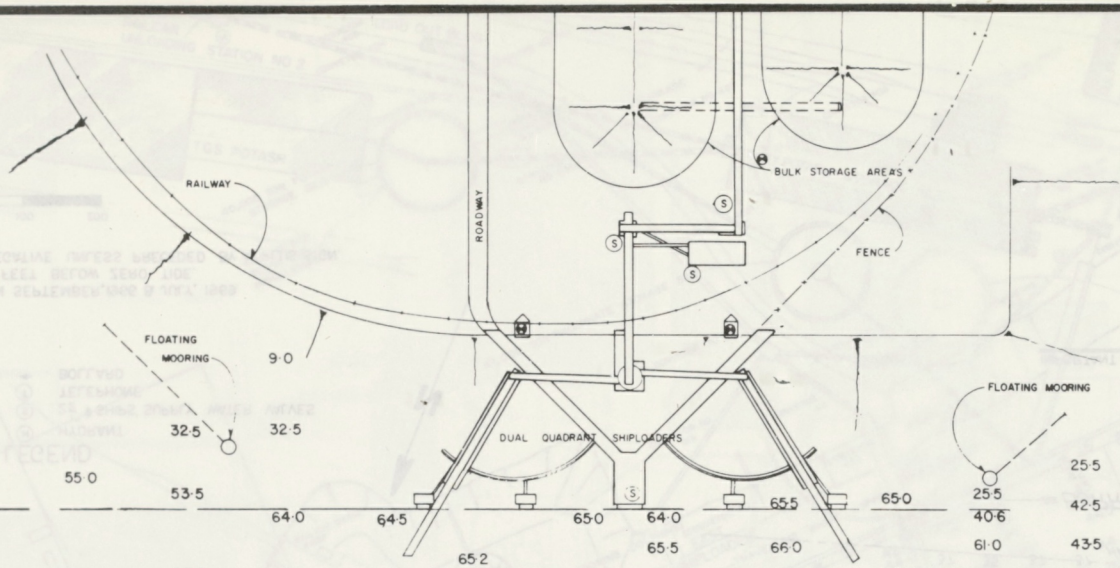

33·0 34·0 39·5 46·0 55·0 9·0 32·5 32·5 53·5 64·0 64·5 65·0 65·2 65·0 64·0 65·5 65·0 25·5 25·5
65·0 66·0 64·5 62·5 65·6 66·0 65·2 65·5 66·0 64·0 40·6 42·5
64·5 66·0 65·0 65·0 64·5 65·5 65·5 66·0 64·5 61·0 43·5
63·5 66·0 65·5 66·0 65·5 67·5 65·0 65·0 64·0 64·0 44·5
65·5 66·0 64·0 62·0 65·5 65·0 66·5 64·5 64·0 66·0 44·0
65·3 66·0 65·0 64·0 64·5 65·0 65·0 65·0 66·0 41·0
62·5 66·0 64·5 65·0 66·5 65·5 65·0 64·0 63·0 35·5
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64·5 63·5 55·0 59·0 64·0 61·5 43·5 22·0 43·0 52·0 40·0 50·0 40·0 30·0 62·0 39·5
60·5 64·0 38·0 40·0 42·0 40·0 34·5 26·0 58·5 66·0 66·0 64·0 60·0 62·5 47·5
40·5 40·0 20·5 22·5 27·0 12·5 9·0 58·5 58·0 51·5

STRAIT OF GEORGIA

NOTES

1. ALL SOUNDINGS TAKEN IN AUGUST 1975
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

IMPORTANT: THESE SOUNDINGS HAVE BEEN SUPPLIED BY OTHERS AND ARE NOT GUARANTEED BY THE NATIONAL HARBOURS BOARD.

LEGEND

(S) STANDPIPE
HYDRANT

100' 50' 0 100' 200'
SCALE

VANCOUVER

WESTSHORE TERMINALS LTD.

VANCOUVER OUTER PORT (Roberts Bank)

CANADA

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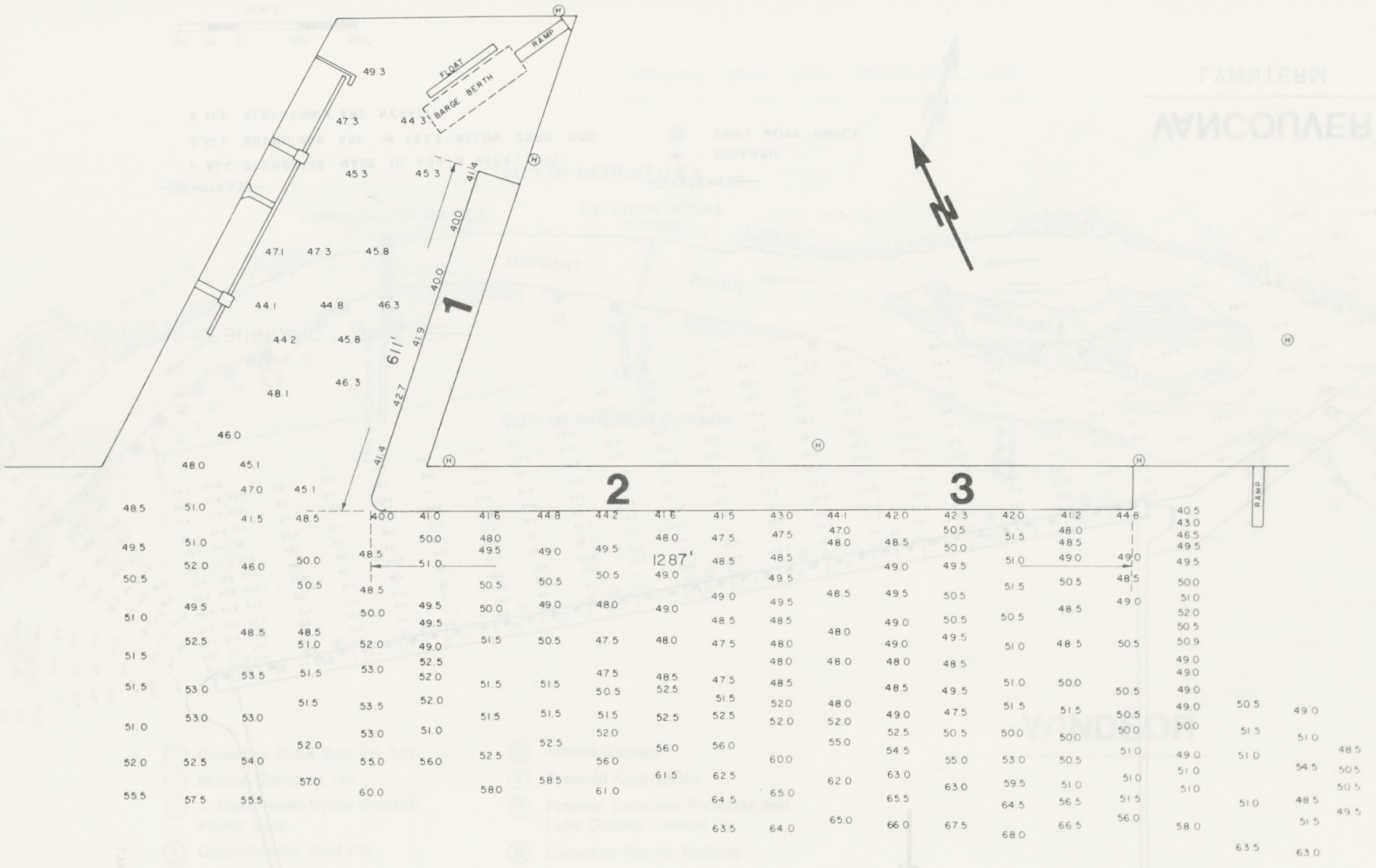

NOTES

1. ALL SOUNDINGS MADE IN FEB. 1970 AND IN AUGUST, 1971
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE
3. ALL ELEVATIONS ARE NEGATIVE UNLESS PRECEDED BY A PLUS SIGN

LEGEND

(H) HYDRANT

100' 50' 0 100' 200'

SCALE

VANCOUVER

SEABOARD SHIPPING LTD

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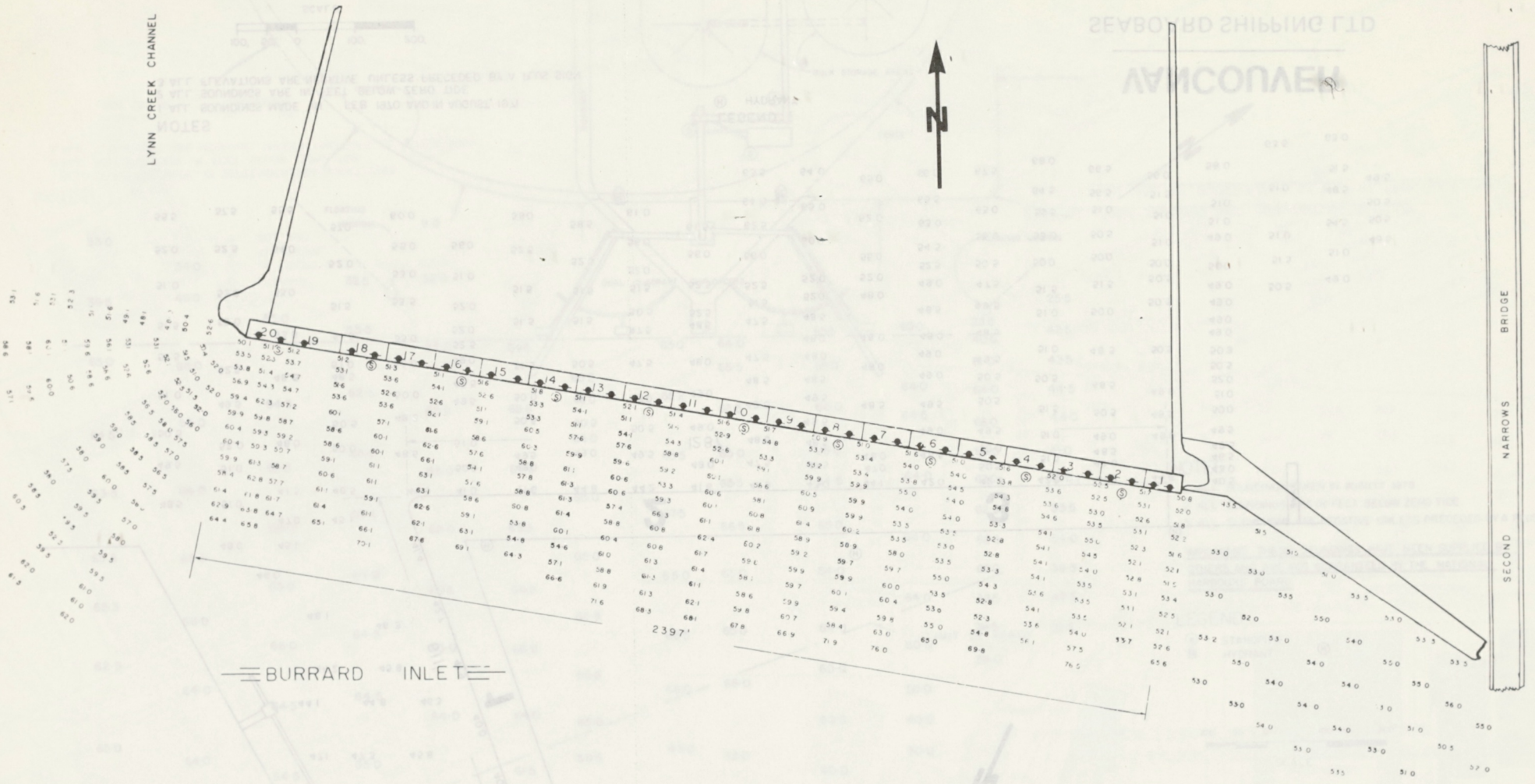

NOTES

1. ALL SOUNDINGS MADE IN AUG. & SEPT., 1975.
2. ALL SOUNDINGS ARE IN FEET BELOW ZERO TIDE.
3. ALL ELEVATIONS ARE NEGATIVE.

LEGEND

- BOLLARD
- (S) SHIP'S WATER SUPPLY

150' 75' 0 150' 300'
SCALE

VANCOUVER

LYNNTERM

CANADA

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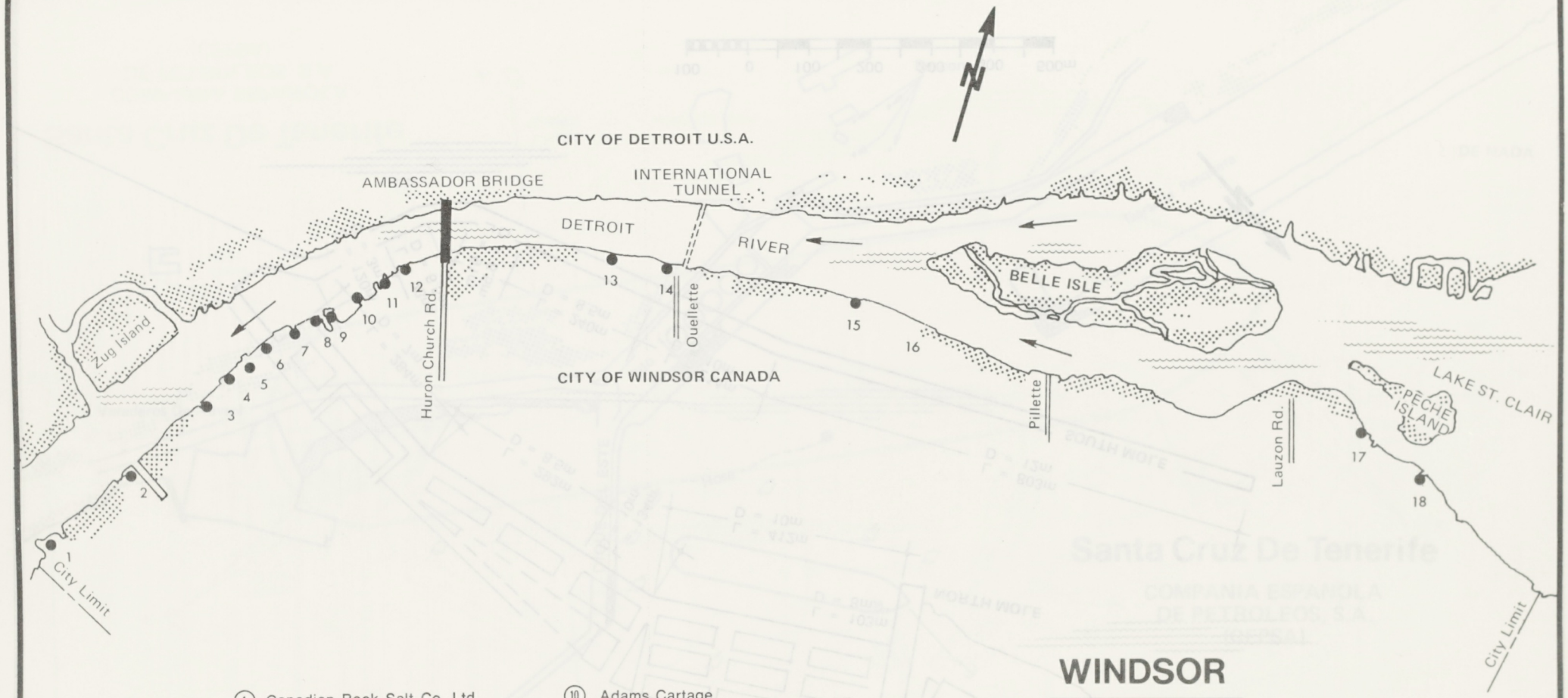

WINDSOR

1. Canadian Rock Salt Co. Ltd.
2. Morton Terminal Ltd.
3. J. Clark Keith-Hydro Electric Power Corp.
4. Consolidation Coal Co.
5. Canadian Salt Co. Ltd.
6. Canada Steamship Lines
7. J. J. Kovinsky Ltd. (Hill St.)
8. Windsor Harbour Commission—Imperial Dock
9. Windsor Harbour Commission—Confederation Dock
10. Adams Cartage
11. Pyramid Aggregates
12. Premier Concrete Products and Lake Ontario Cement Co.
13. Canadian Pacific Railway
14. Dieppe Park Dock
15. Canadian National Railway
16. Hiram Walker and Sons Ltd.
17. Ford Motor Co. of Canada Ltd.
18. Windsor Yacht Club
19. Southwestern Sales

CANADA

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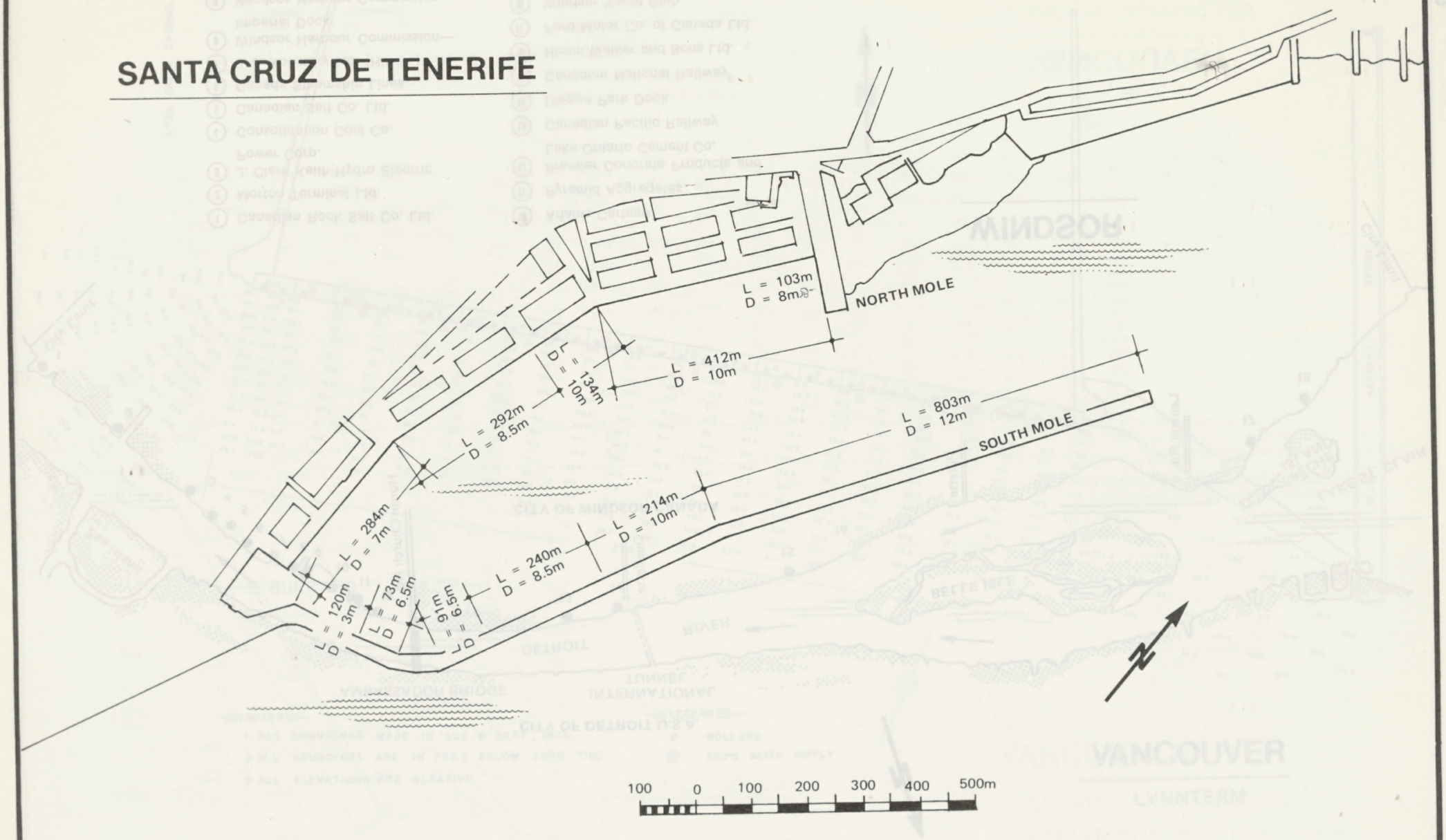
SANTA CRUZ DE TENERIFE



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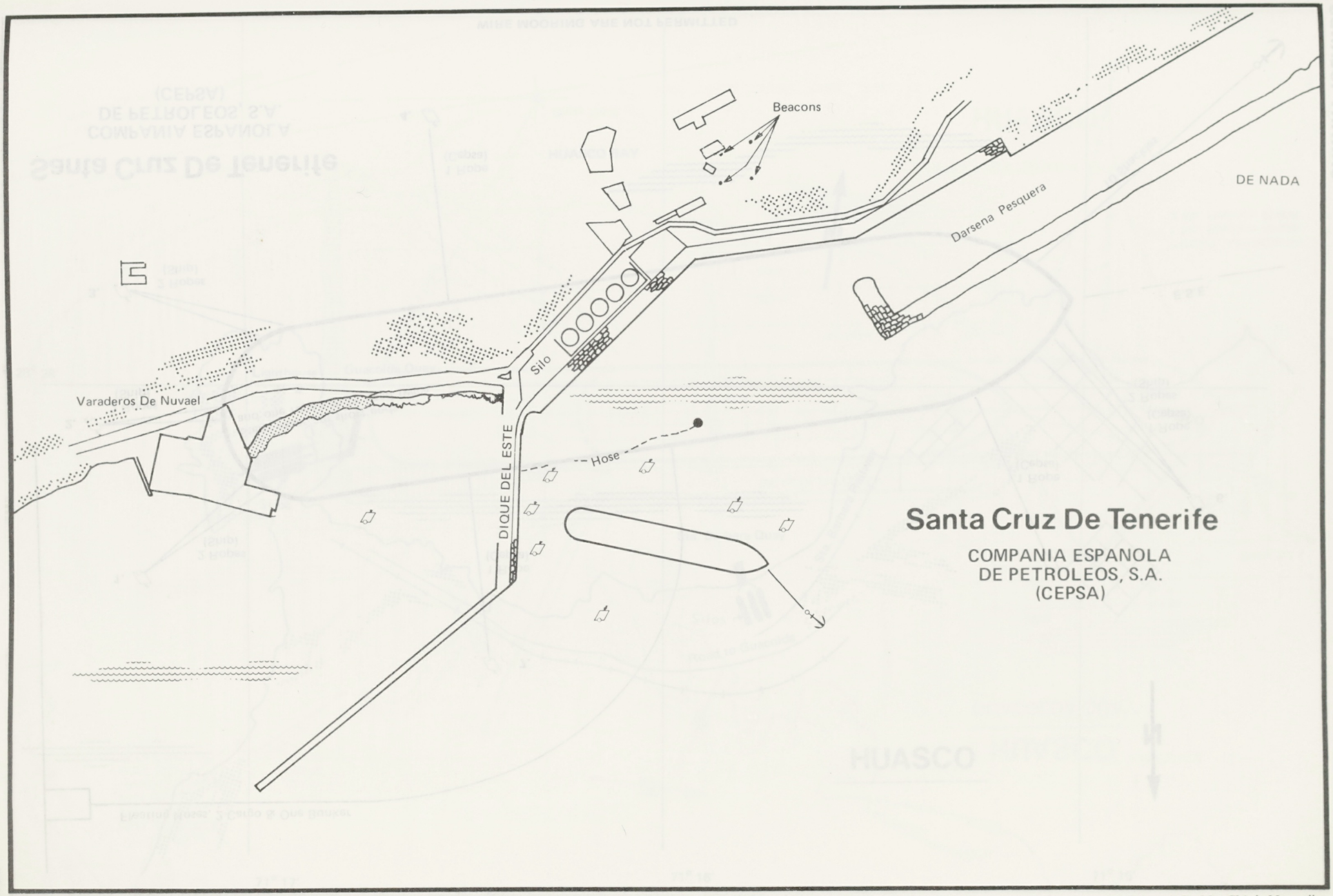
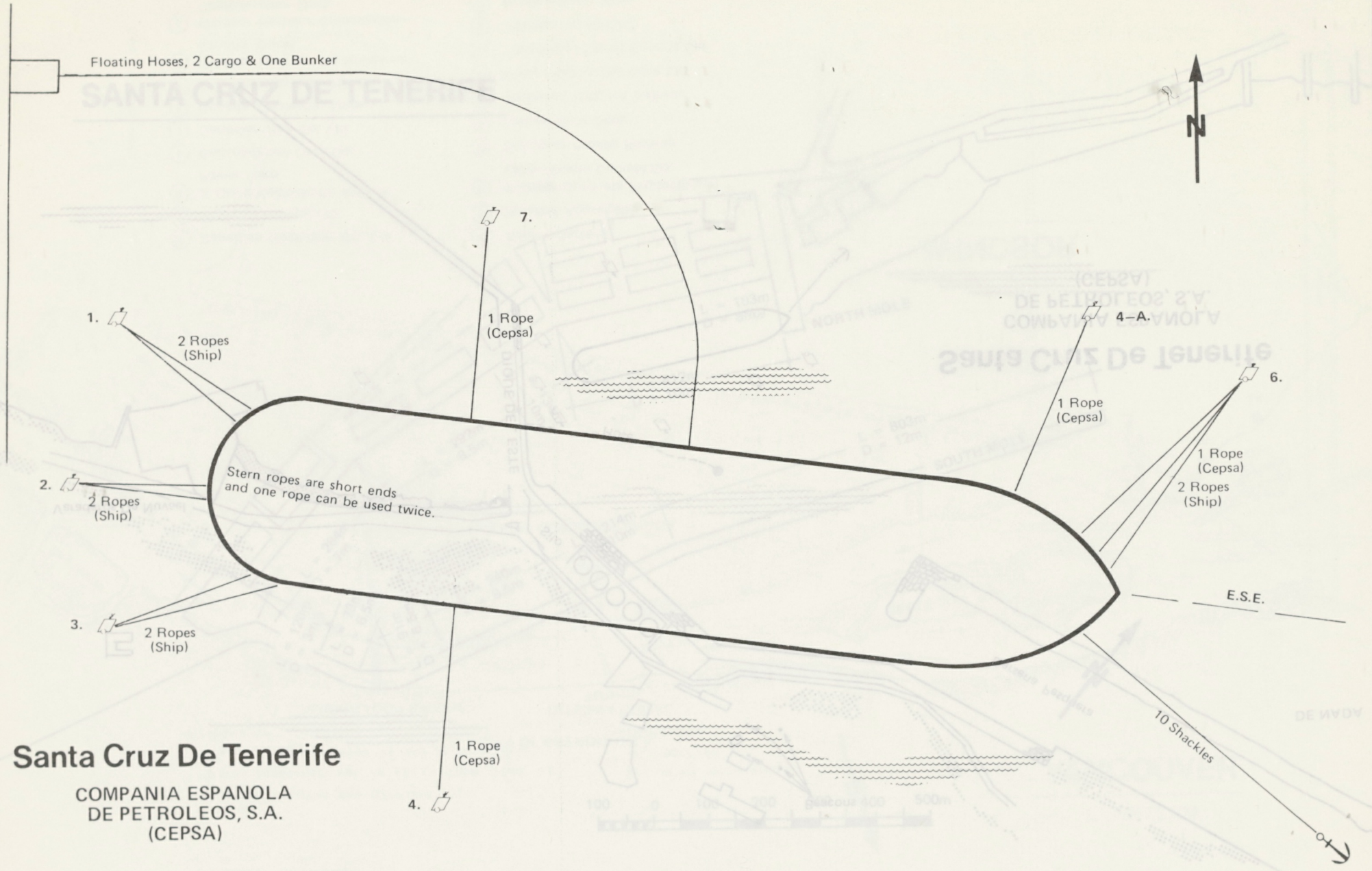


Santa Cruz De Tenerife

COMPANIA ESPANOLA
DE PETROLEOS, S.A.
(CEPSA)

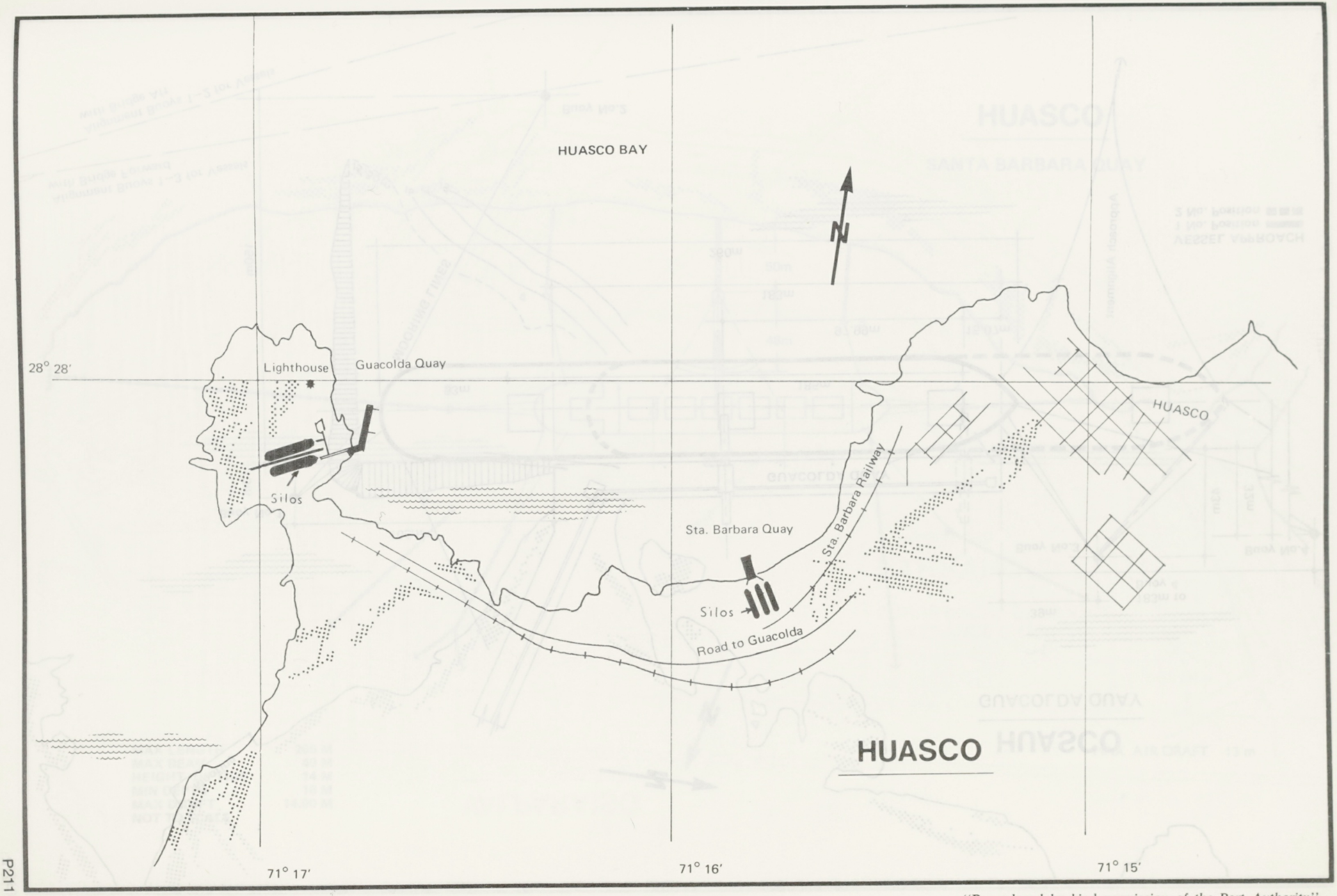
"Plan supplied by Ship's Master"



Santa Cruz De Tenerife

COMPANIA ESPANOLA
DE PETROLEOS, S.A.
(CEPSA)

WIRE MOORING ARE NOT PERMITTED



HUASCO

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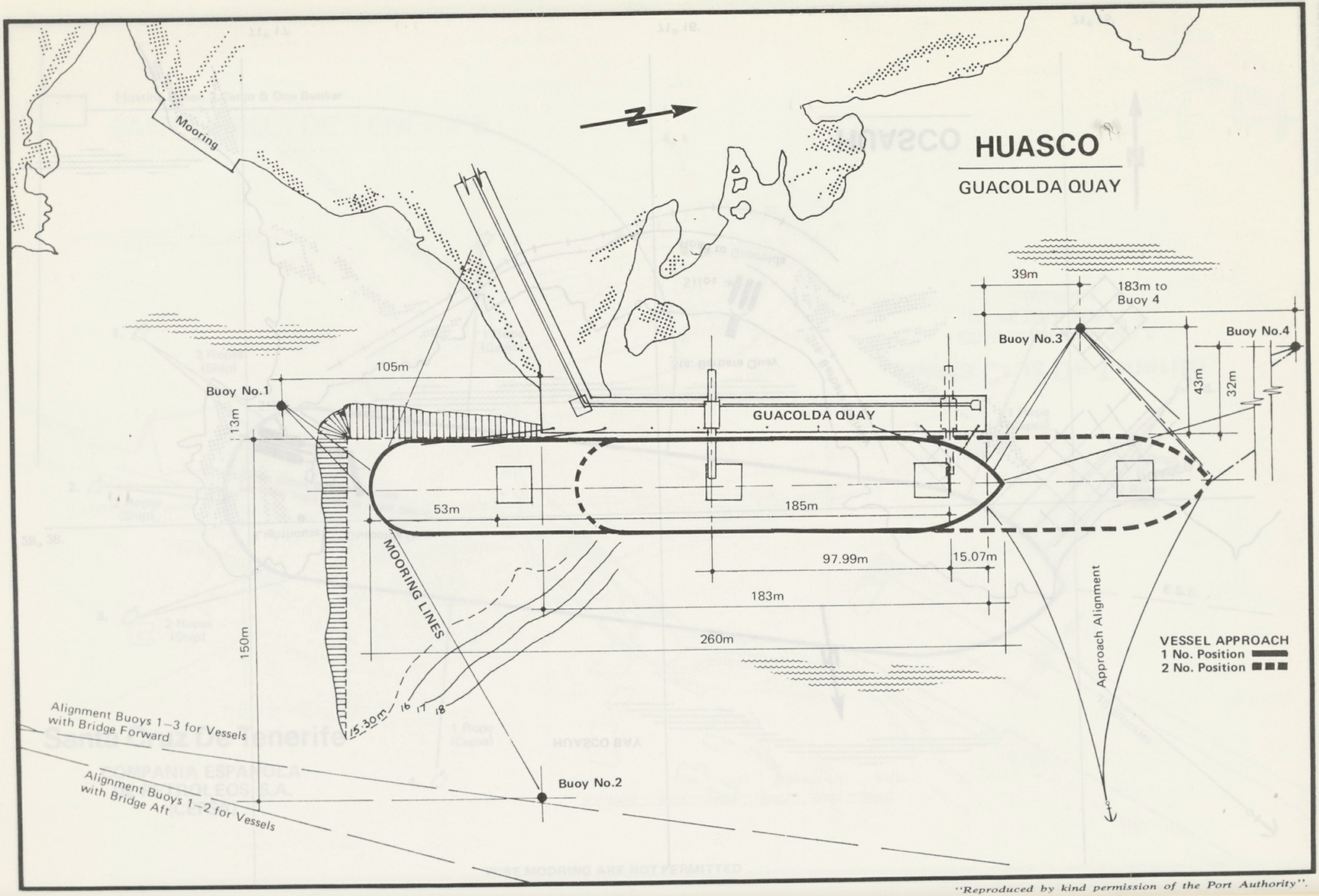

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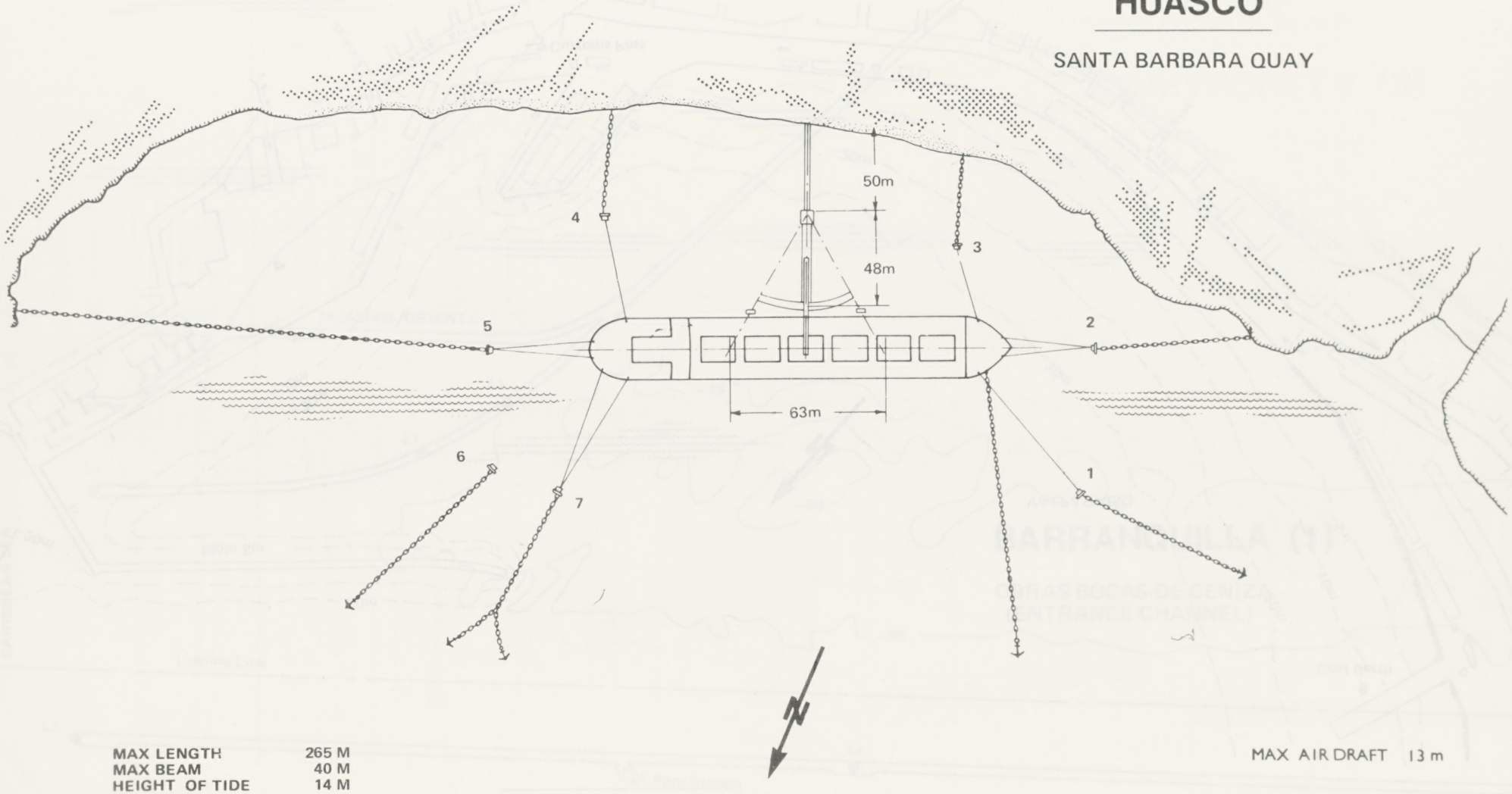
HUASCO

SANTA BARBARA QUAY



MAX LENGTH	265 M
MAX BEAM	40 M
HEIGHT OF TIDE	14 M
MIN DEPTH	16 M
MAX DRAFT	14.90 M

NOT TO SCALE

MAX AIR DRAFT 13 m

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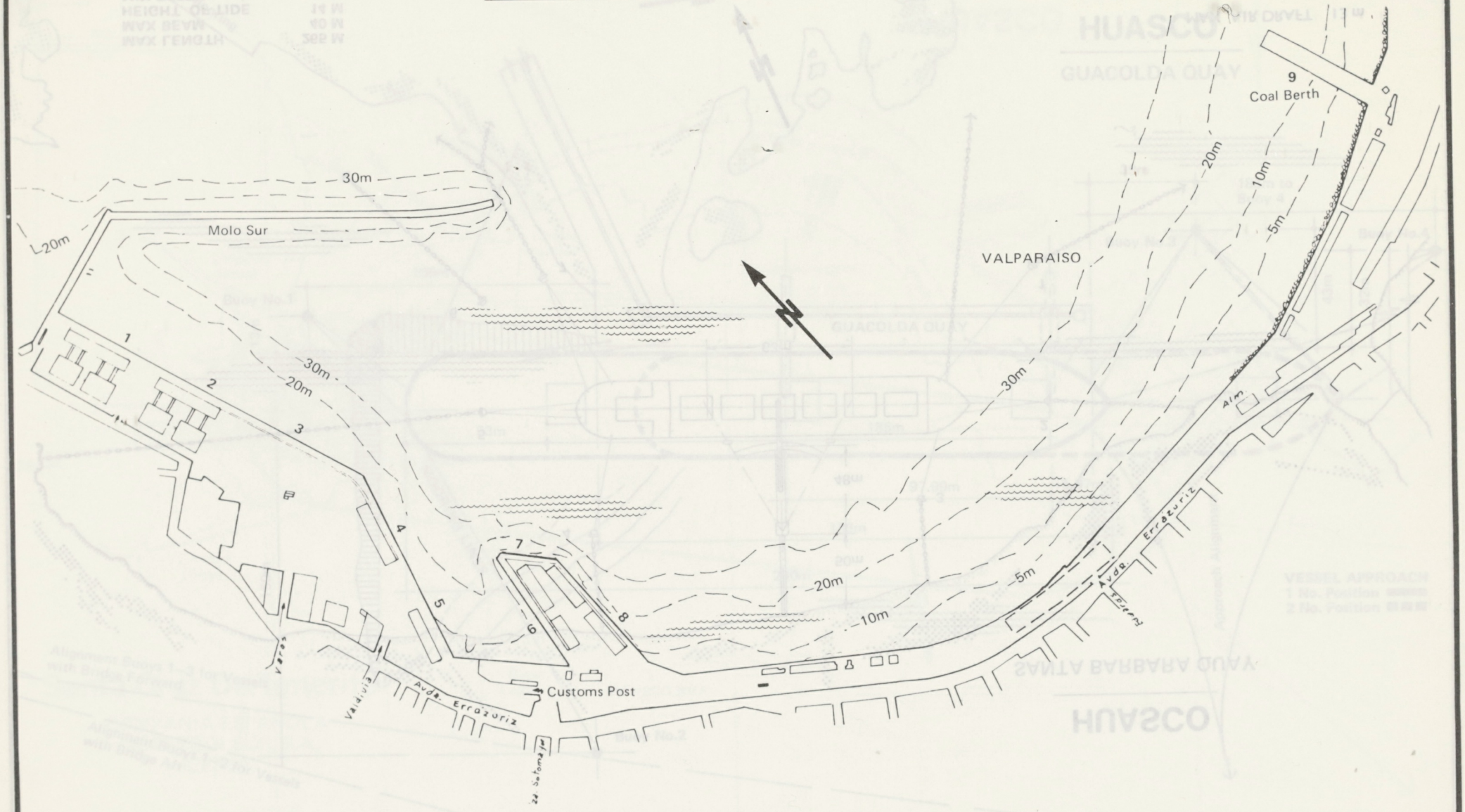
VALPARAISO



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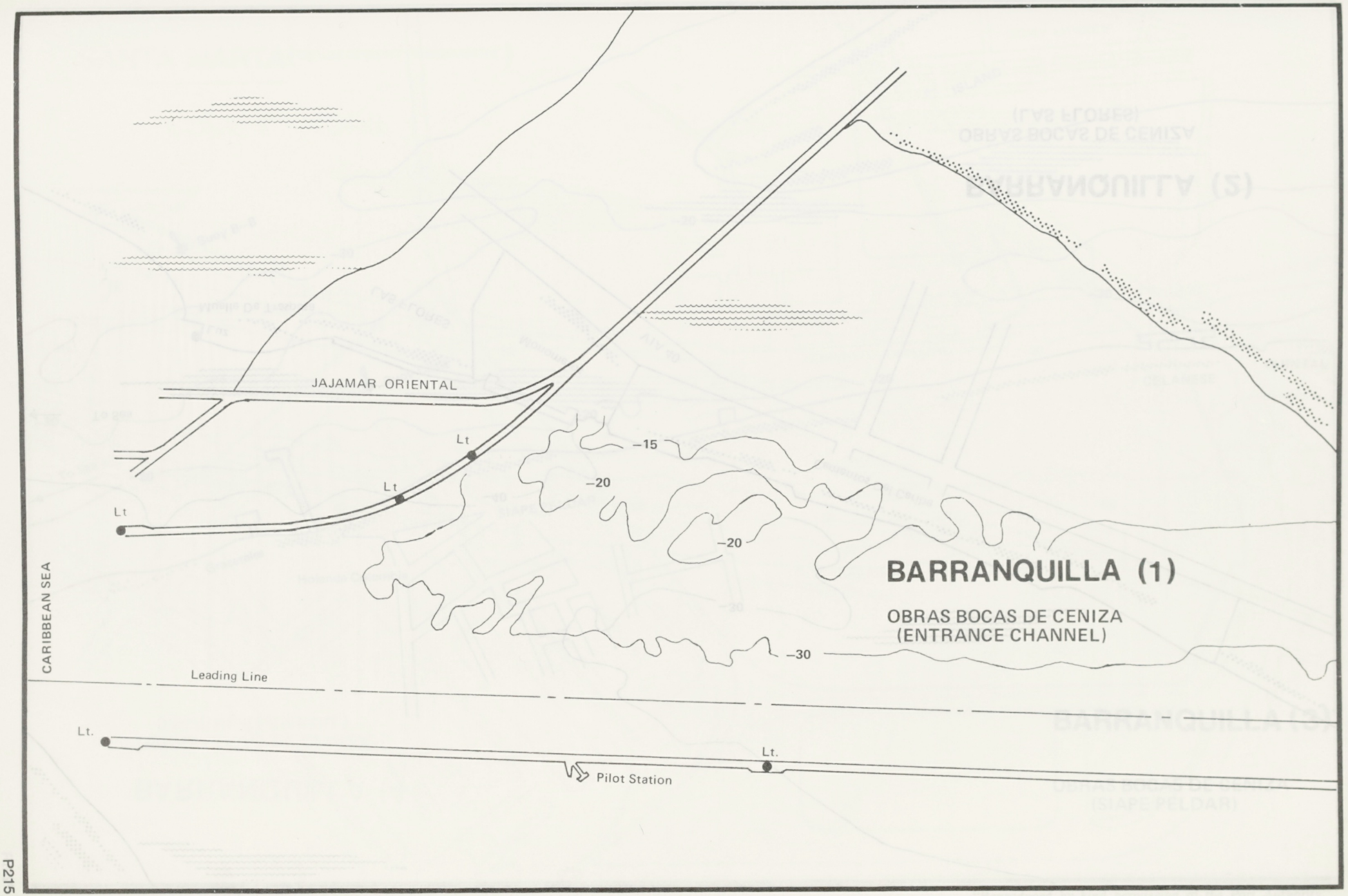

BARRANQUILLA (1)

OBRAS BOCAS DE CENIZA (ENTRANCE CHANNEL)

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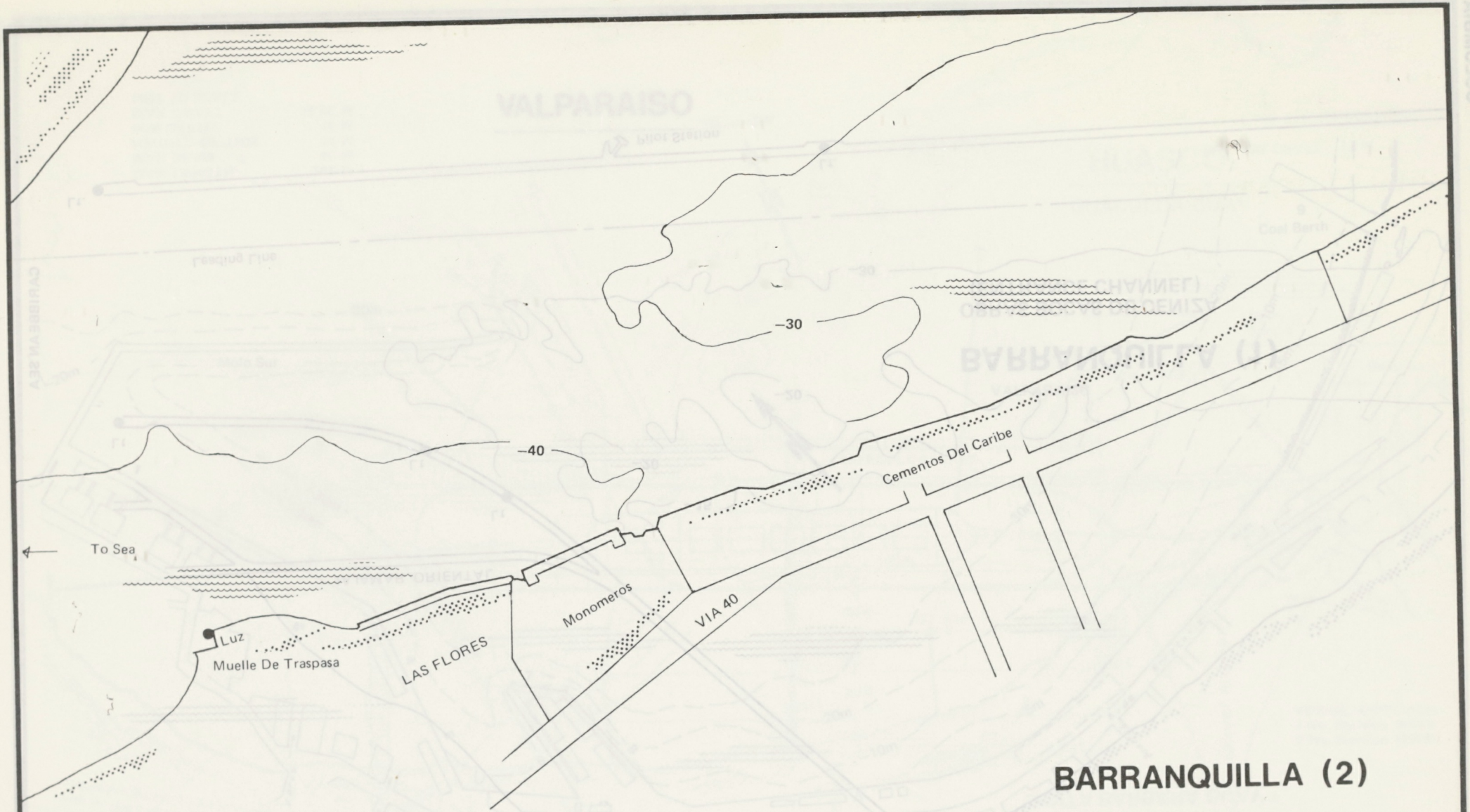

BARRANQUILLA (2)

OBRAS BOCAS DE CENIZA (LAS FLORES)

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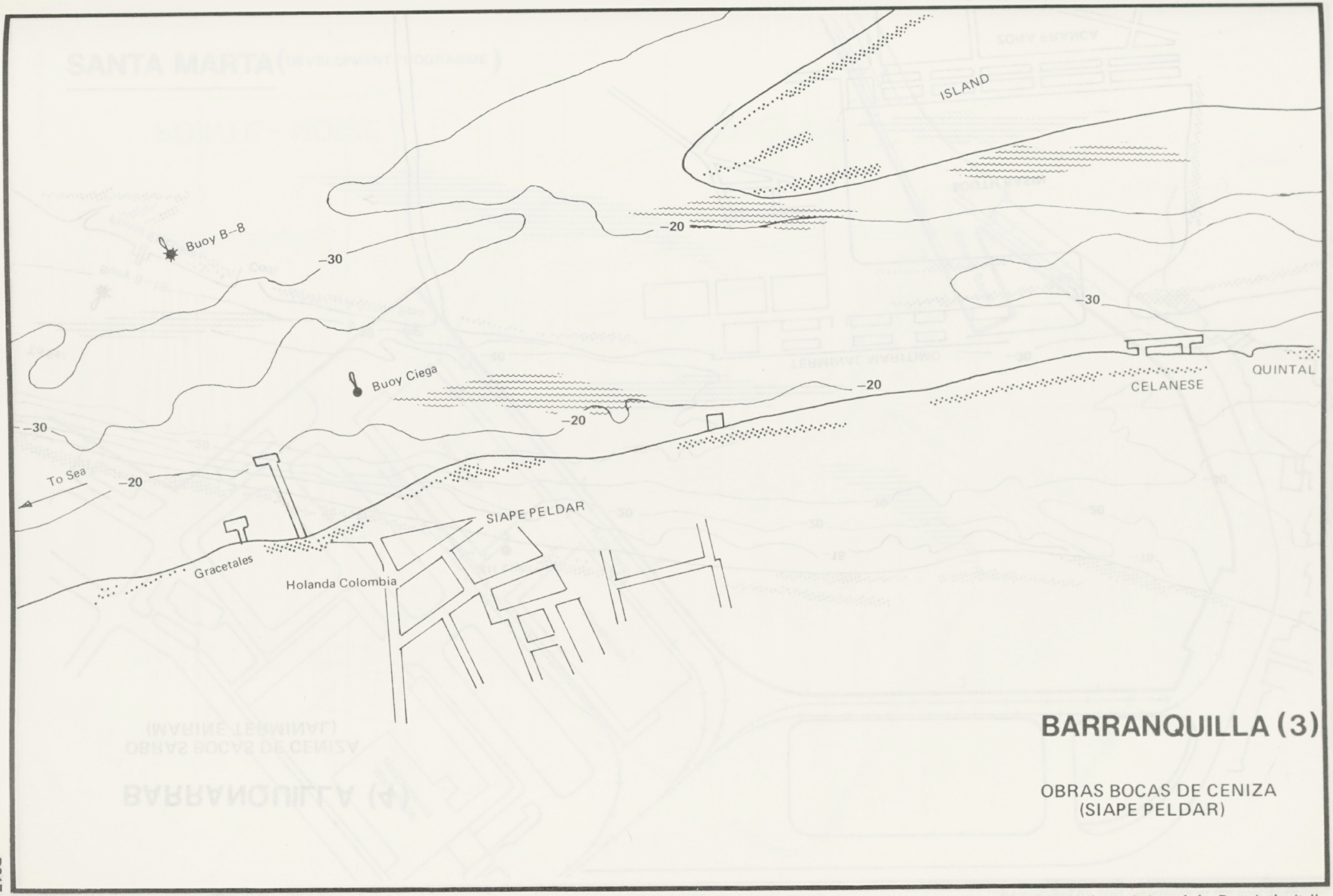

BARRANQUILLA (3)

OBRAS BOCAS DE CENIZA
(SIAPE PELDAR)

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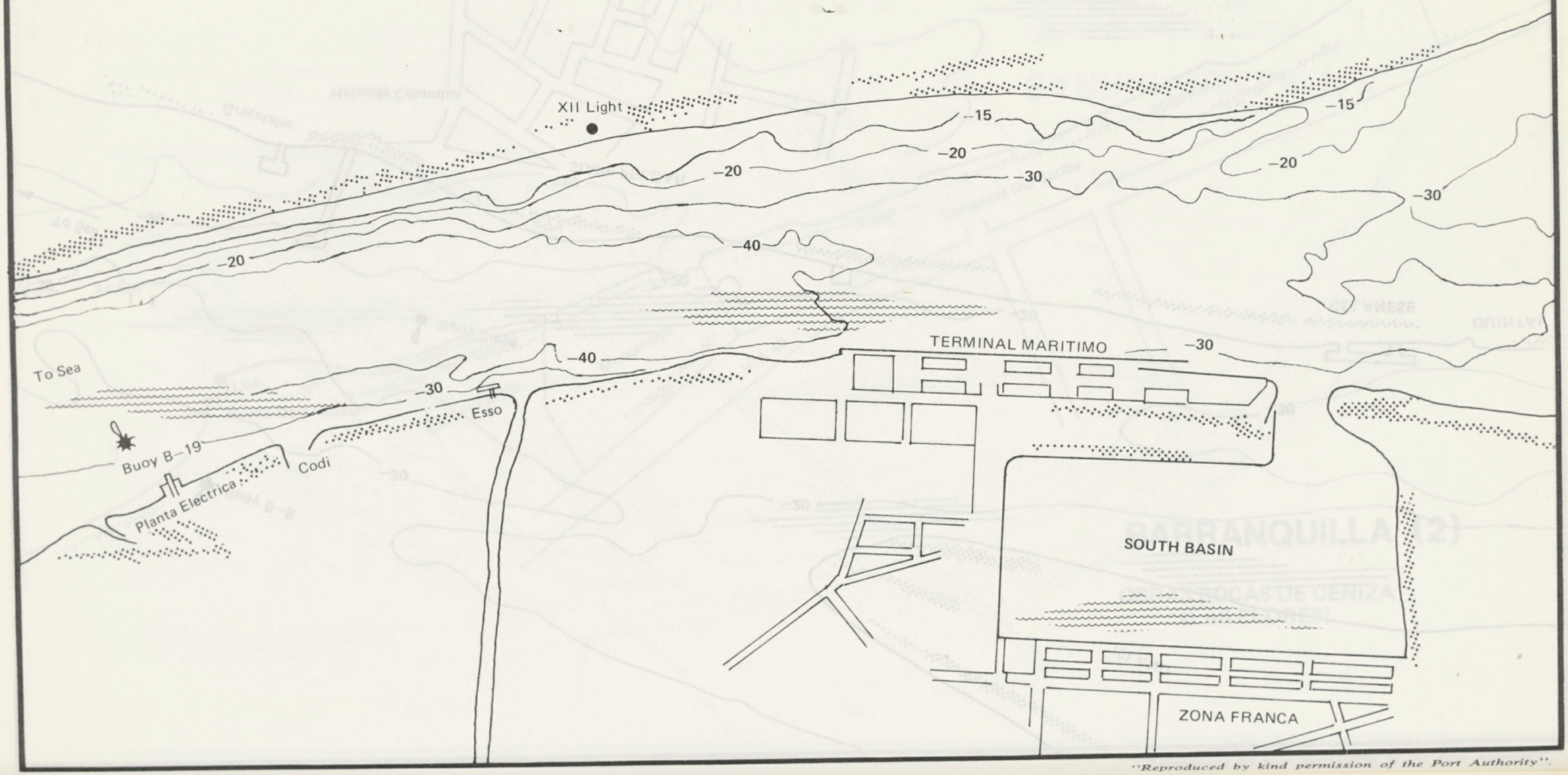
BARRANQUILLA (4)

OBRAS BOCAS DE CENIZA (MARINE TERMINAL)



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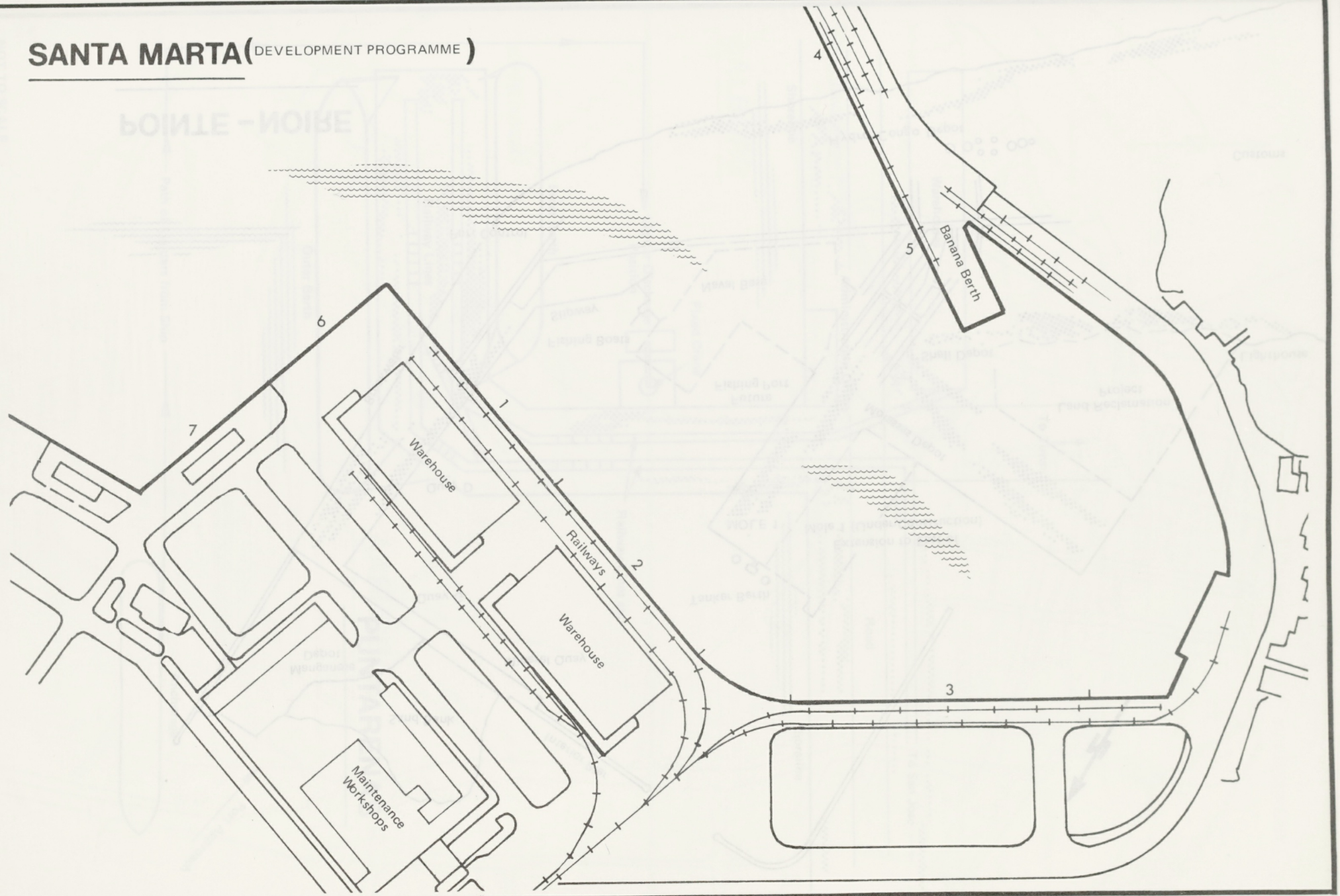
SANTA MARTA (DEVELOPMENT PROGRAMME)



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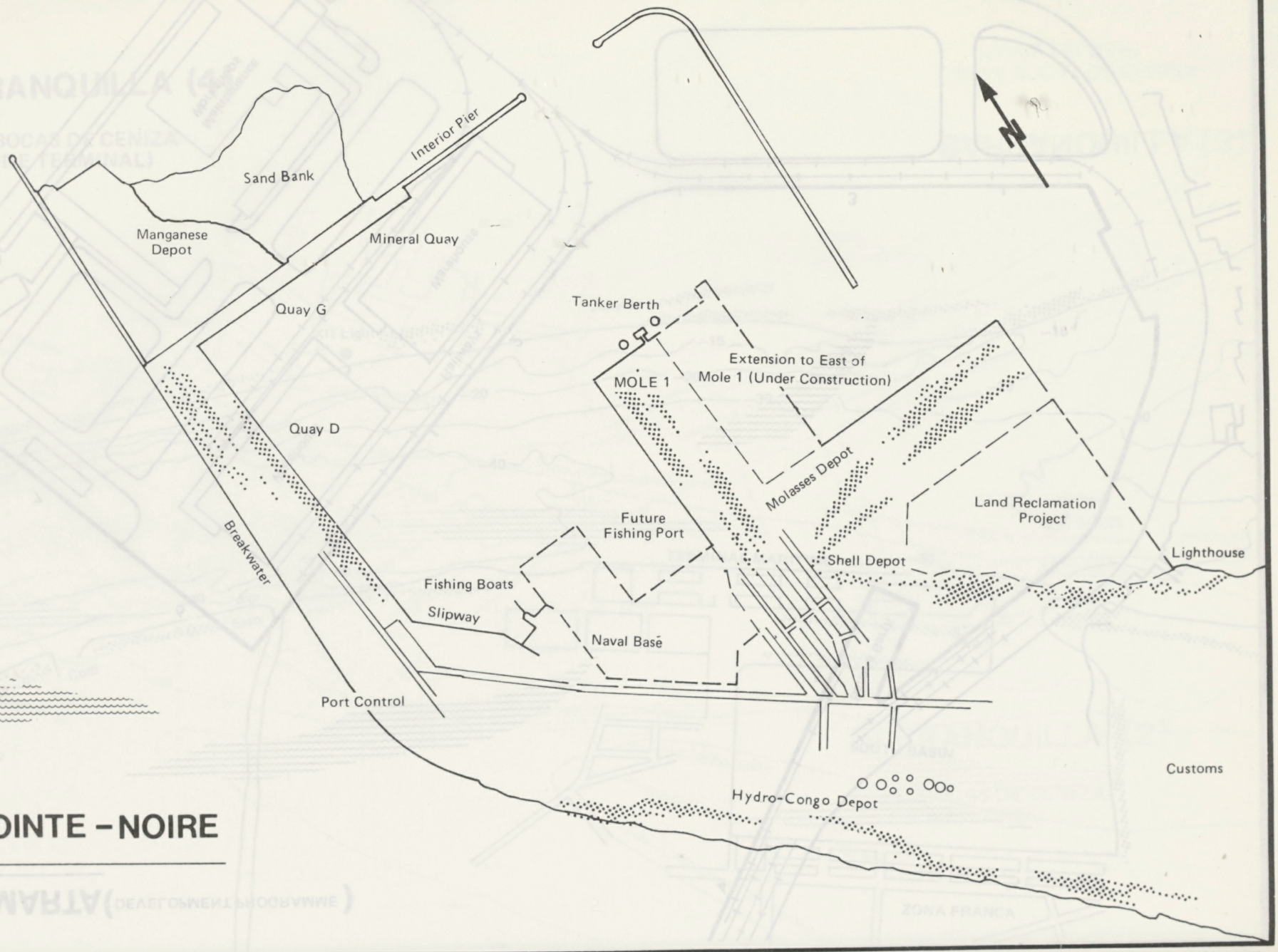

POINTE – NOIRE

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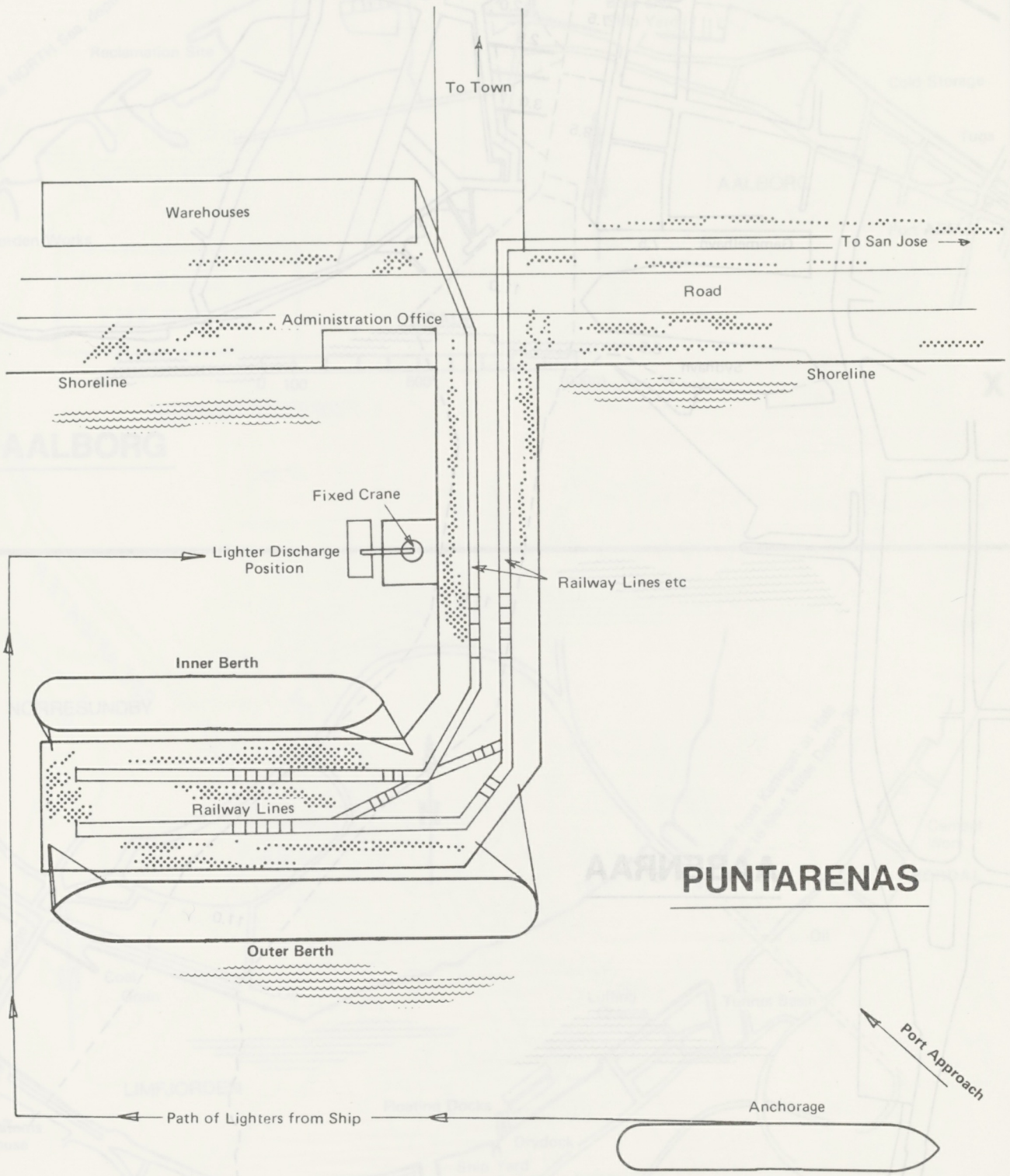

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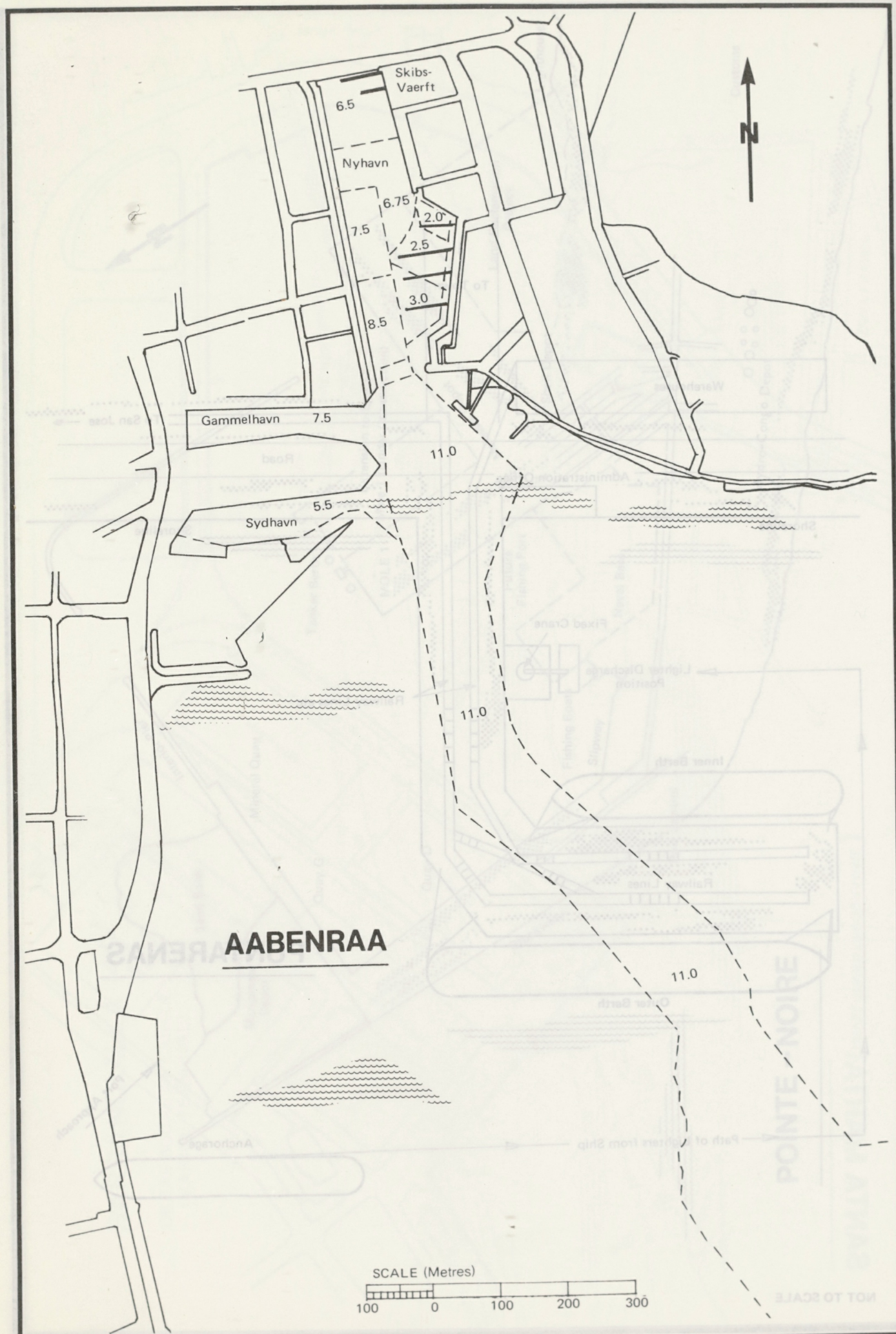
"Plan supplied by Supercargo"



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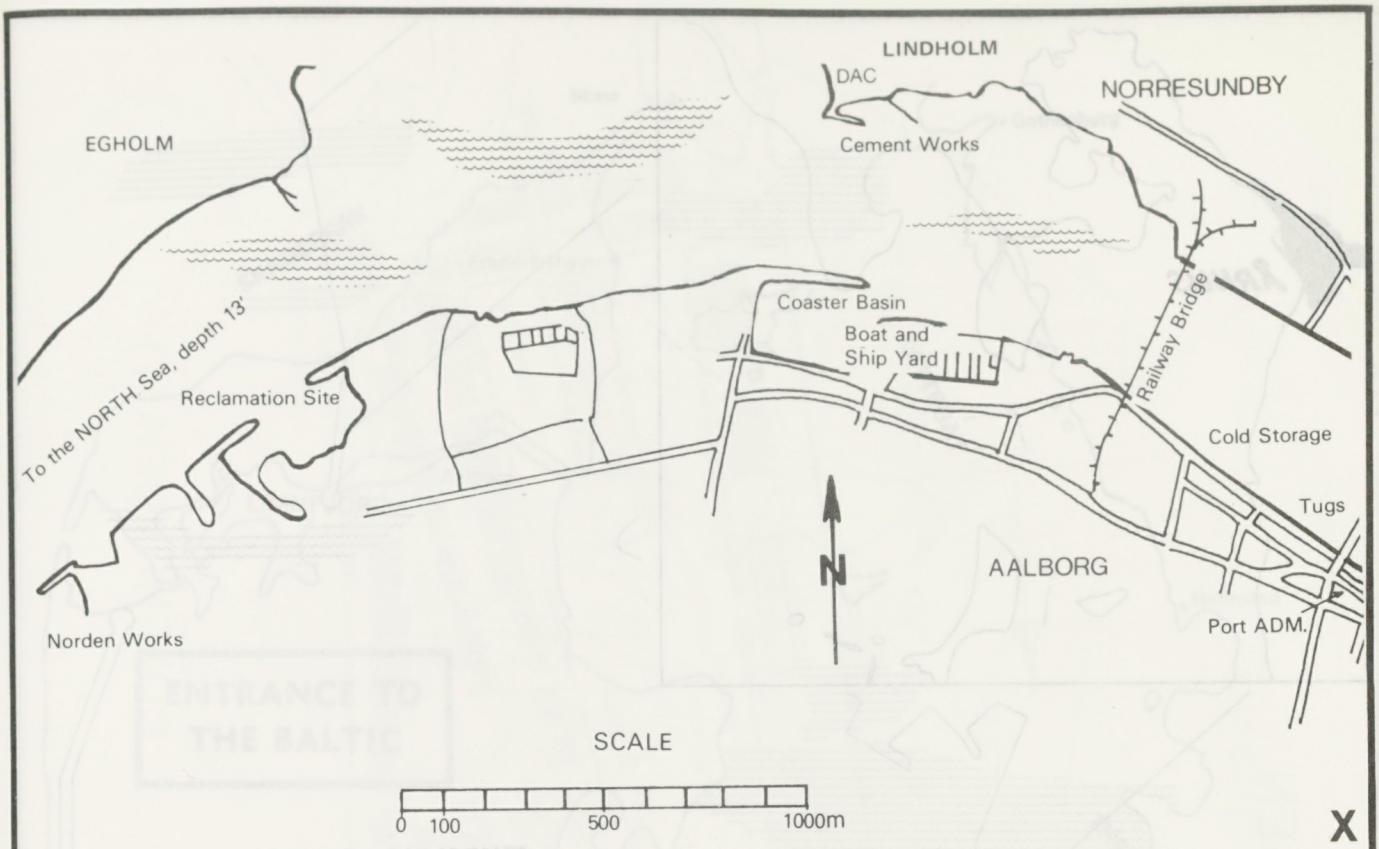
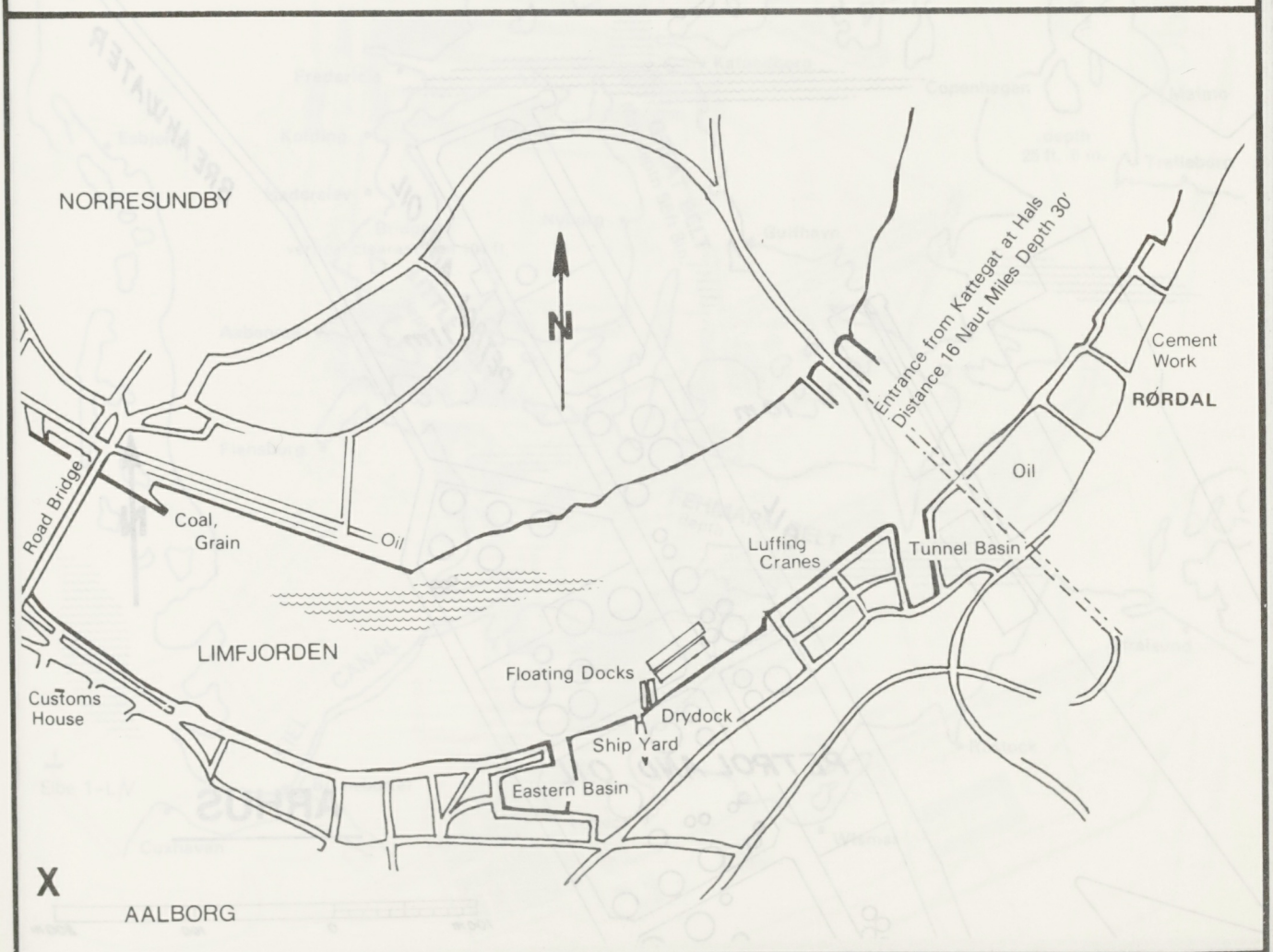


AALBORG



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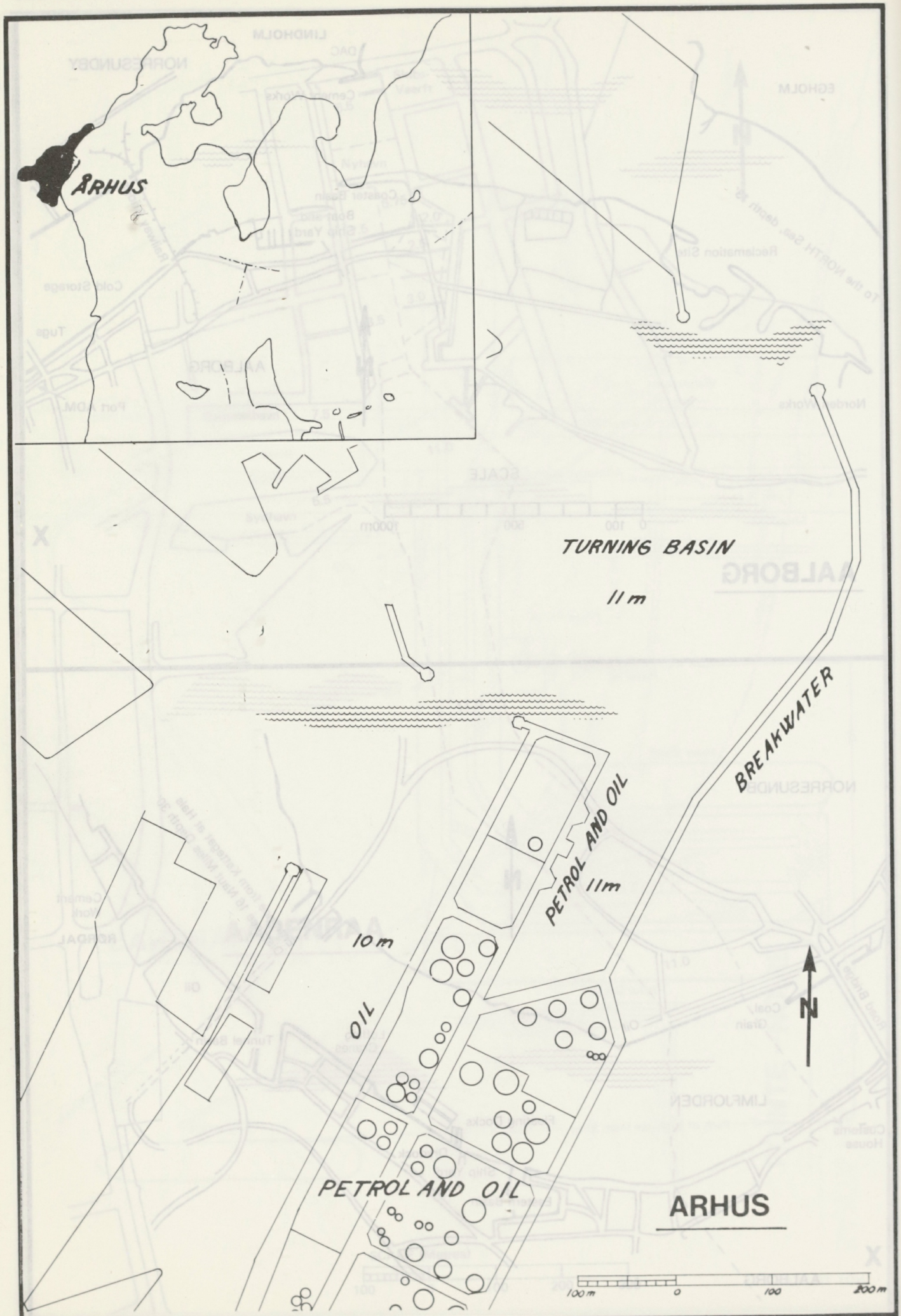

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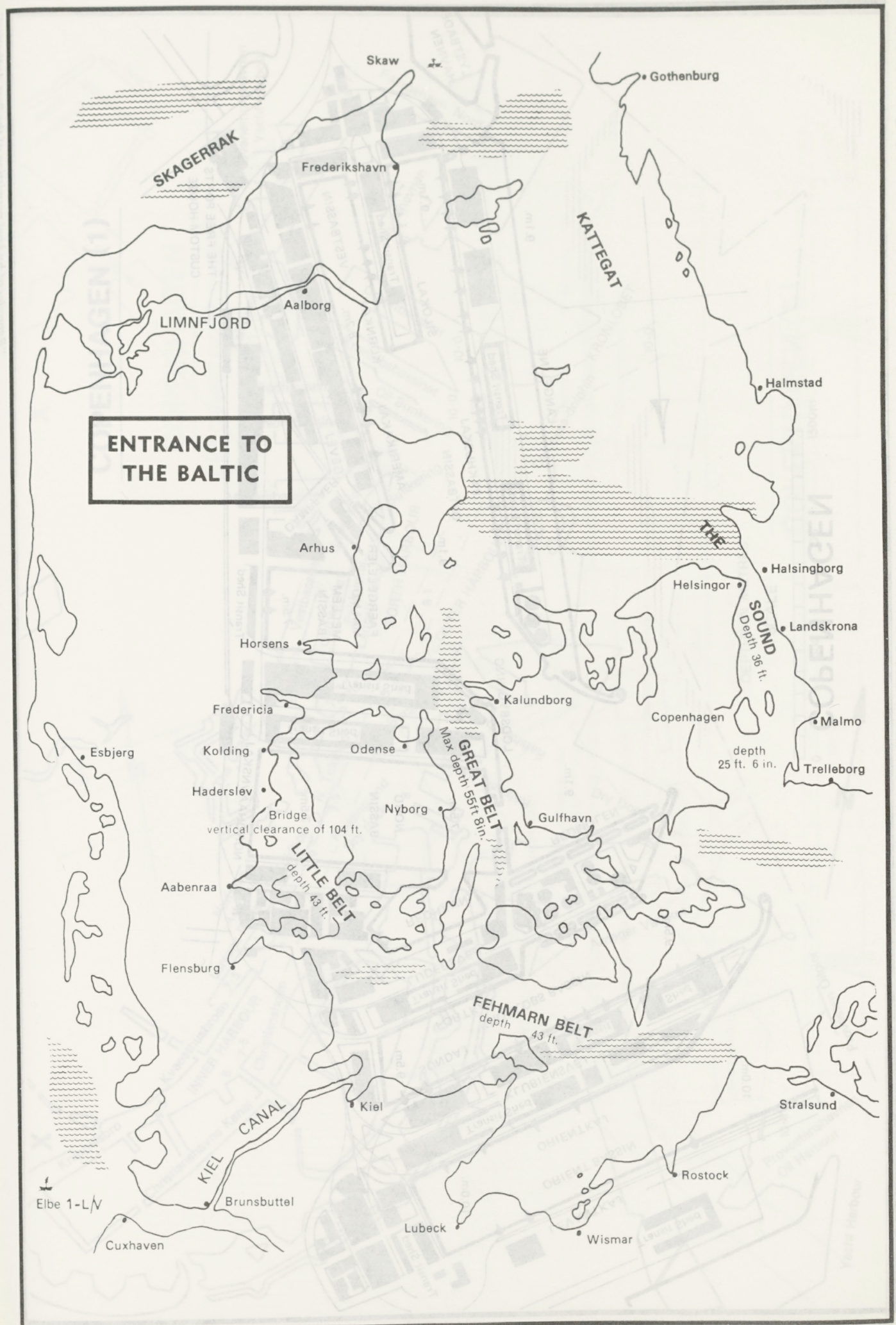

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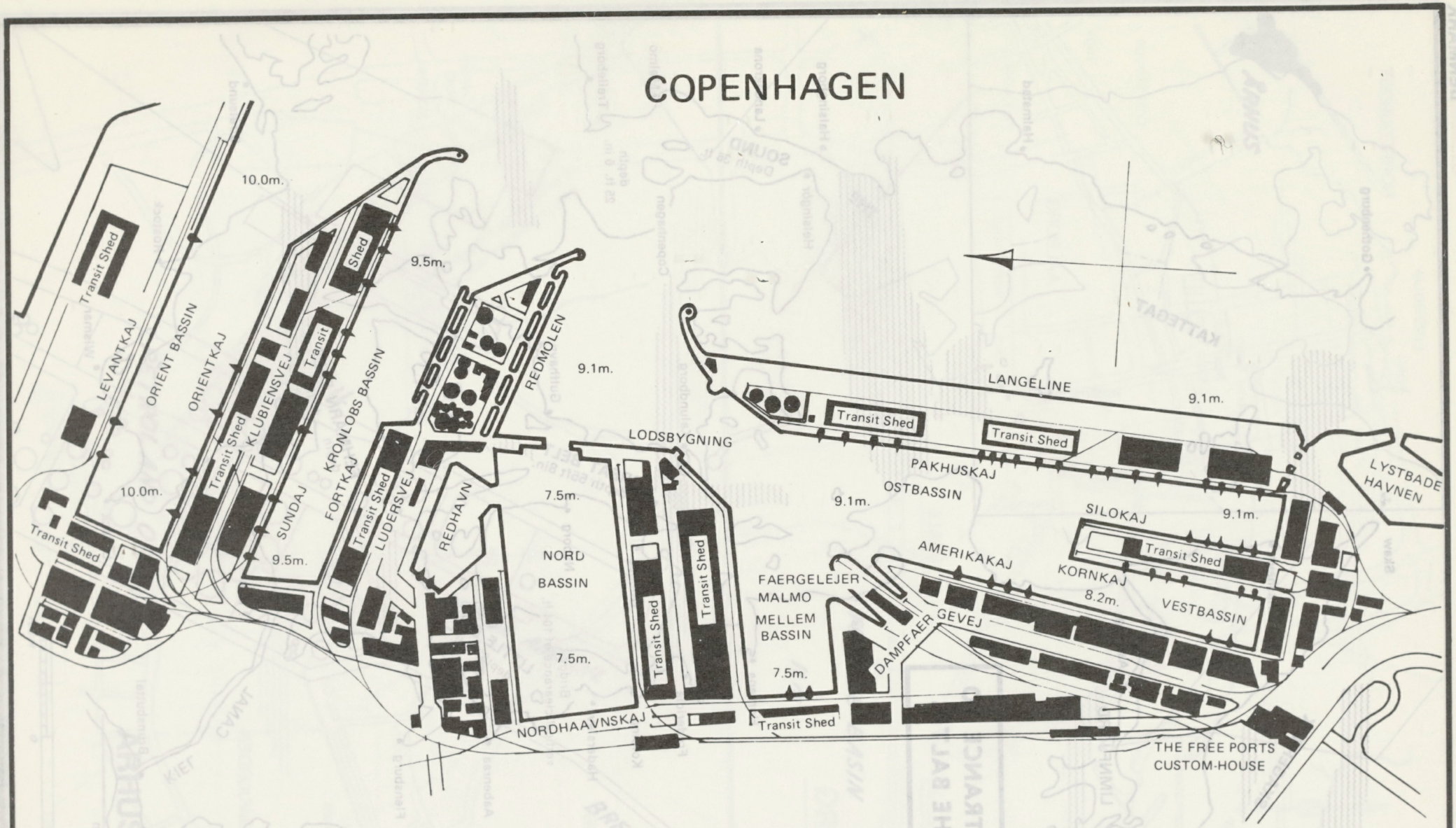
COPENHAGEN



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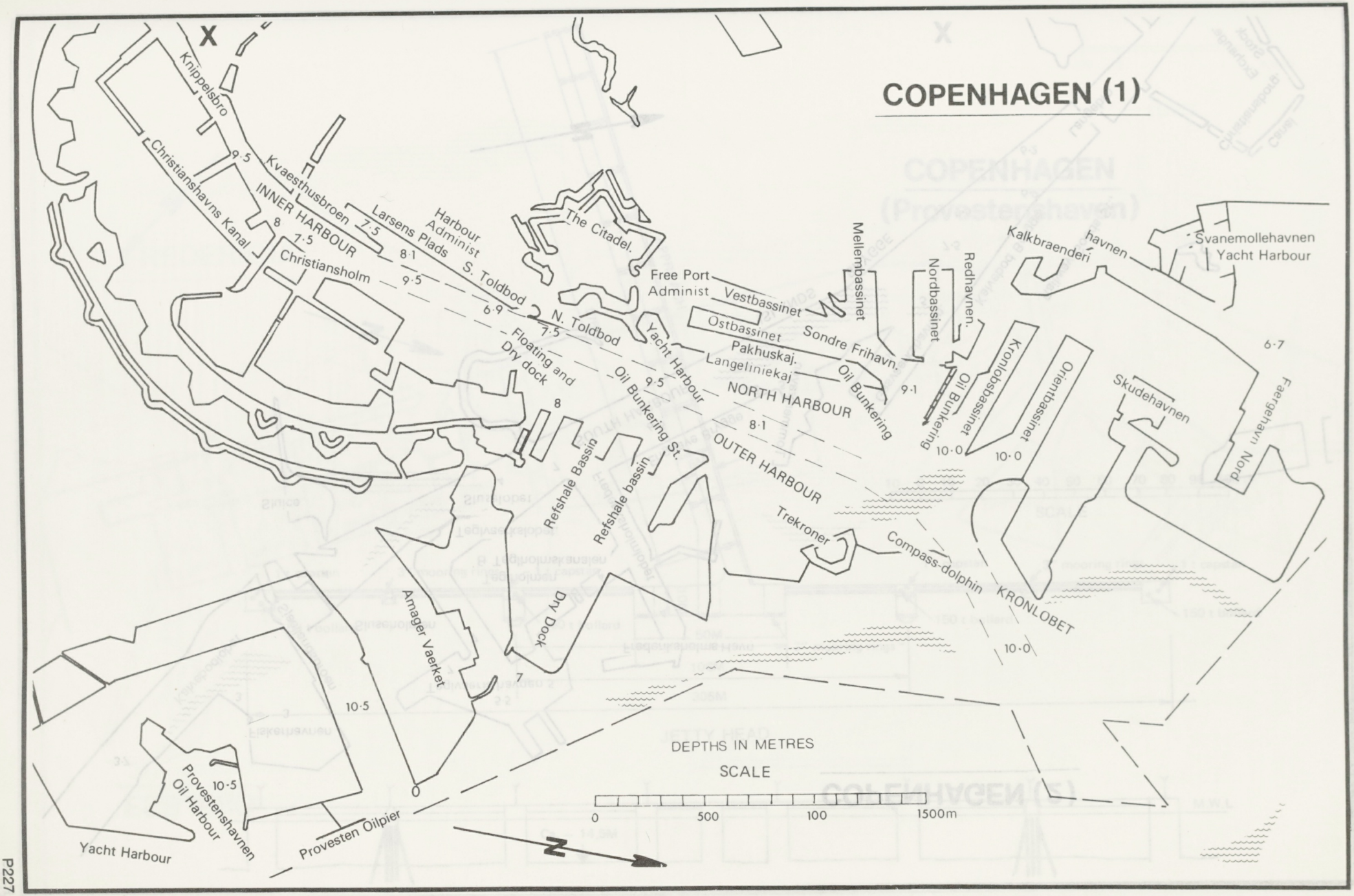

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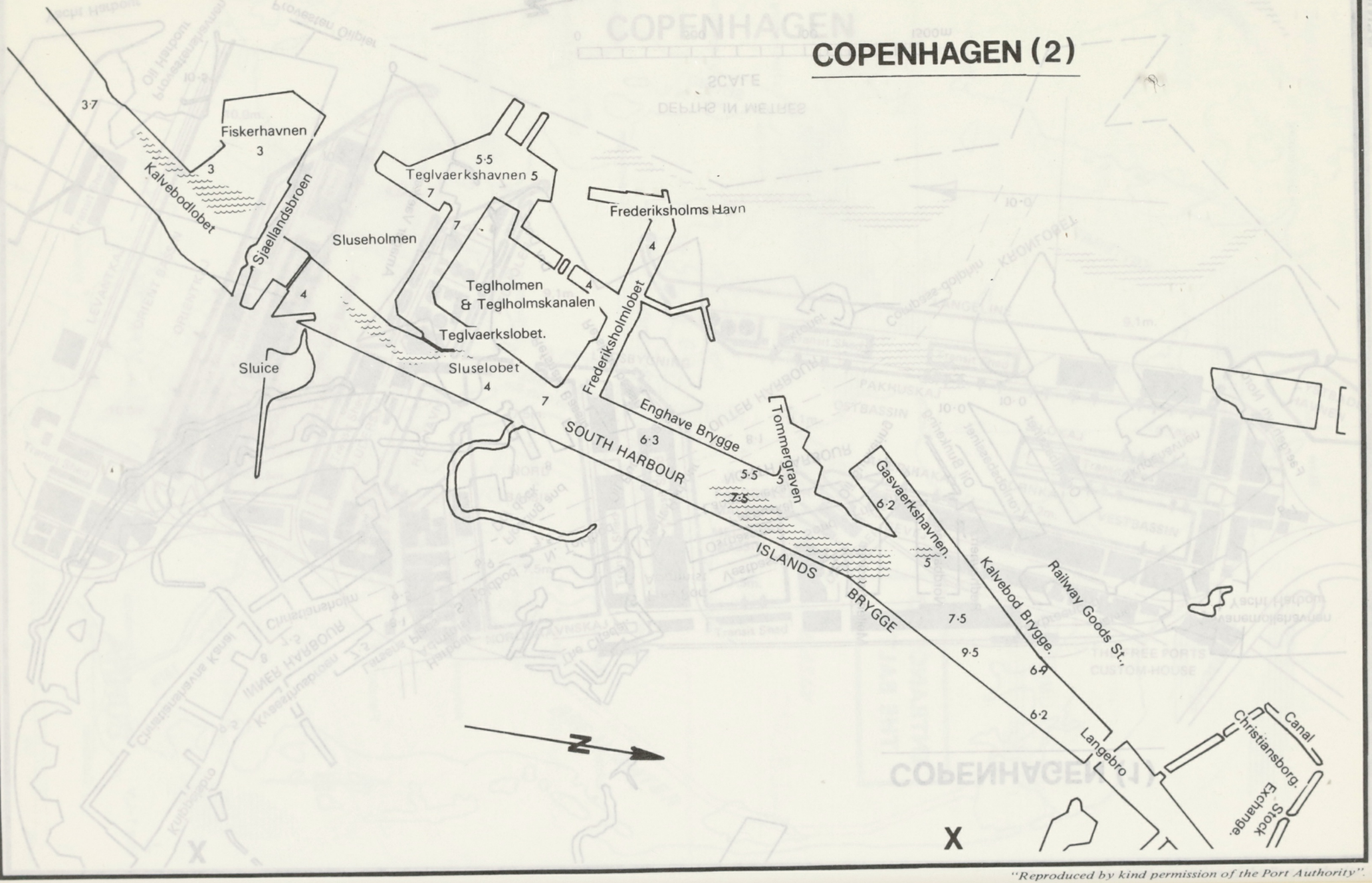

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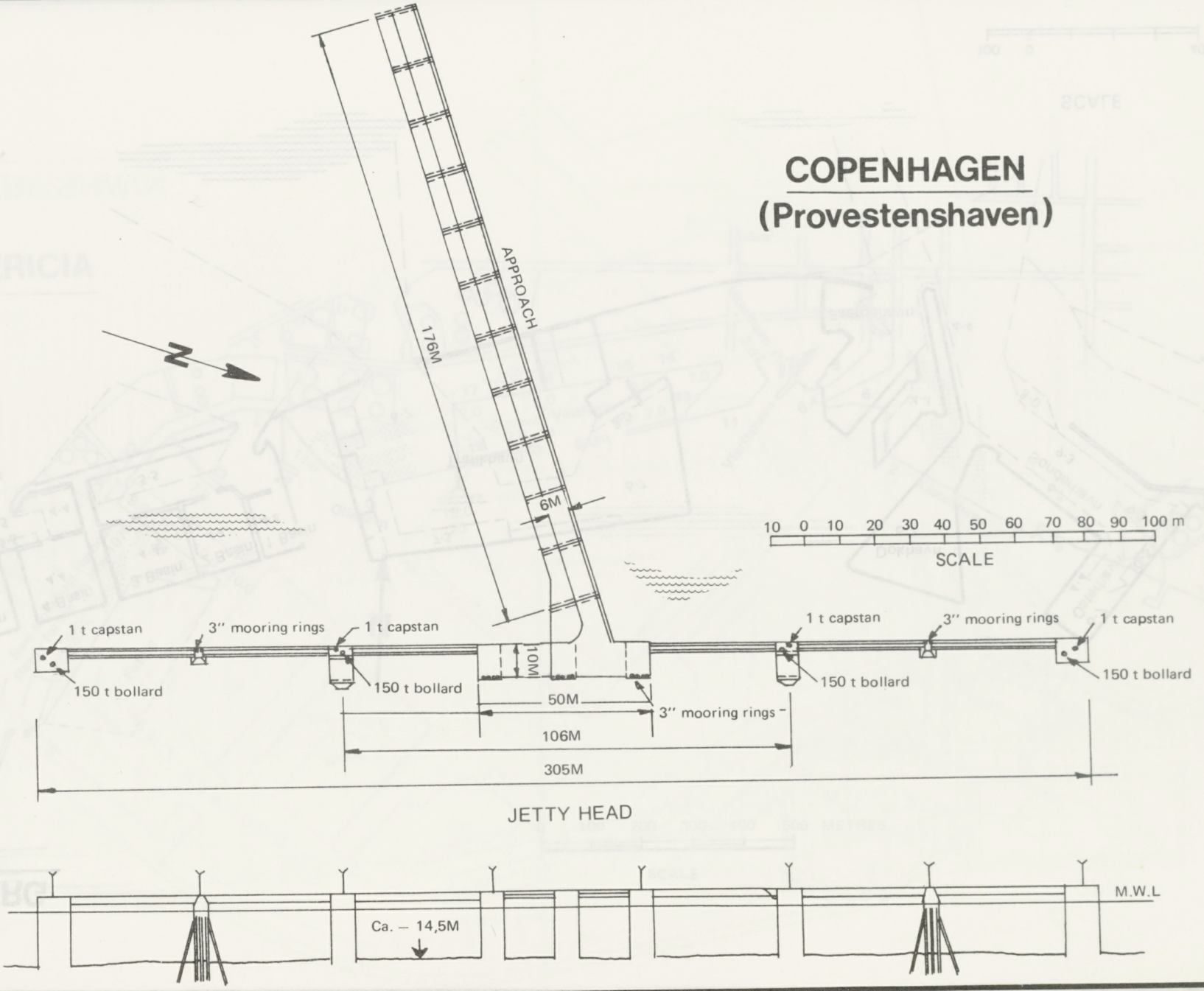
COPENHAGEN
(Provestenshaven)



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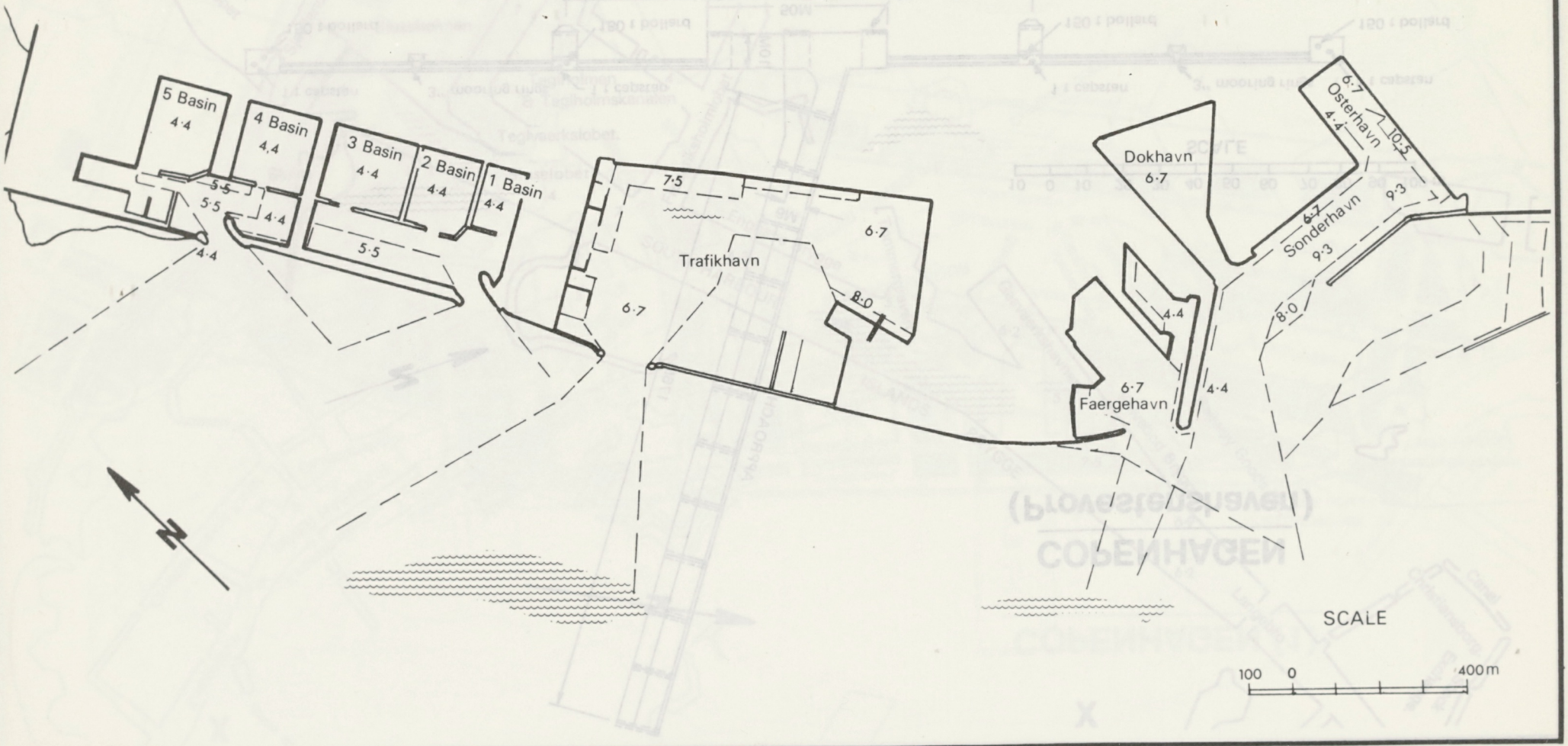
ESBJERG



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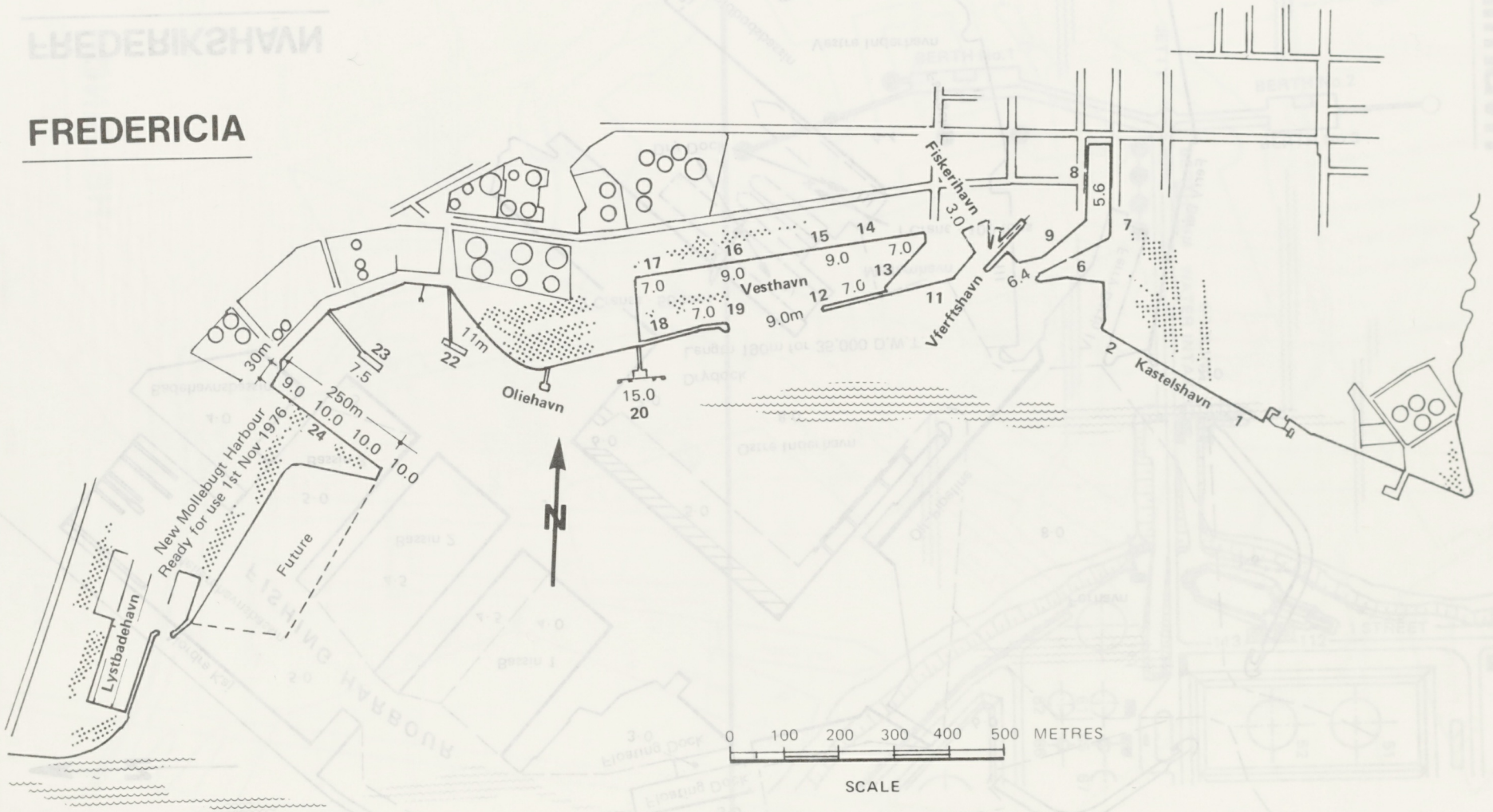
FREDERICIA



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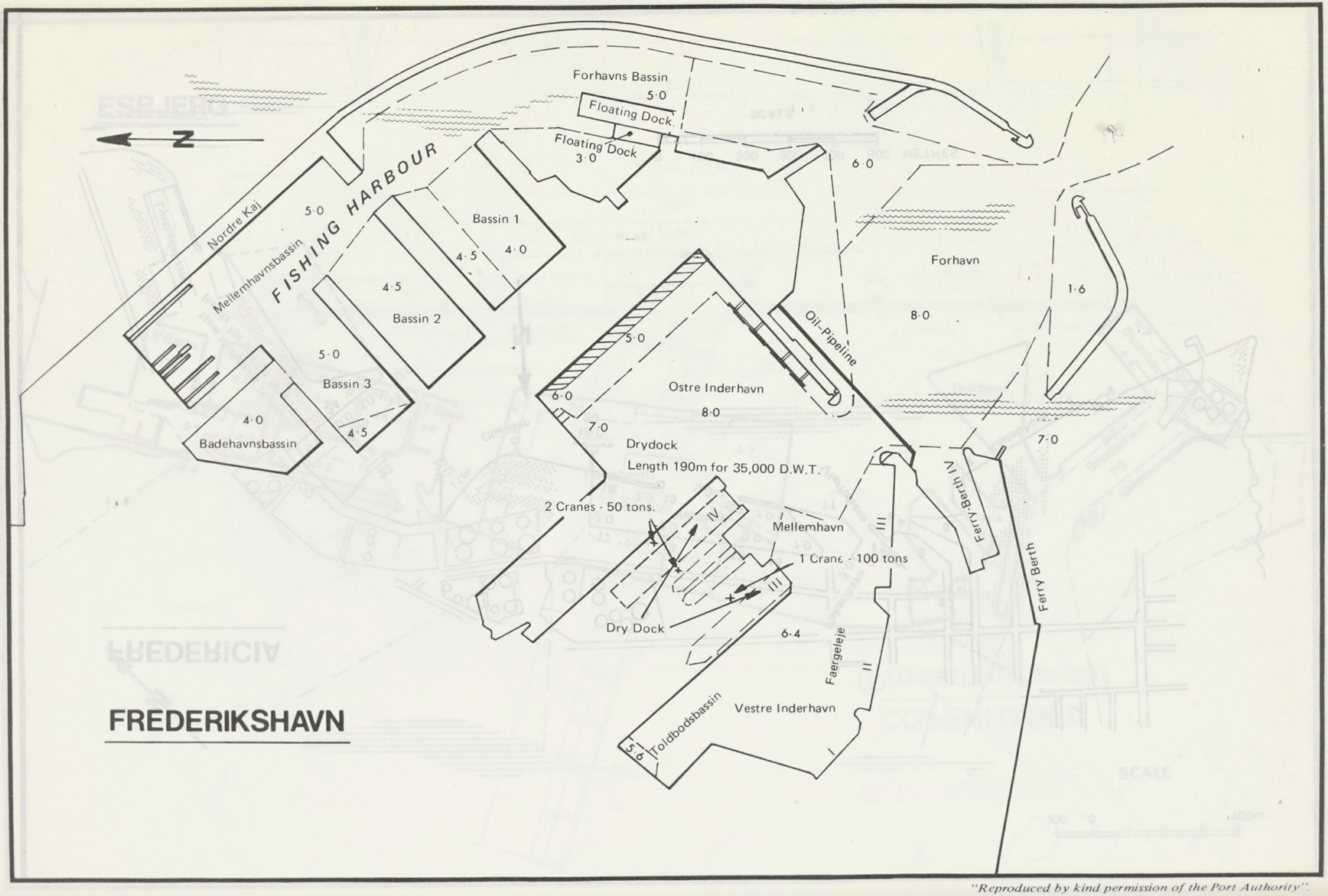

FREDERIKSHAVN

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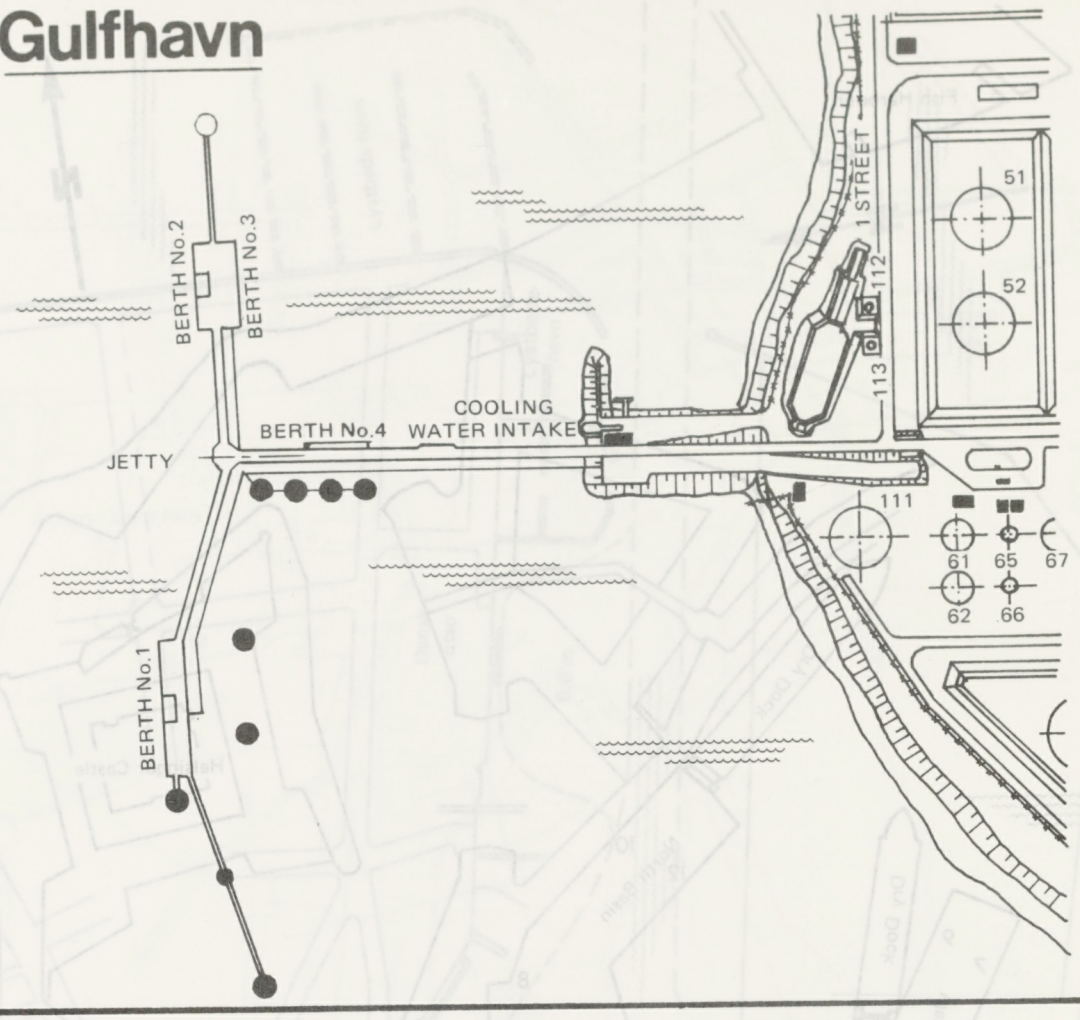
Gulfhavn



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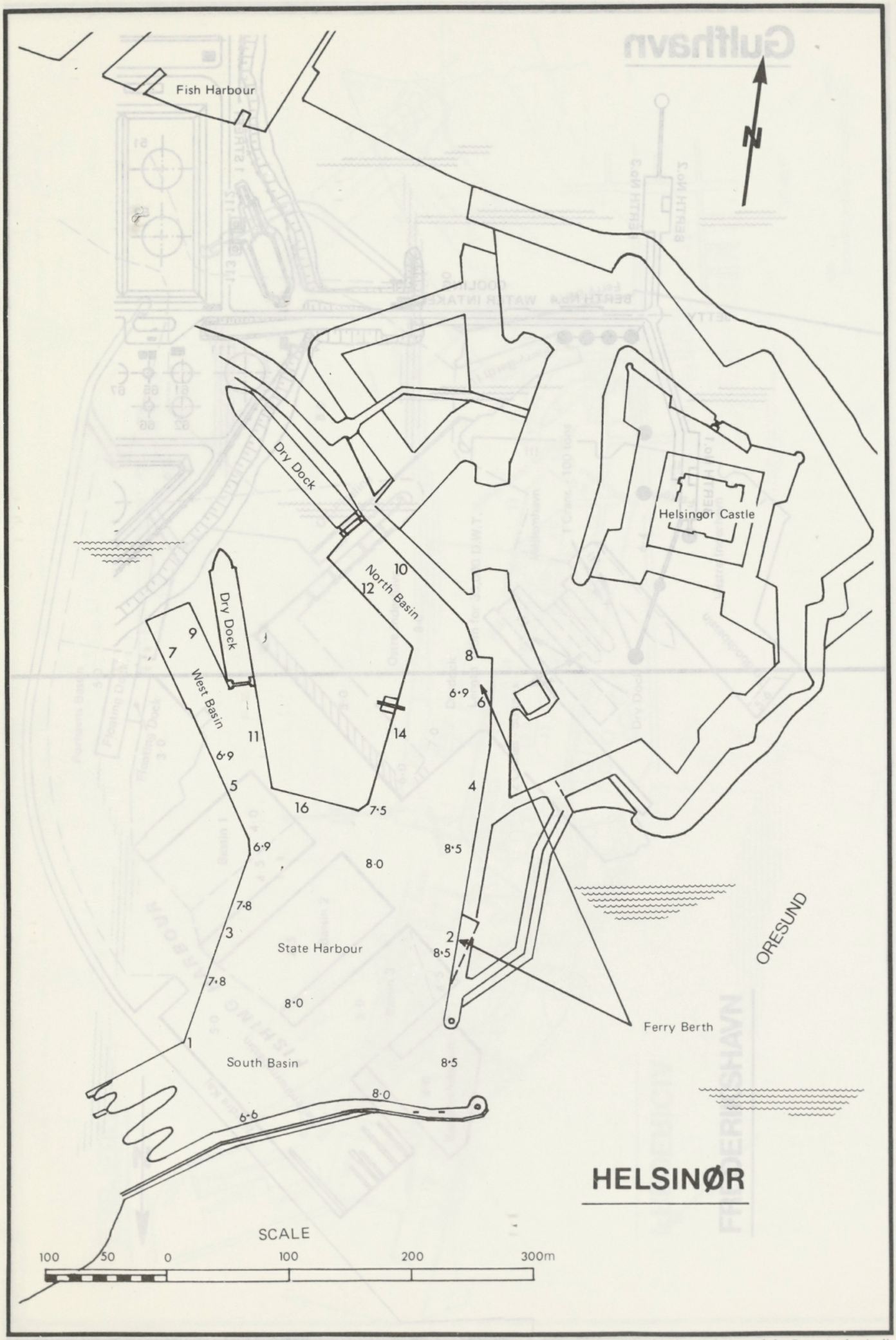

HELSINØR

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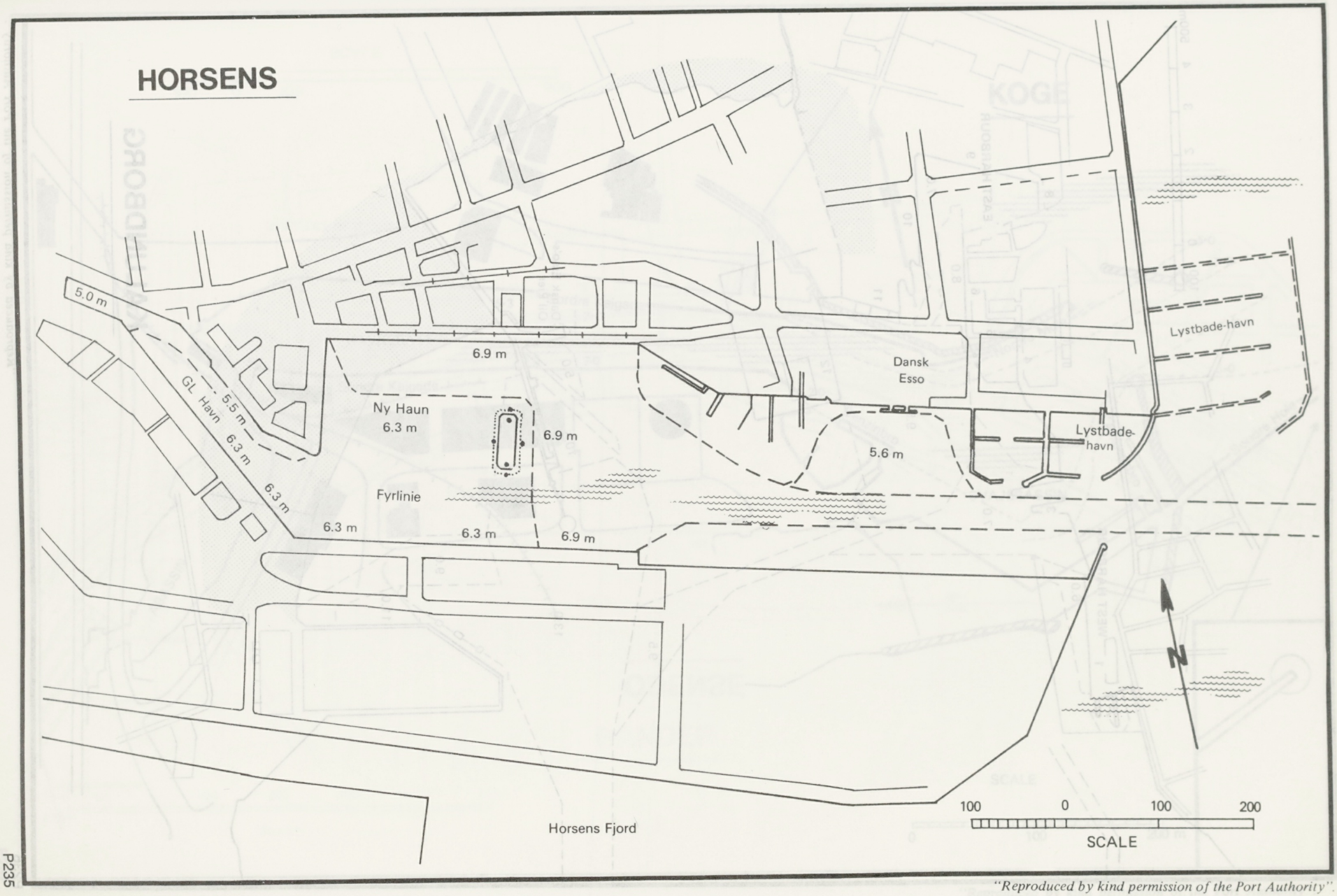

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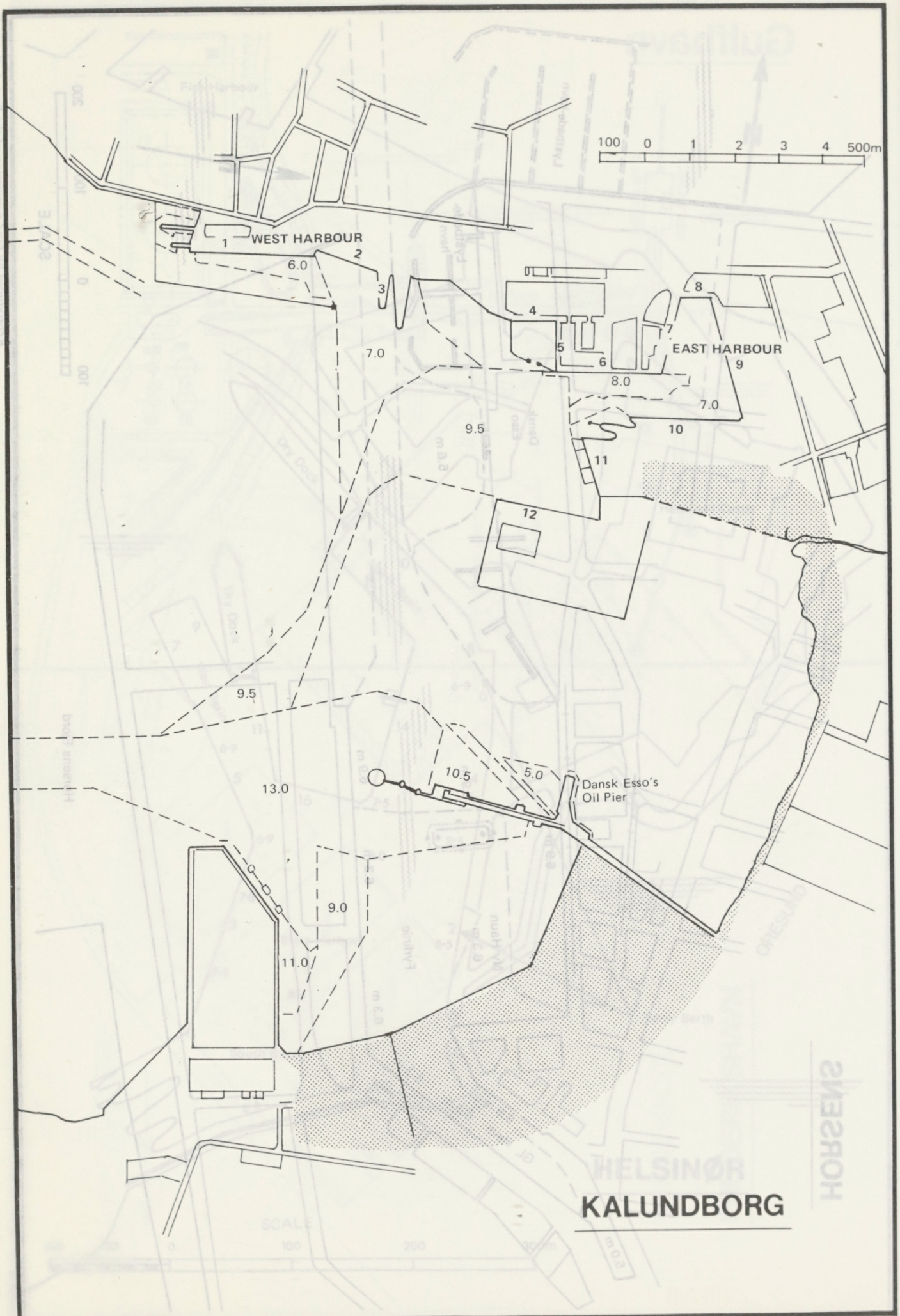

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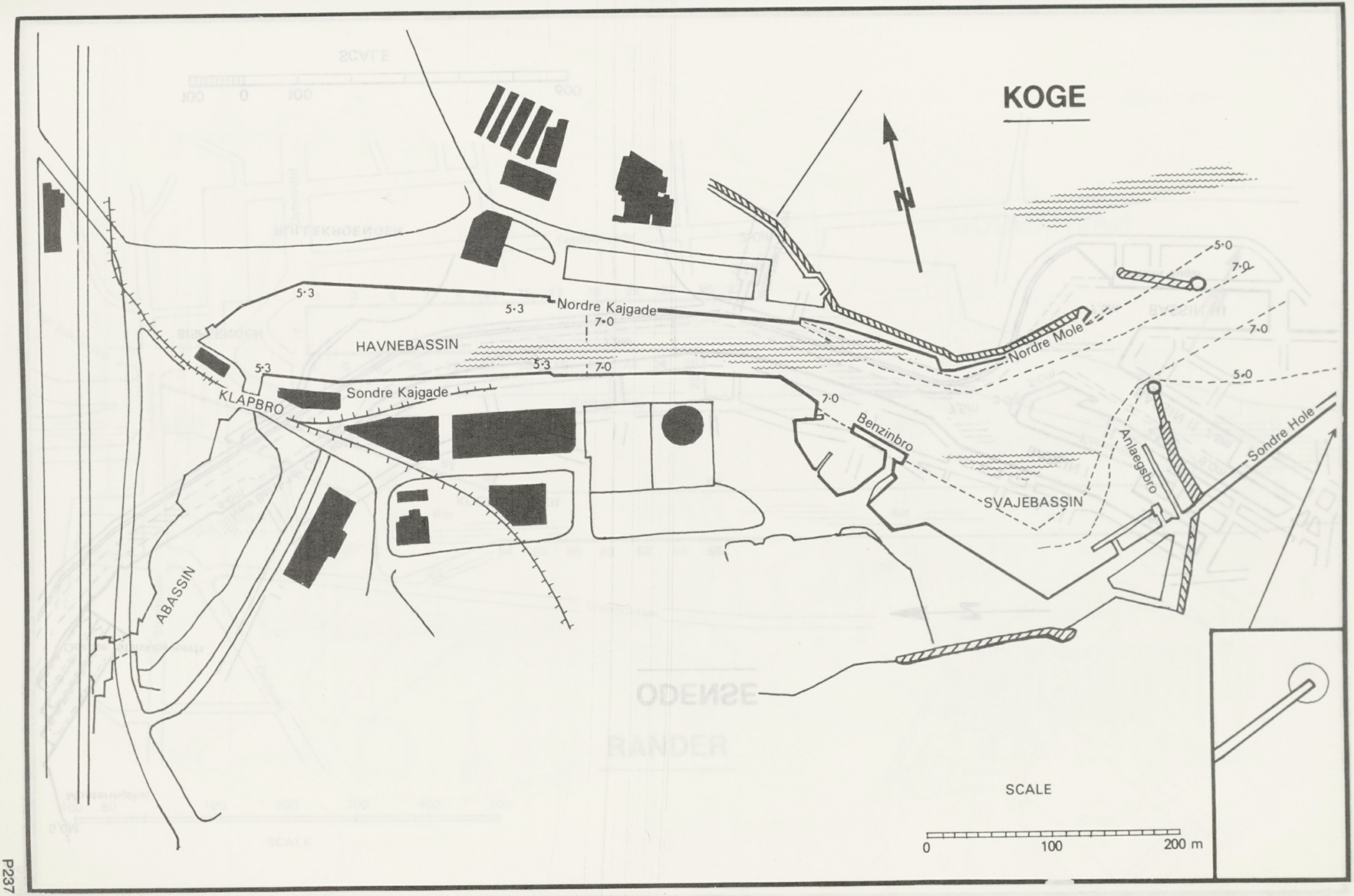

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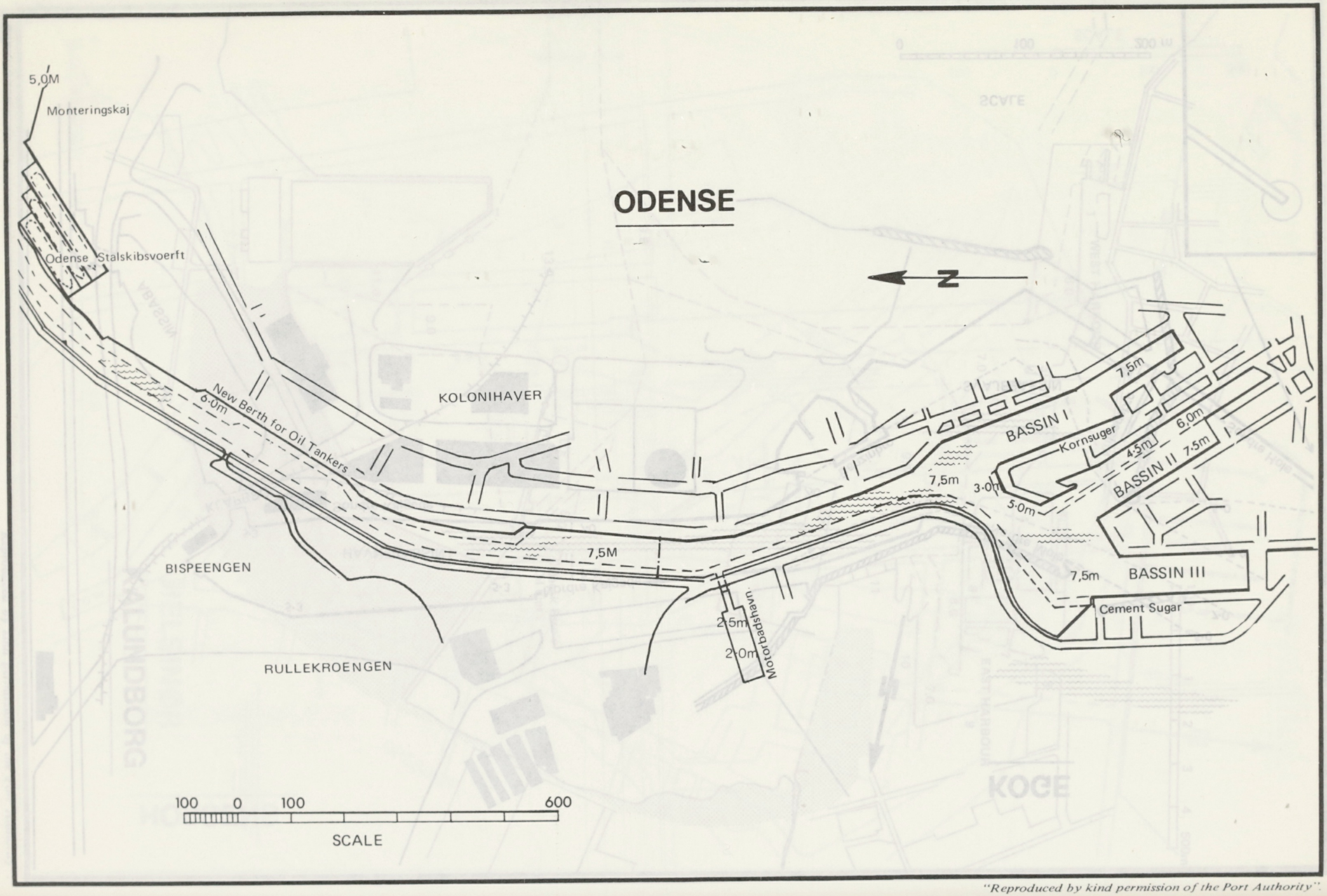

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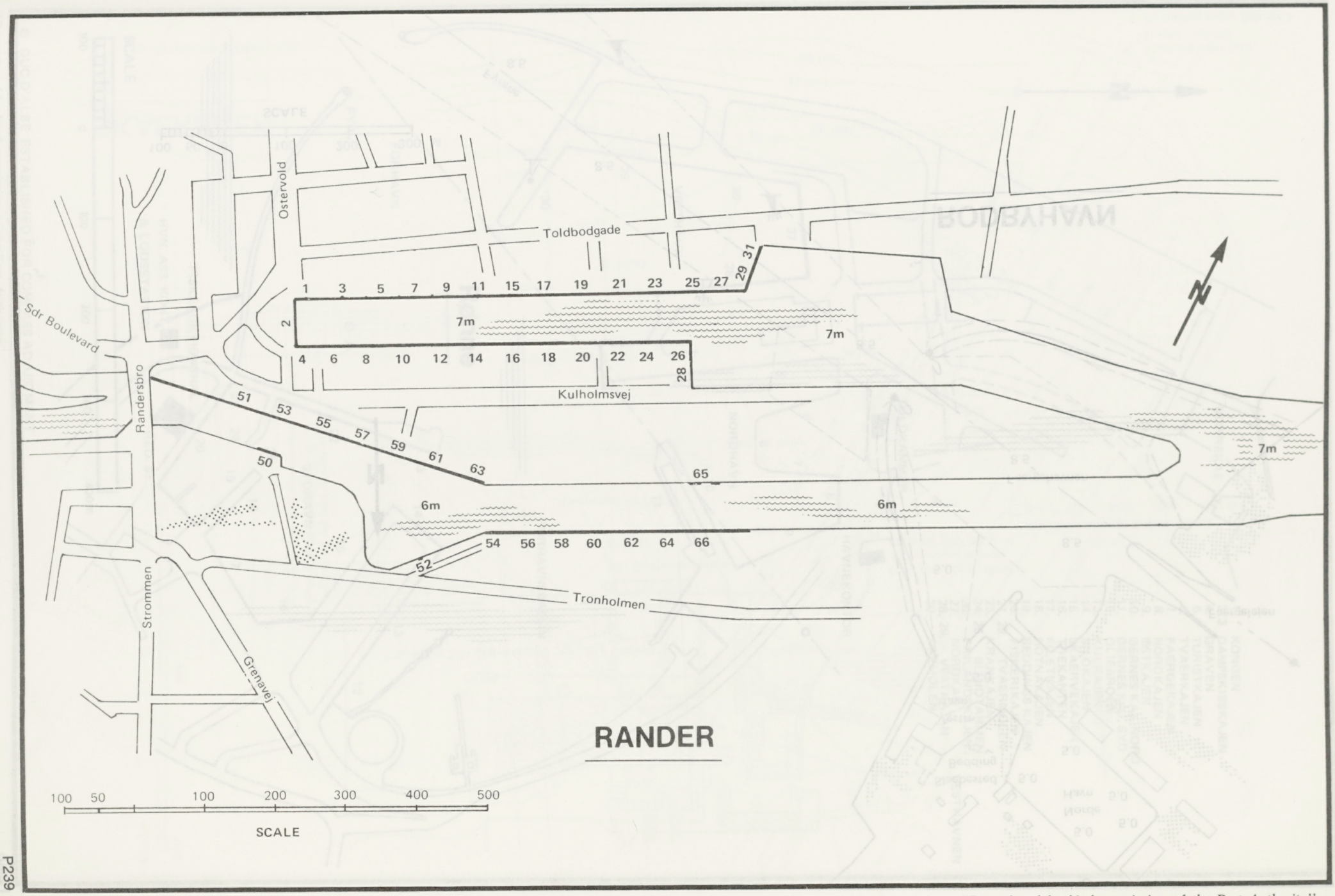

RANDER

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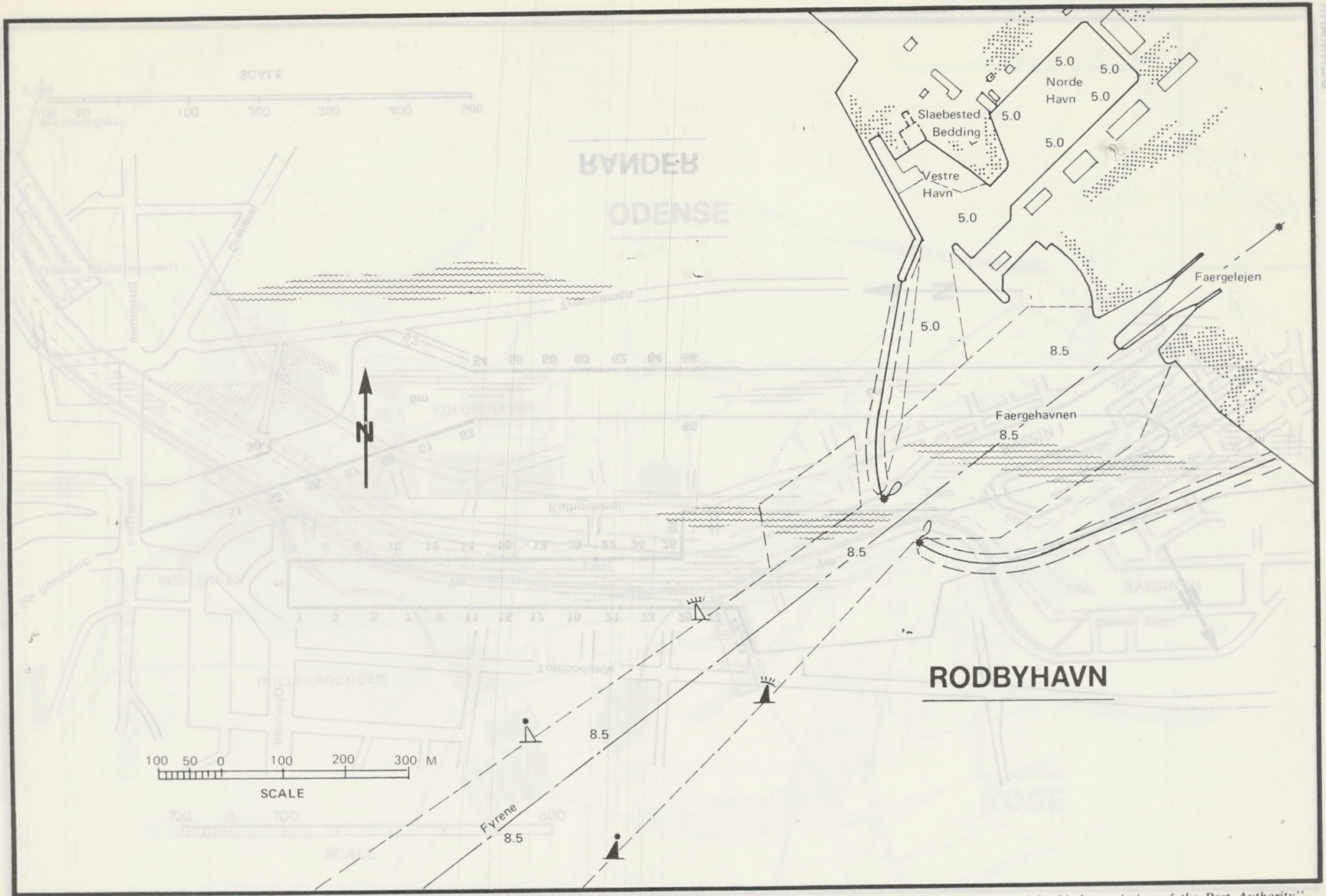

RODBYHAVN

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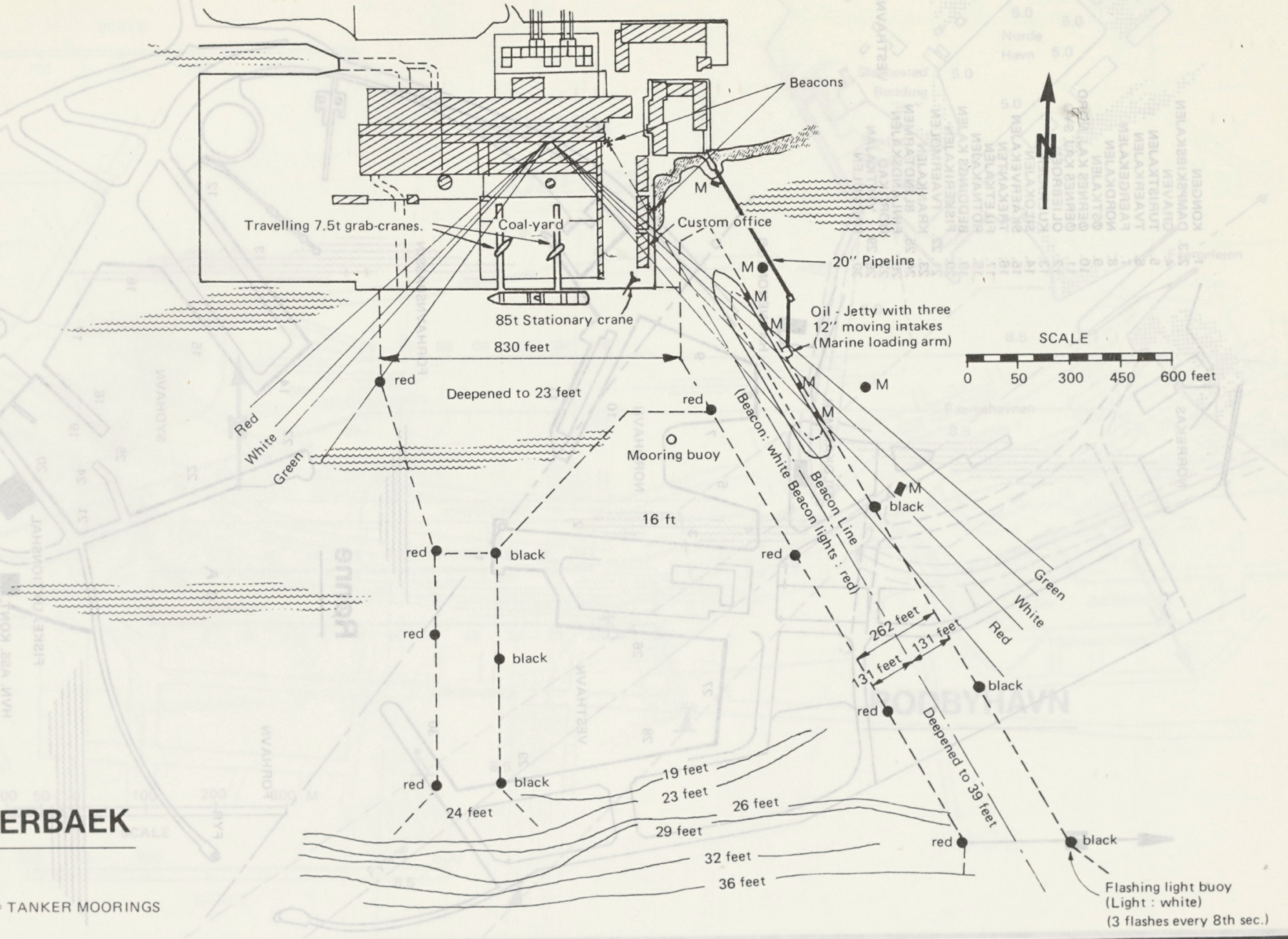

SKAERBAEK

M = TANKER MOORINGS

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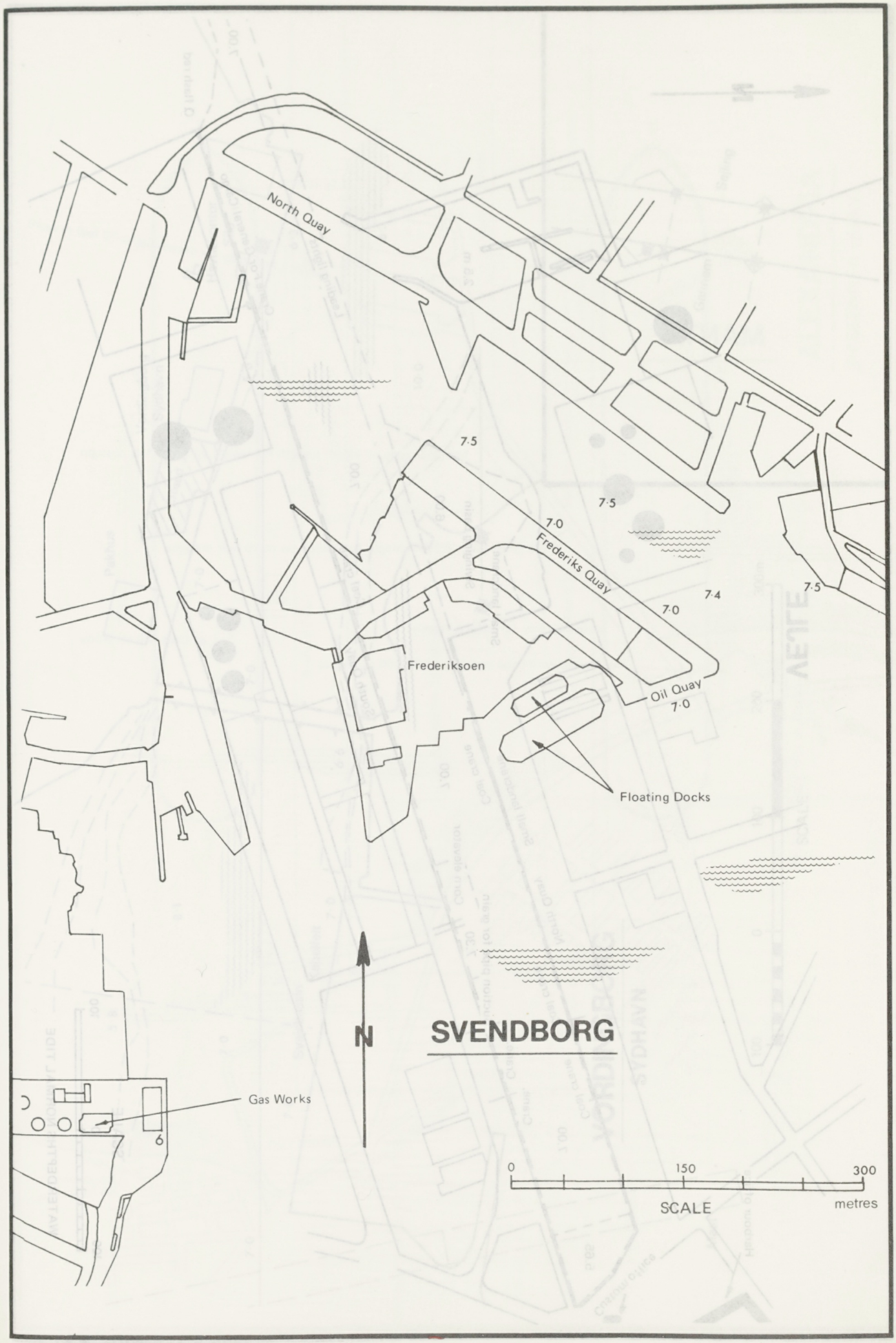

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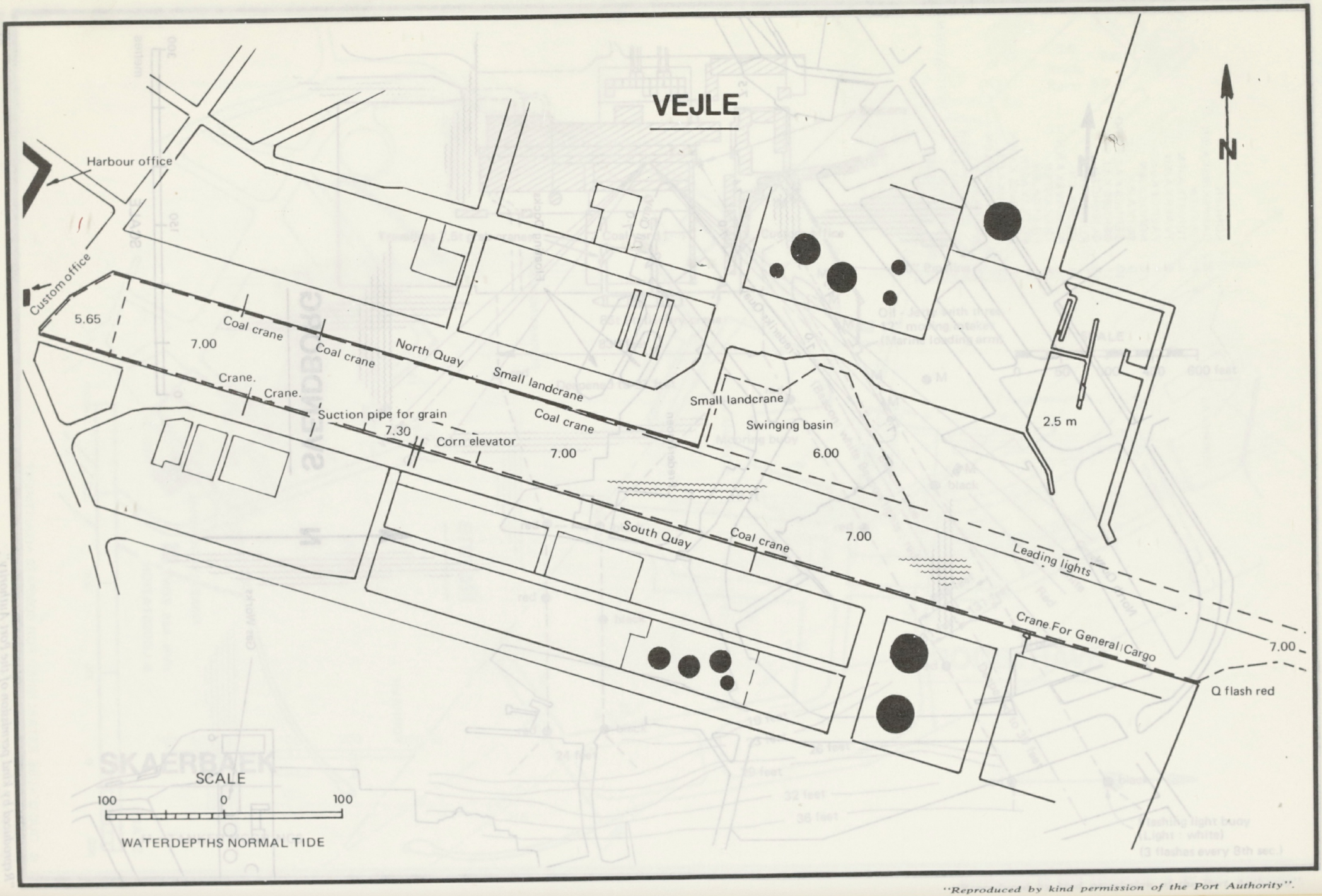

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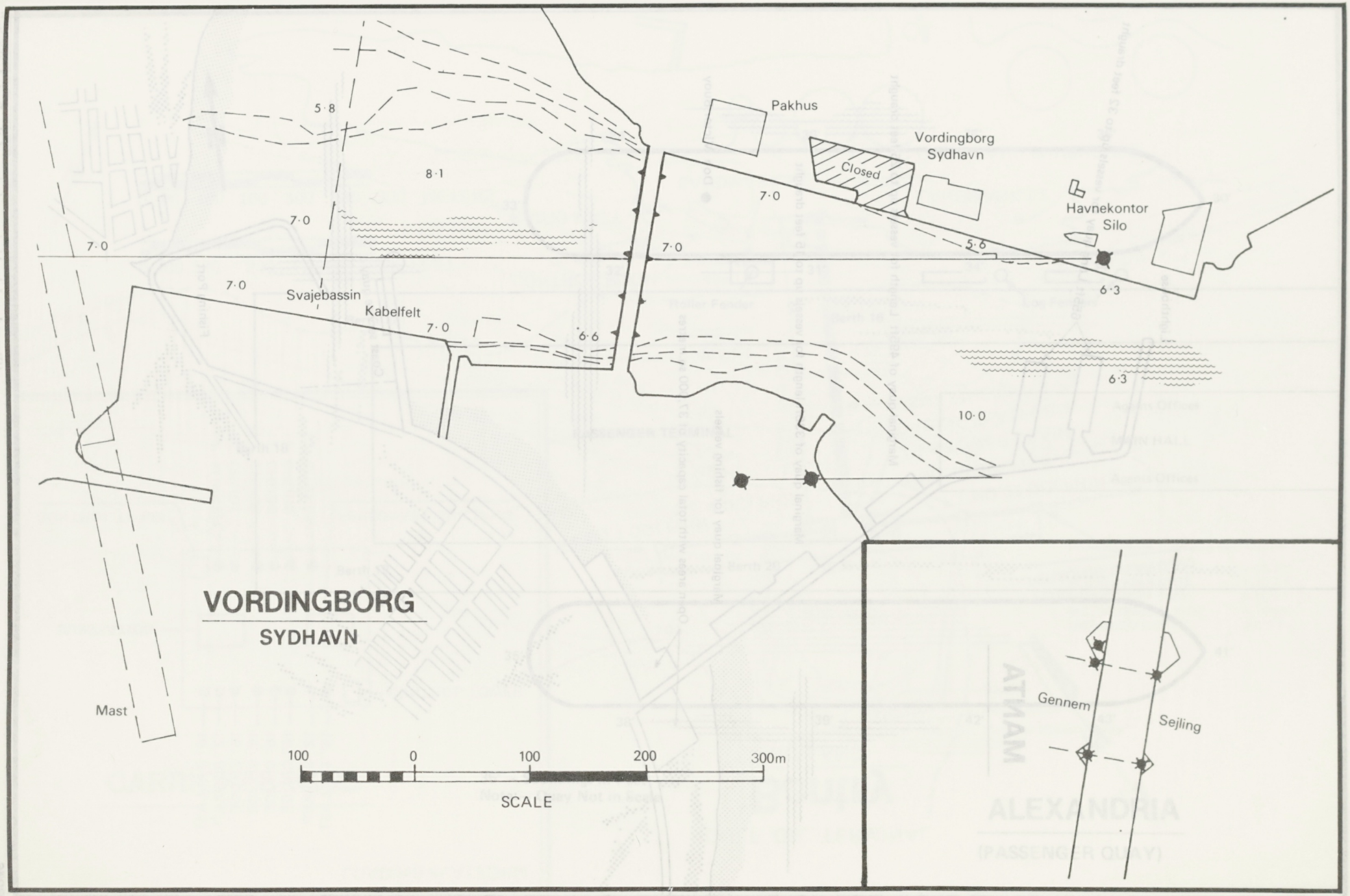

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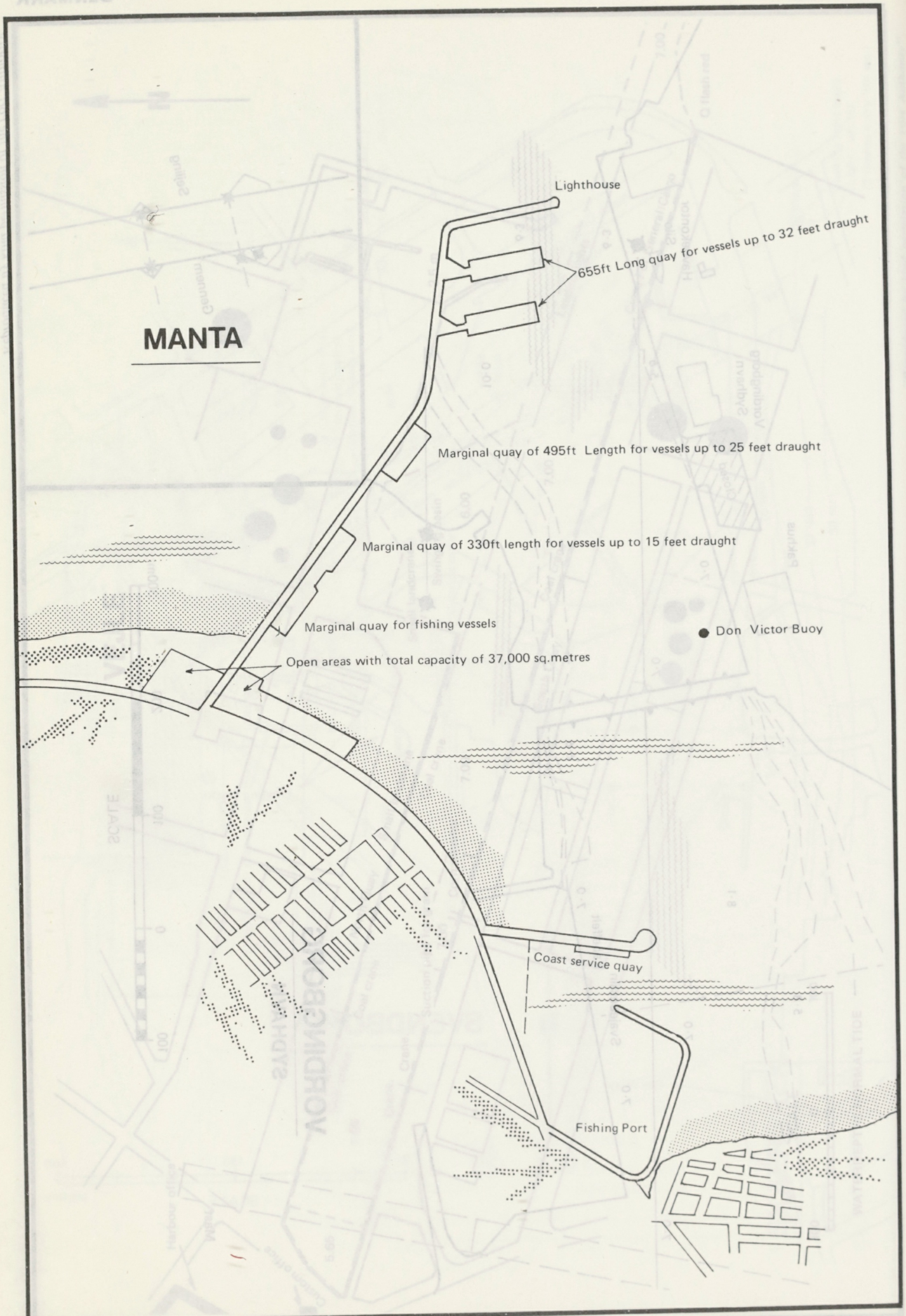

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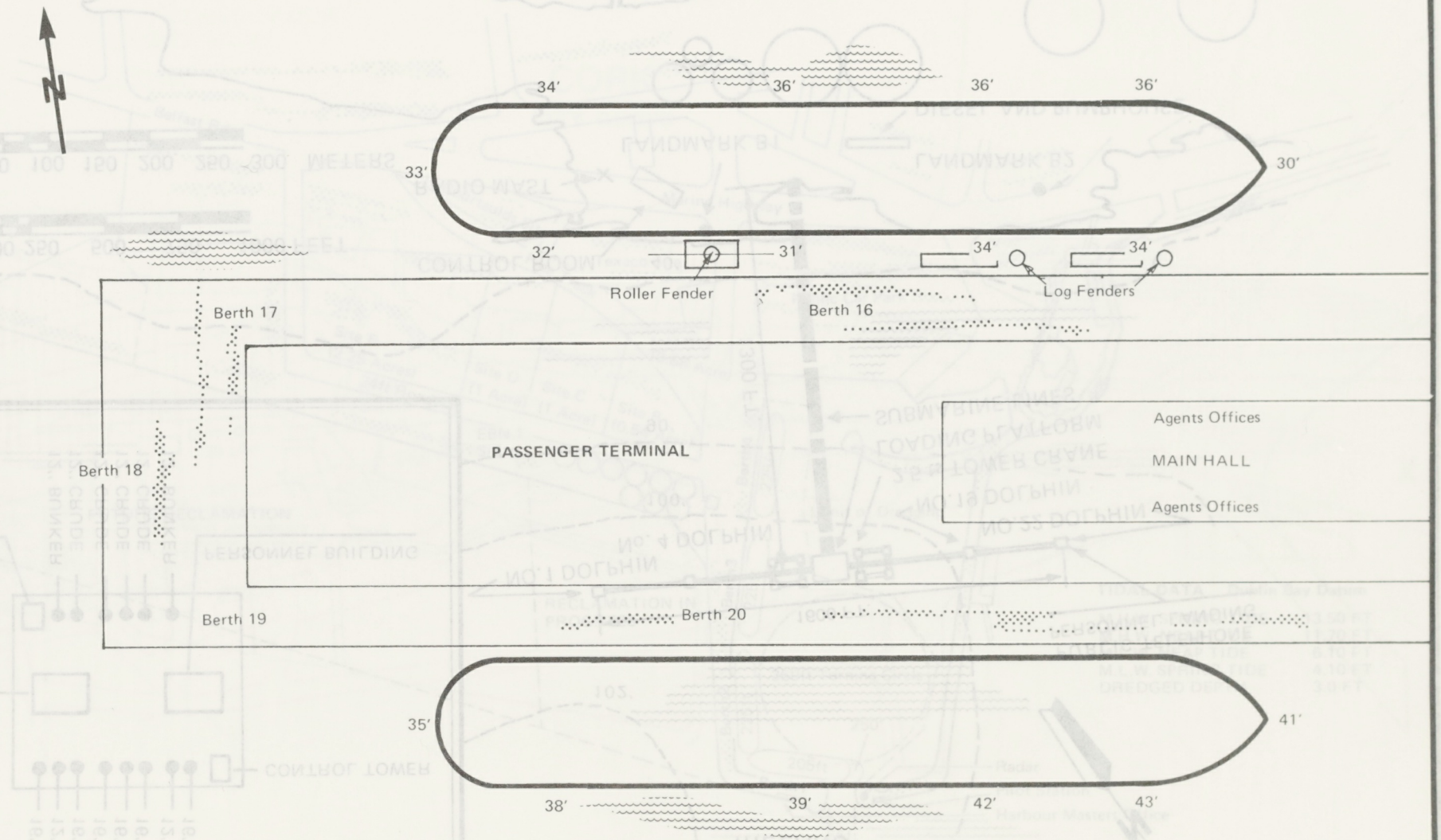
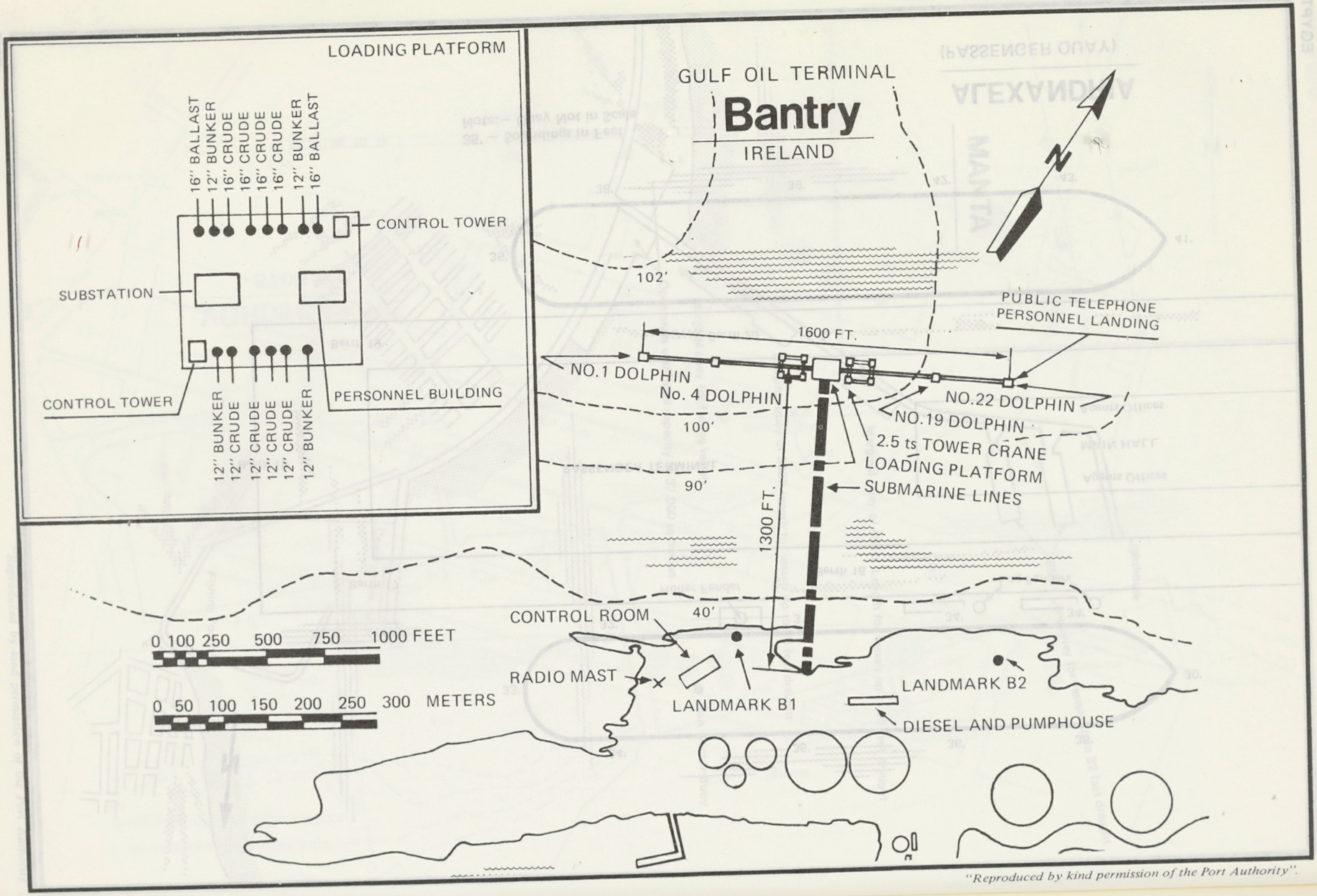


35′ — Soundings in Feet
Note:— Quay Not in Scale

ALEXANDRIA

(PASSENGER QUAY)

"Plan supplied by Ship's Master"



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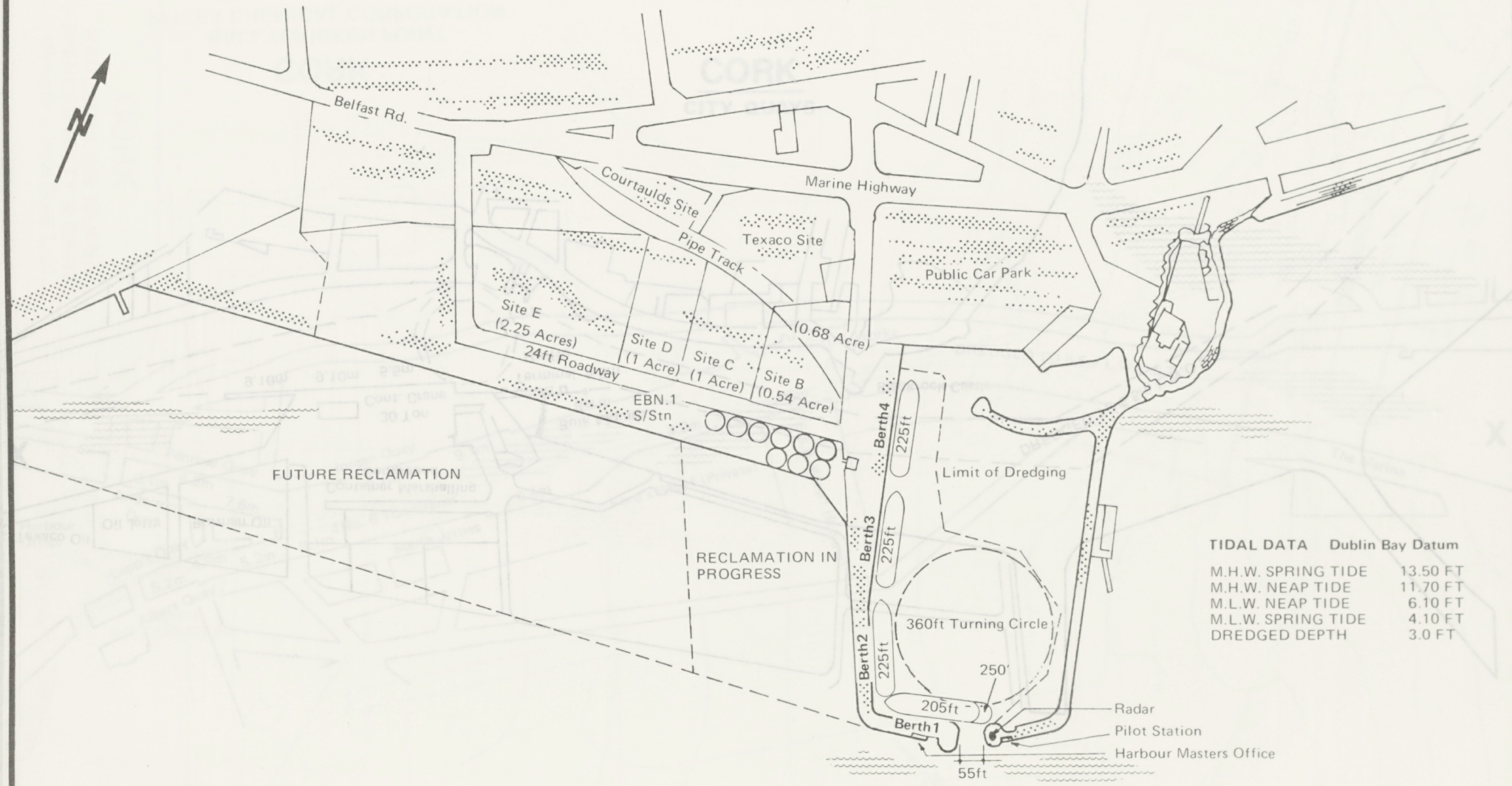

CARRICKFERGUS

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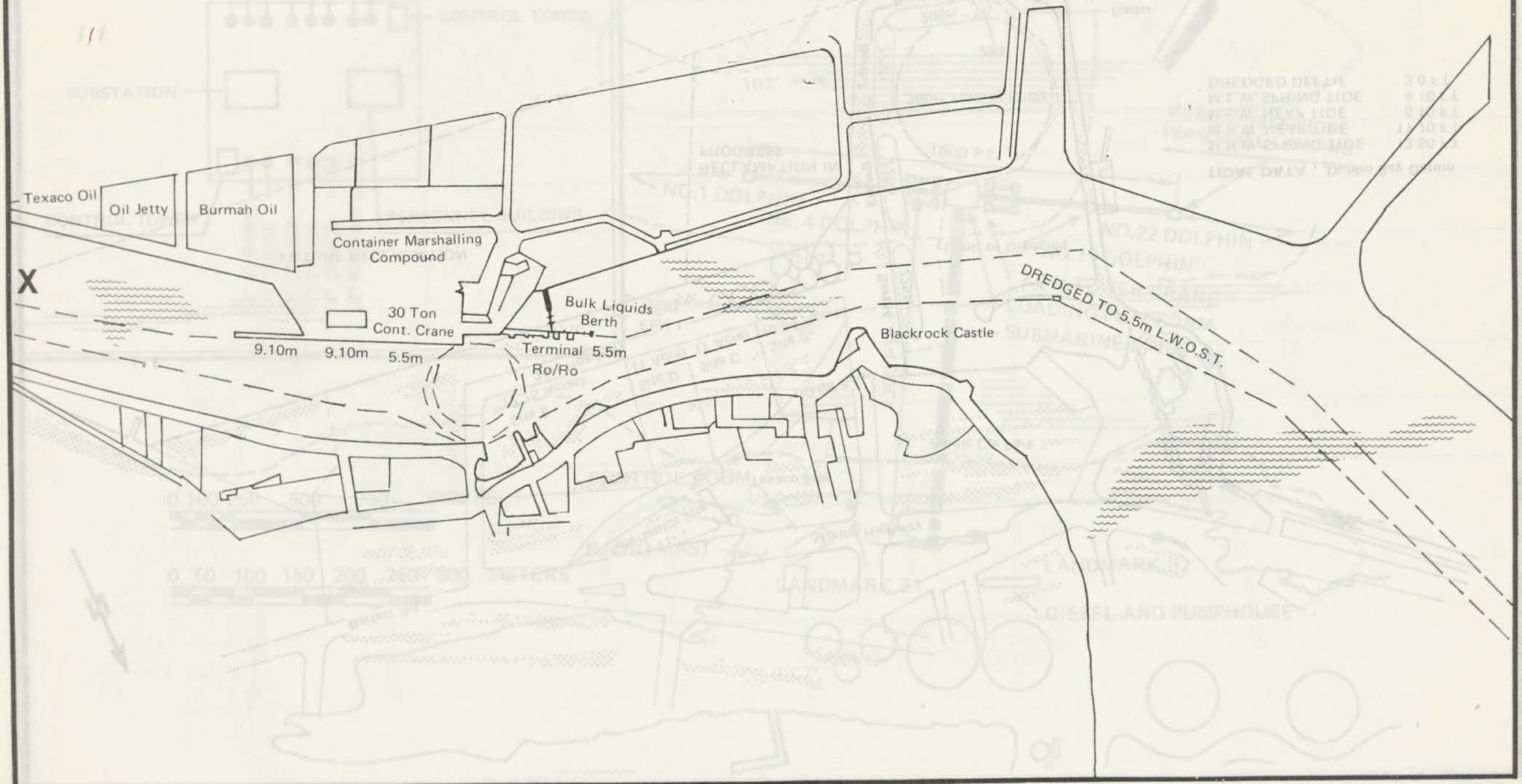
CORK

TIVOLI DOCK ESTATE



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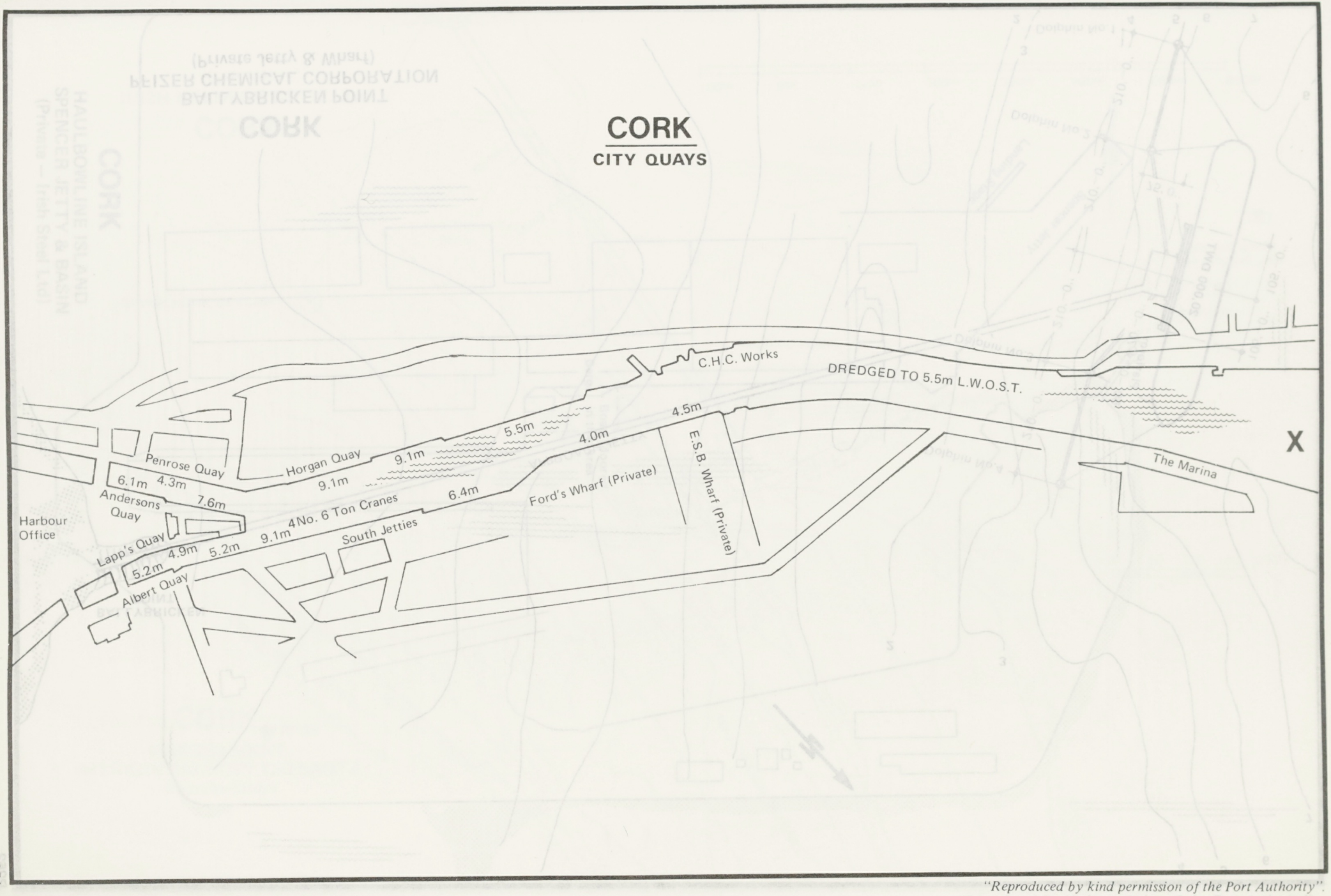
CORK

CITY QUAYS



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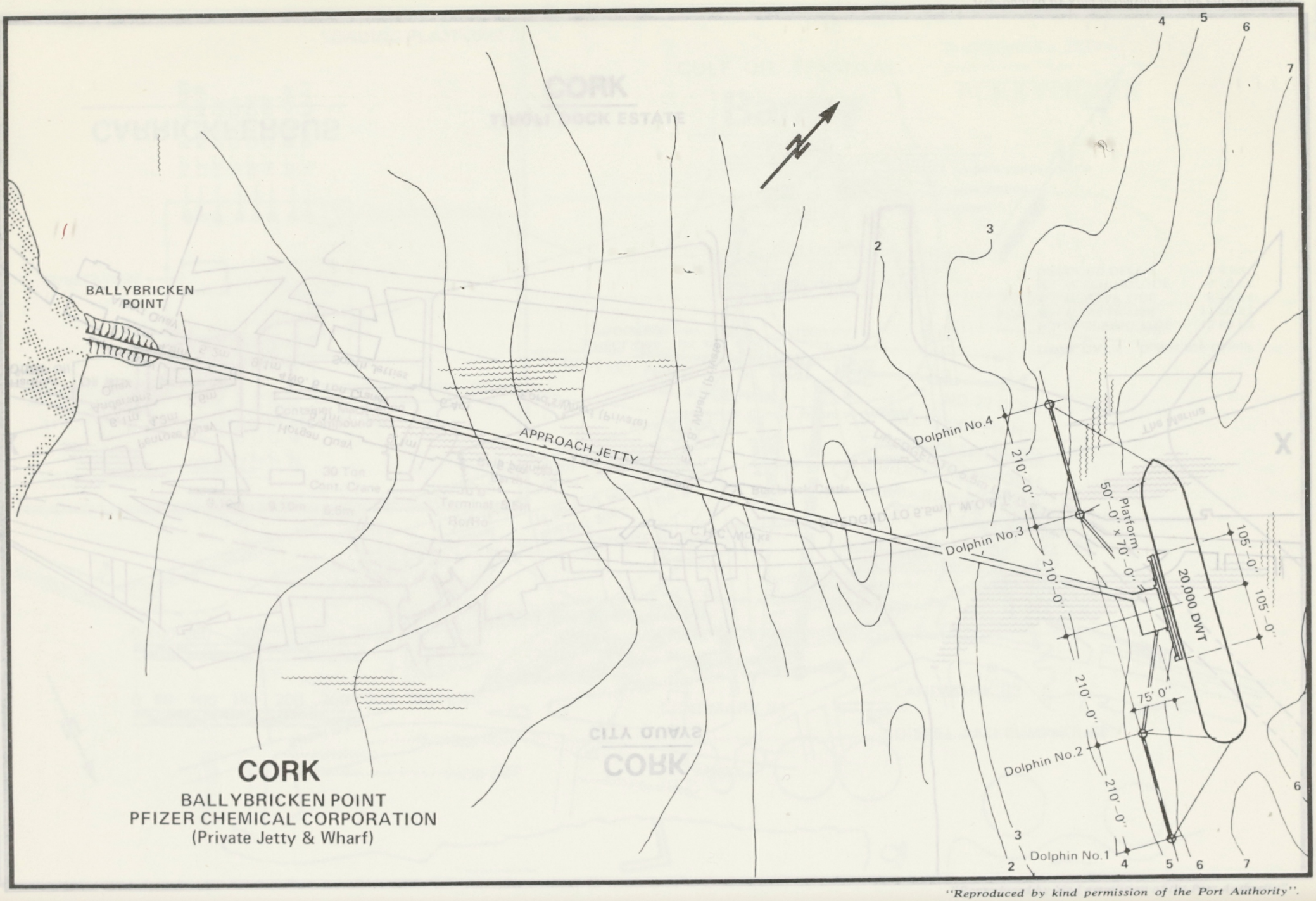

CORK

BALLYBRICKEN POINT
PFIZER CHEMICAL CORPORATION
(Private Jetty & Wharf)

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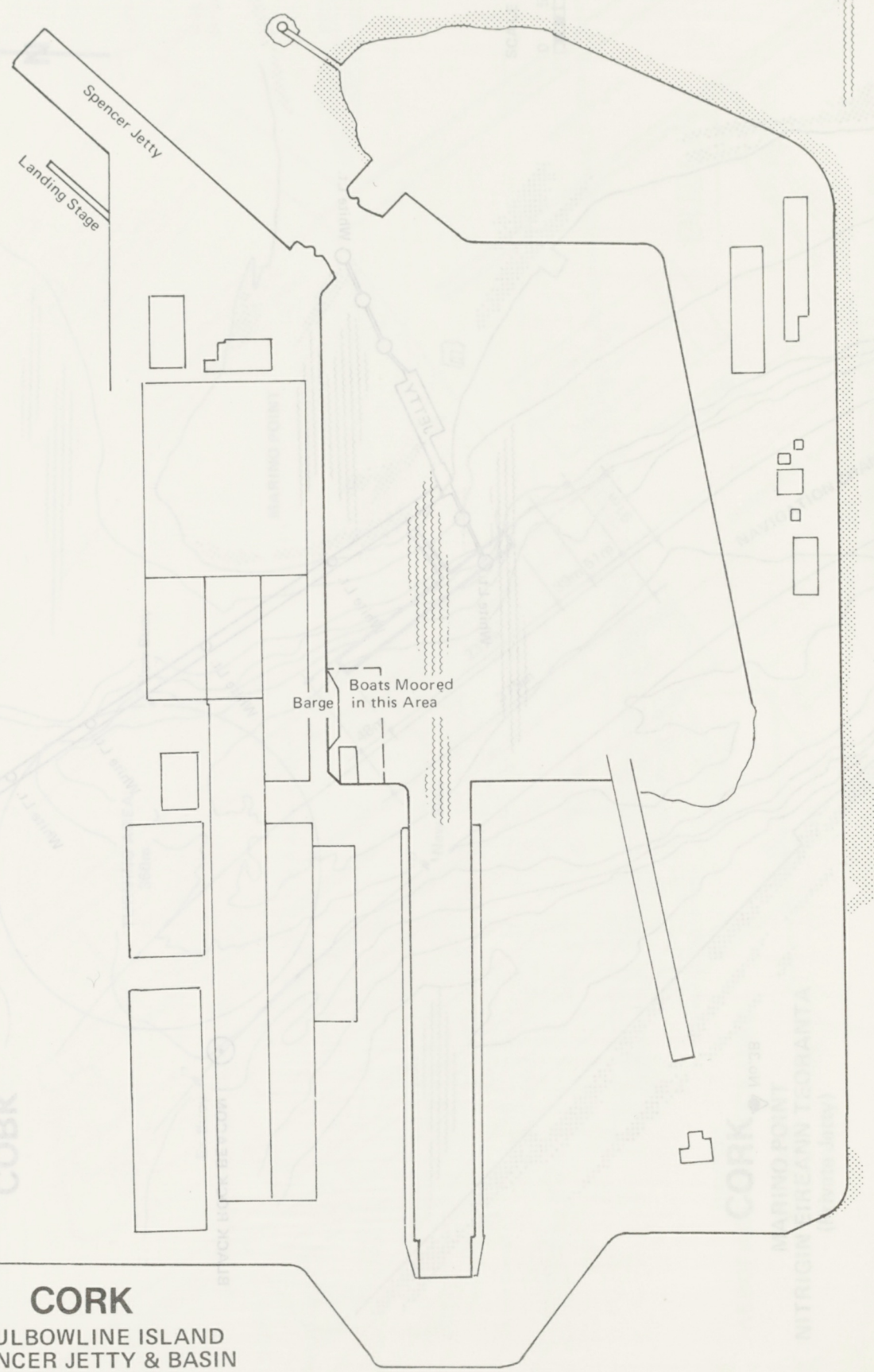

CORK

HAULBOWLINE ISLAND
SPENCER JETTY & BASIN
(Private – Irish Steel Ltd)

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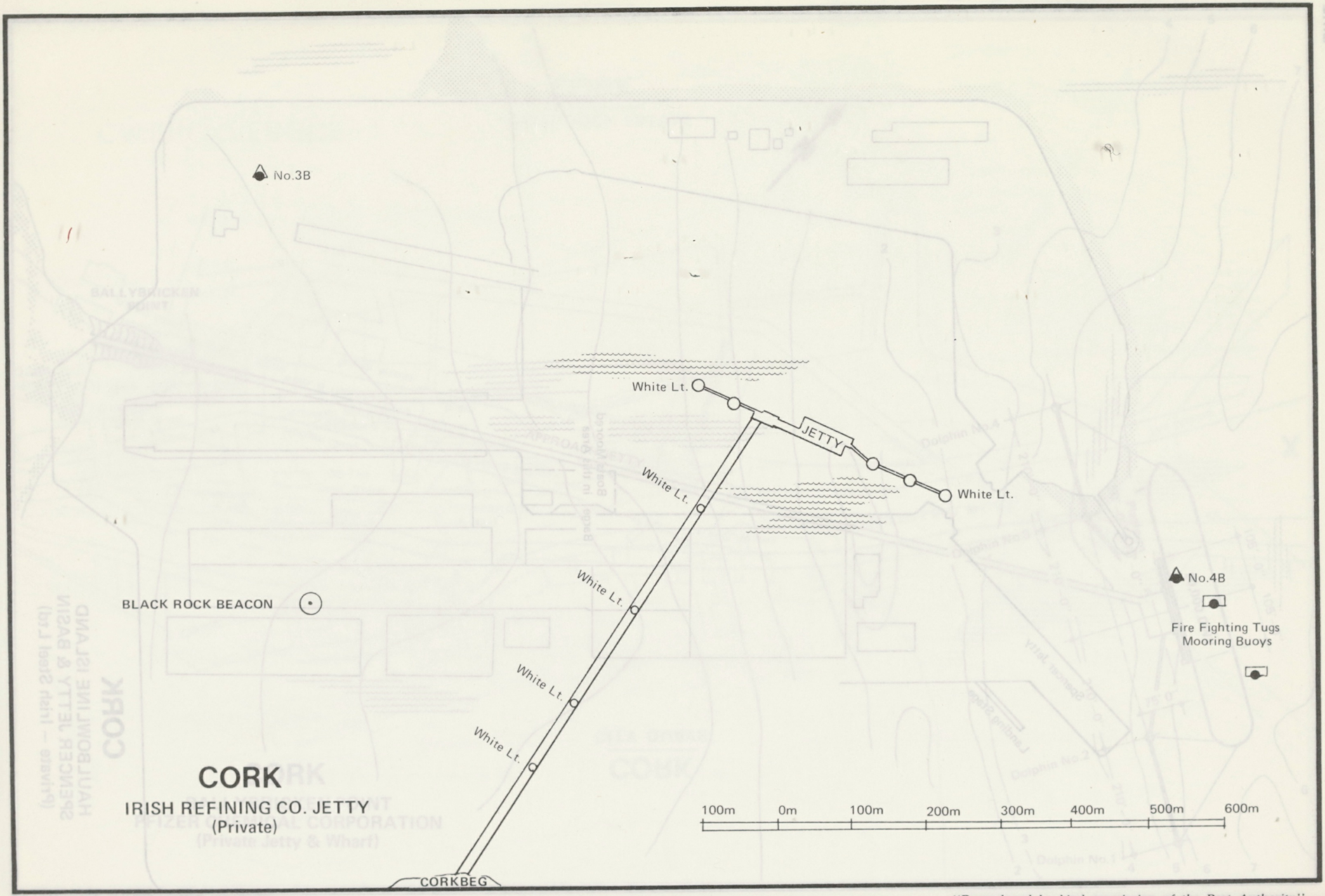

CORK

IRISH REFINING CO. JETTY

(Private)

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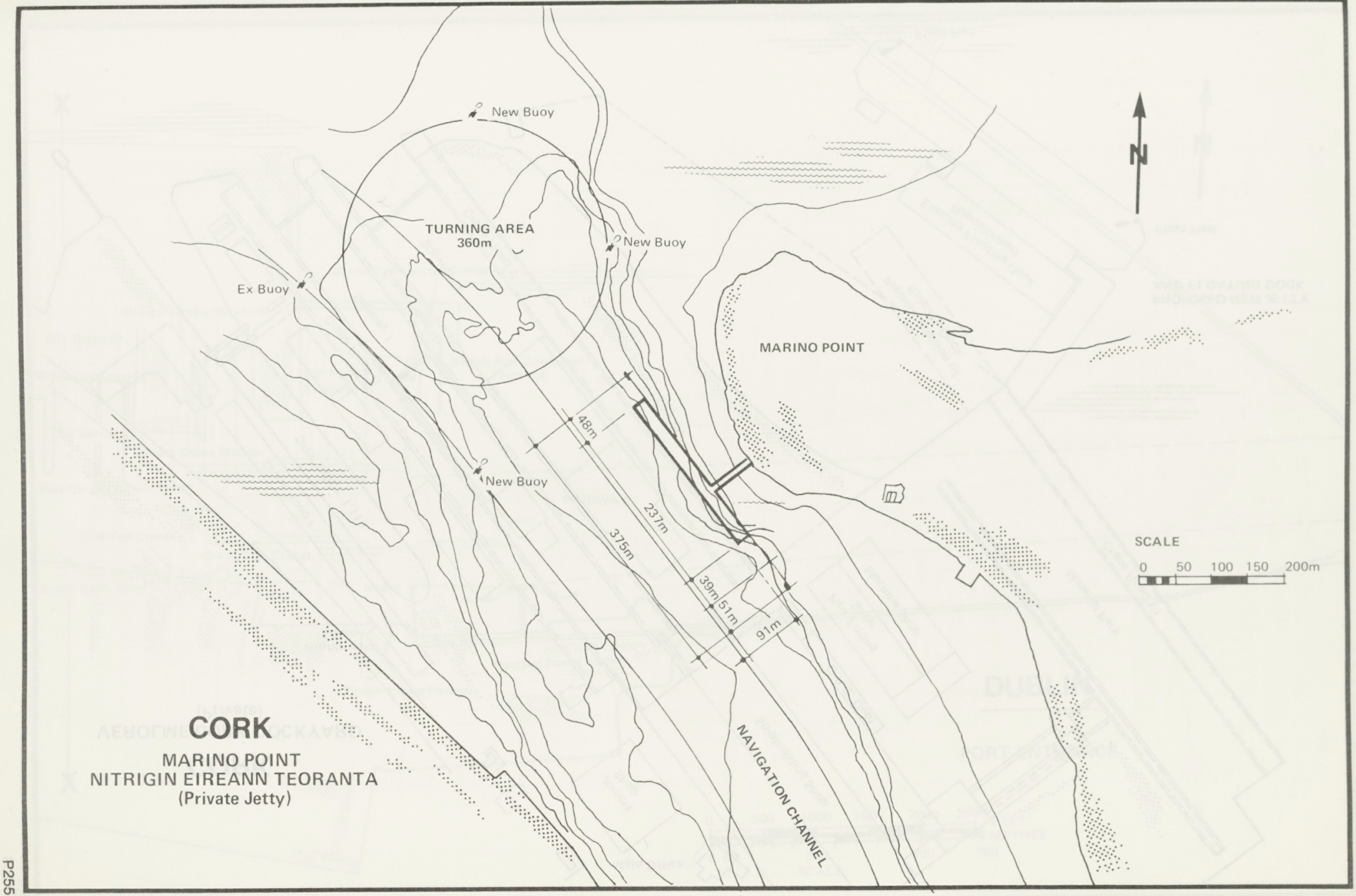

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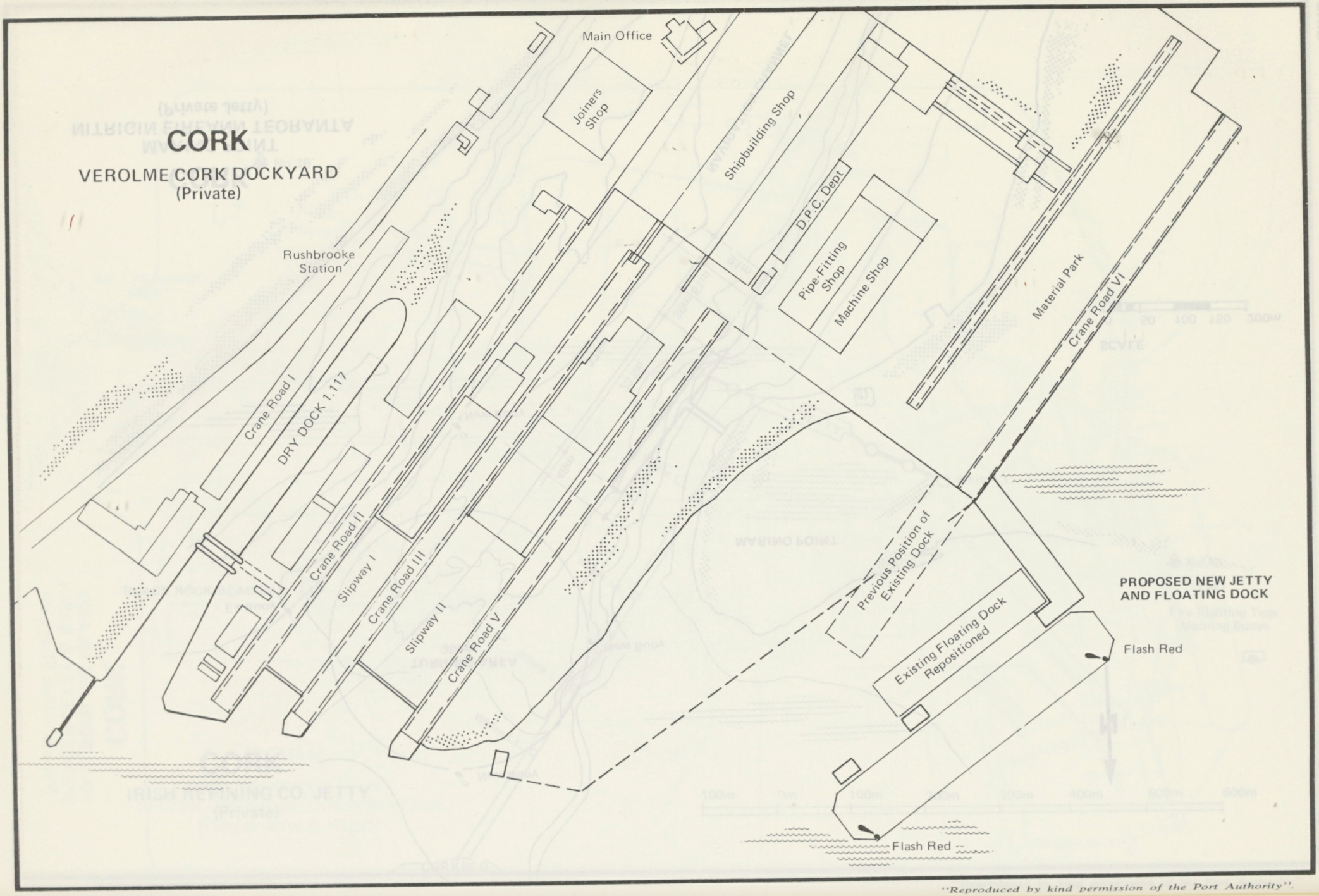

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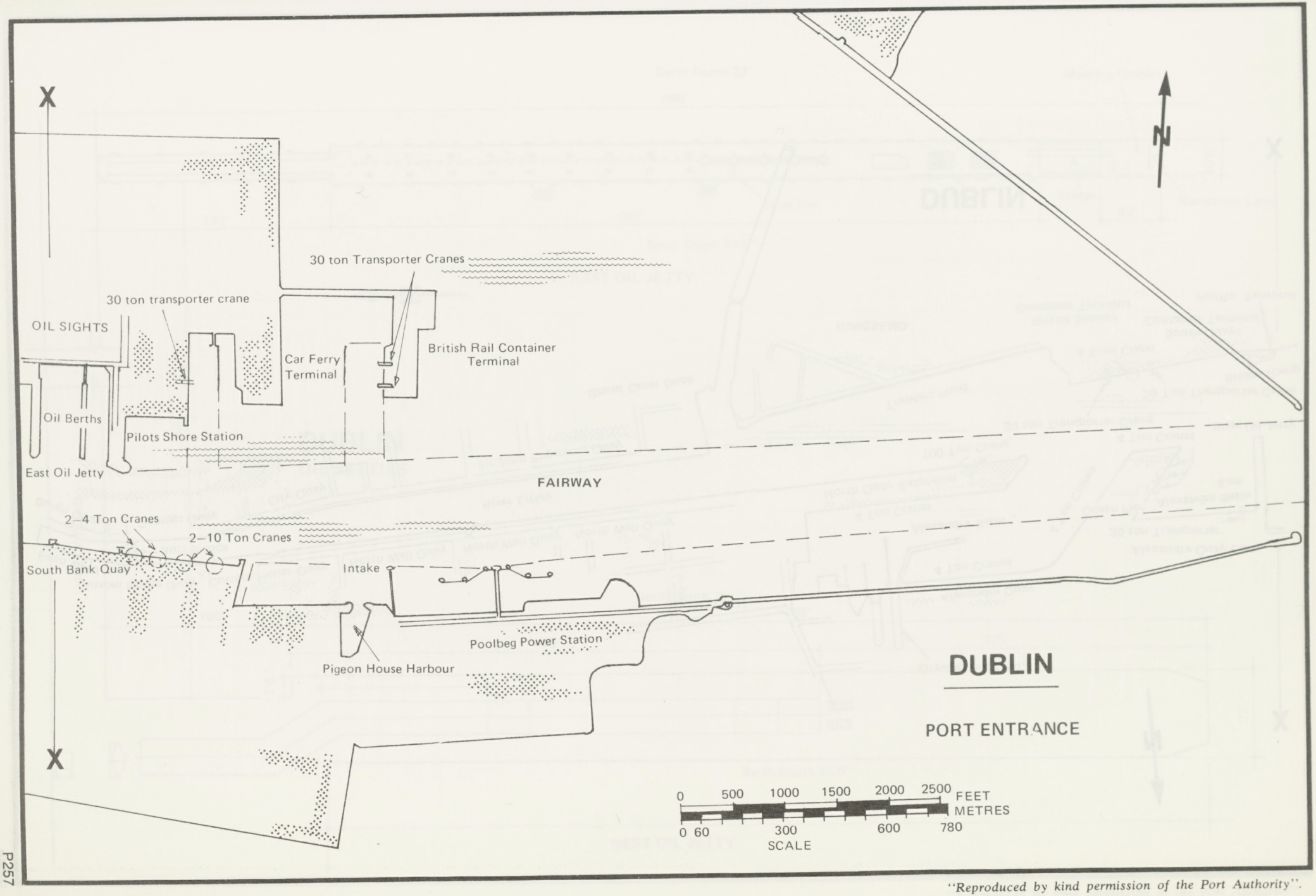

P257

EIRE

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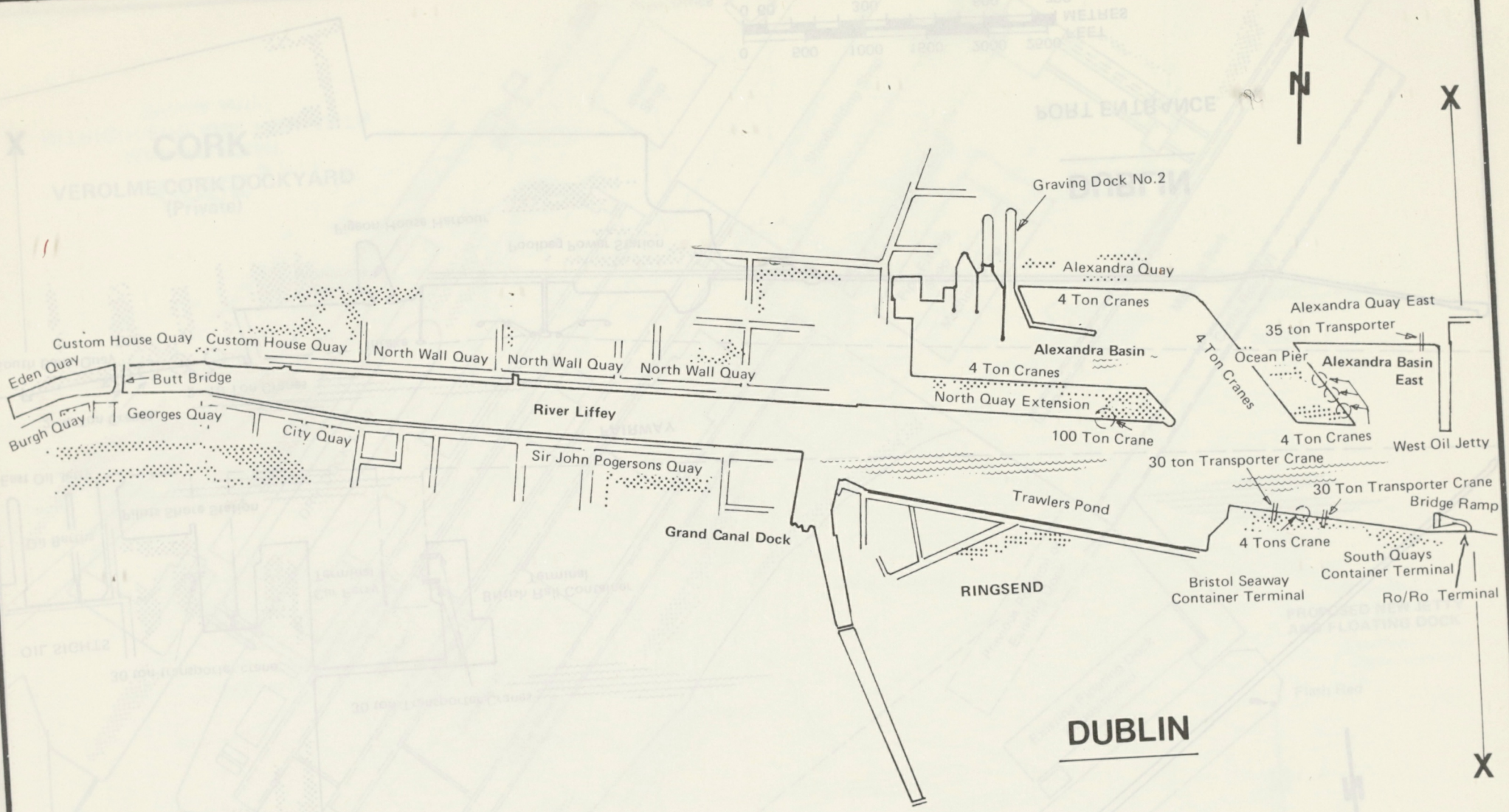

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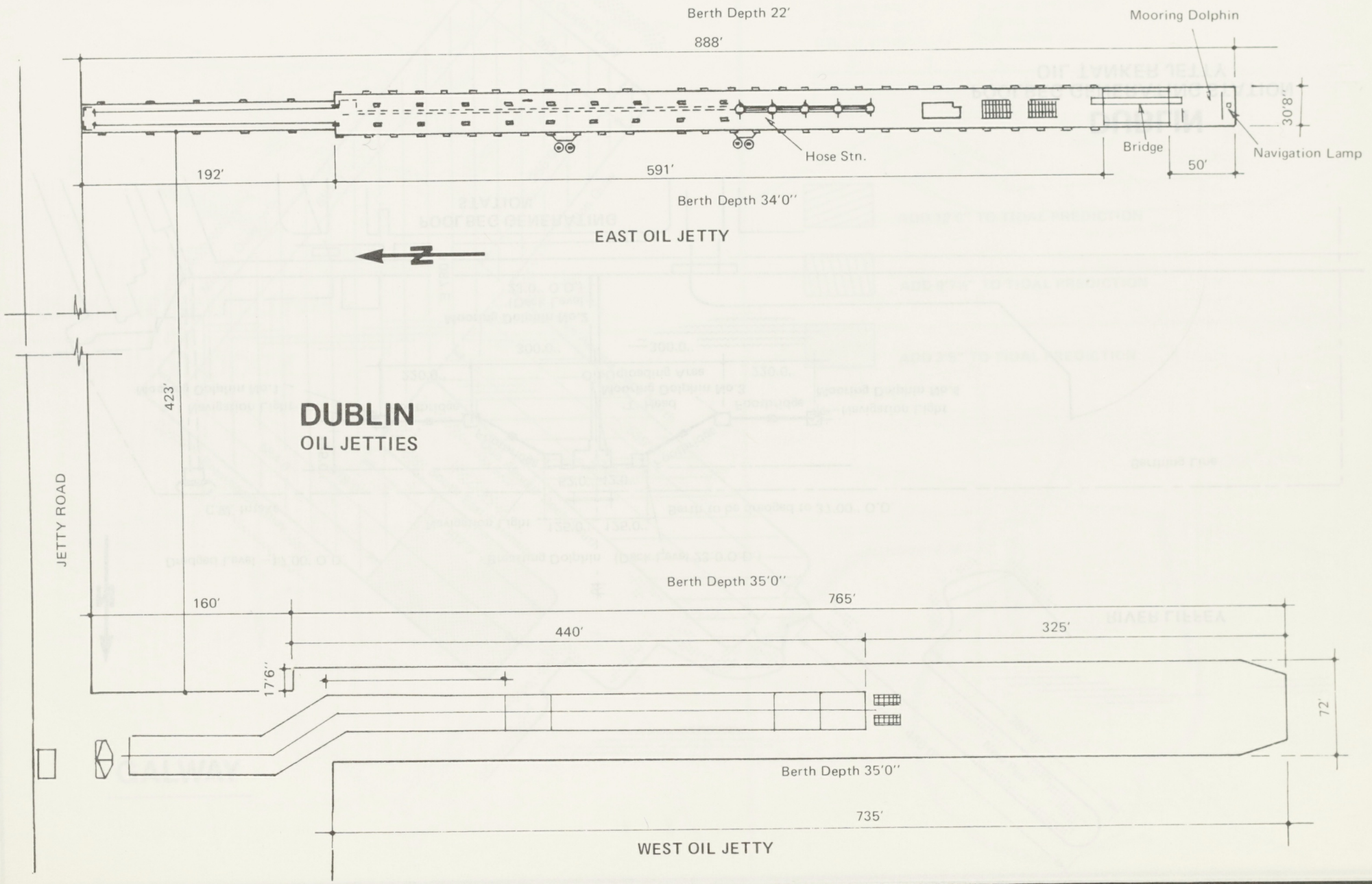

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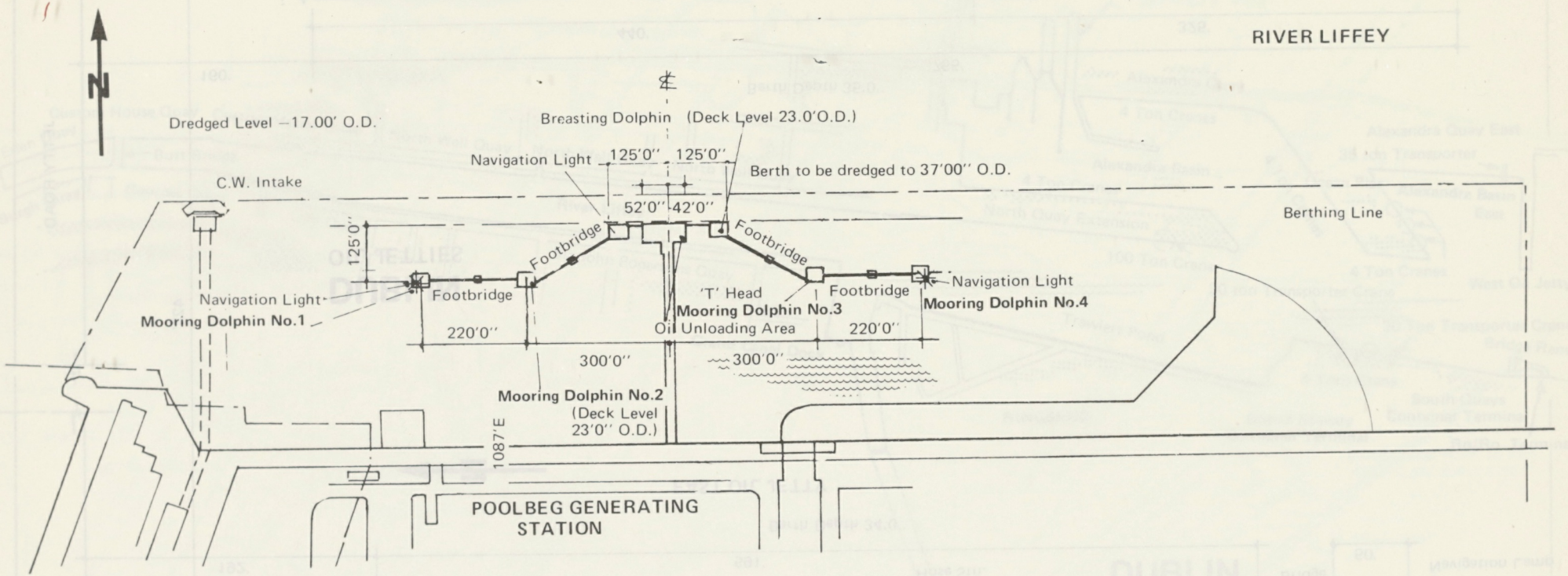

DUBLIN

POOLBEG GENERATING STATION
OIL TANKER JETTY

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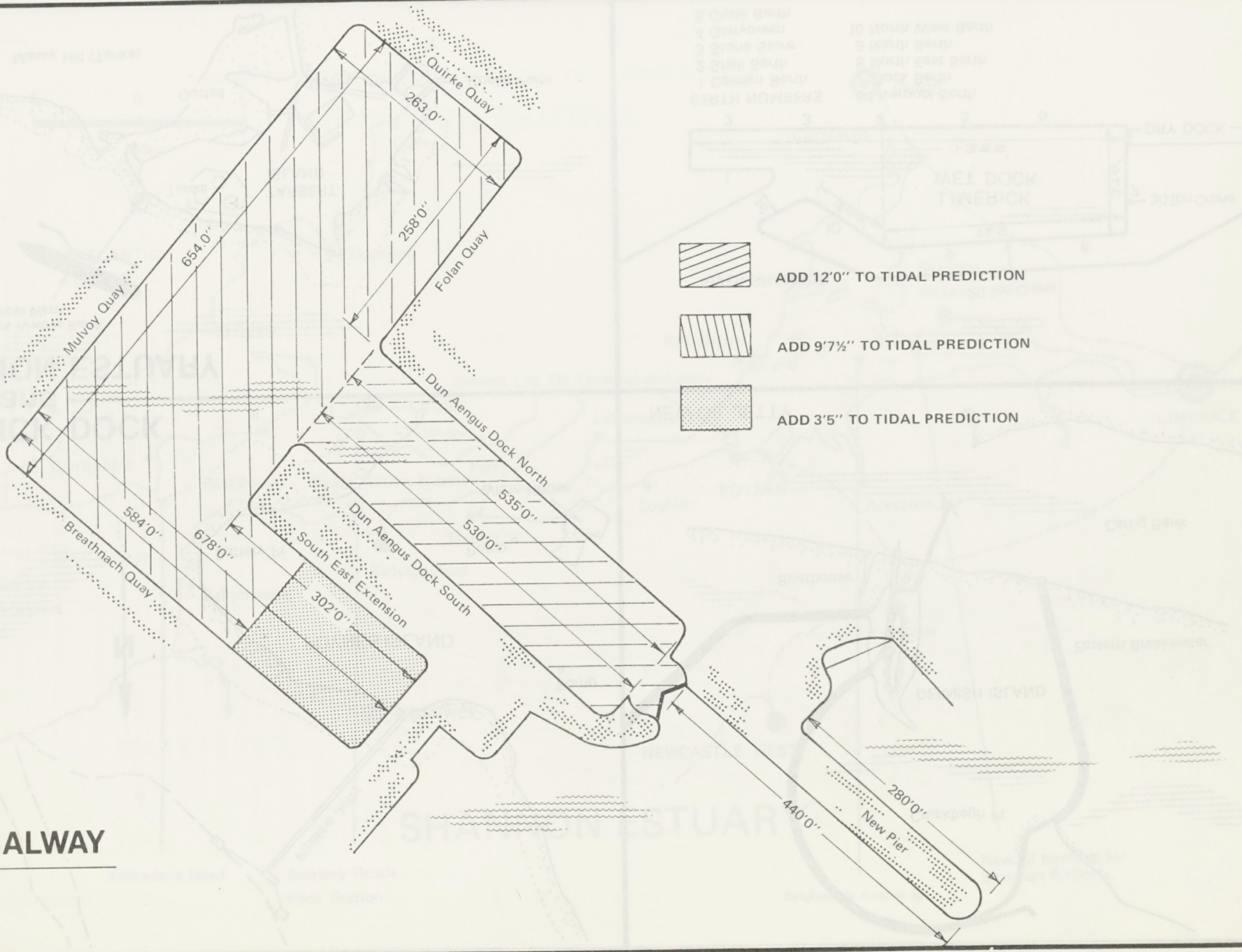

GALWAY

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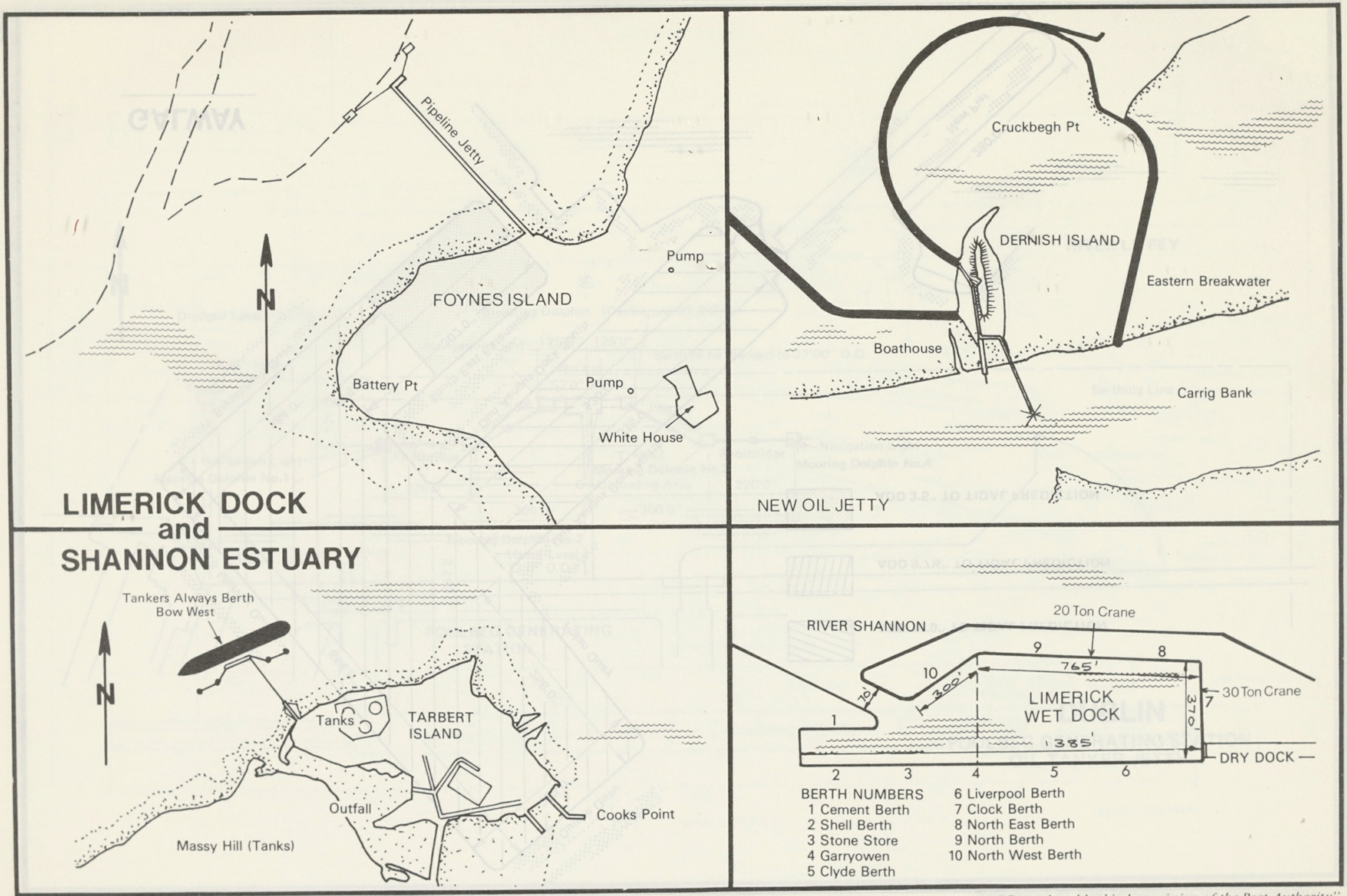

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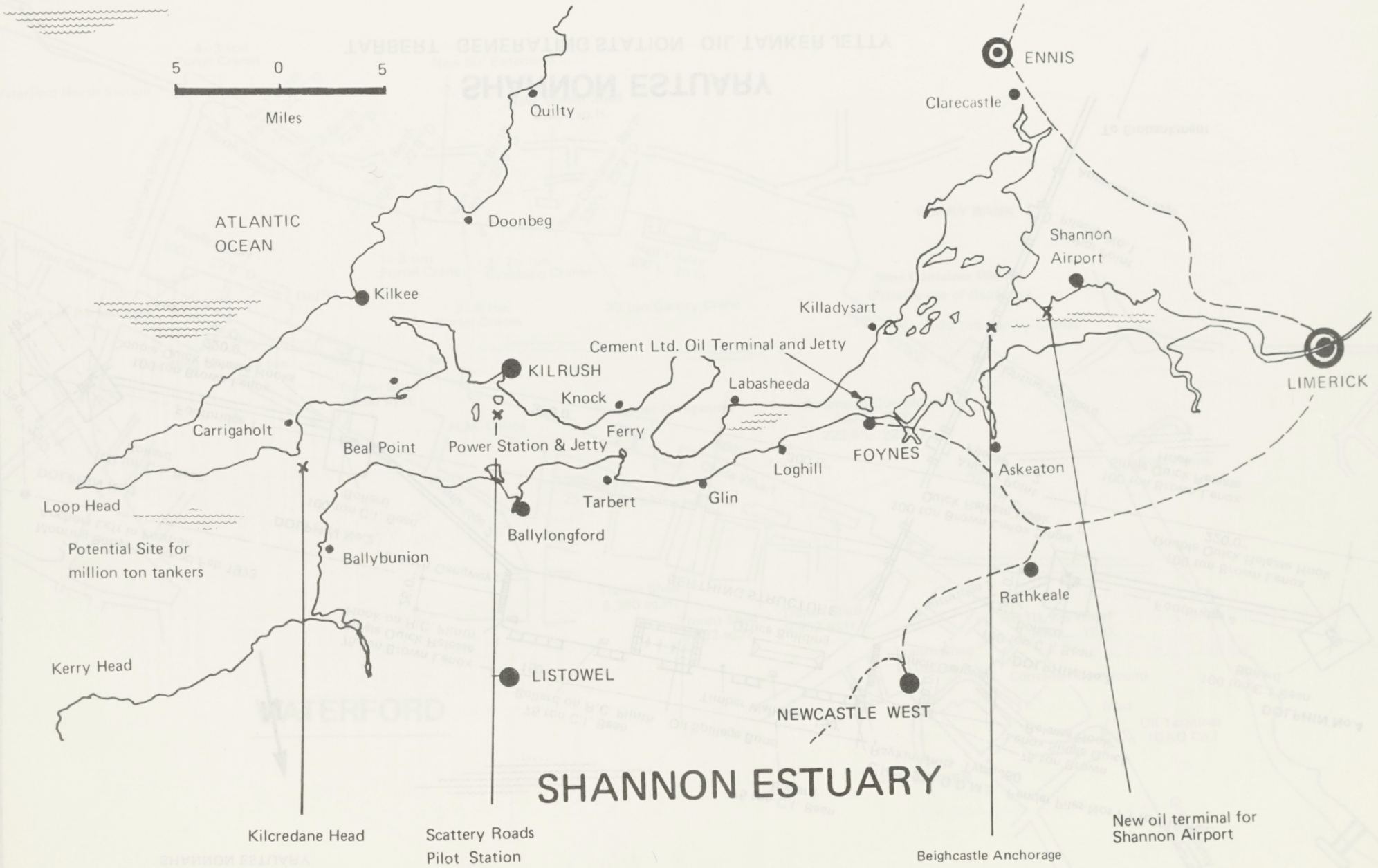

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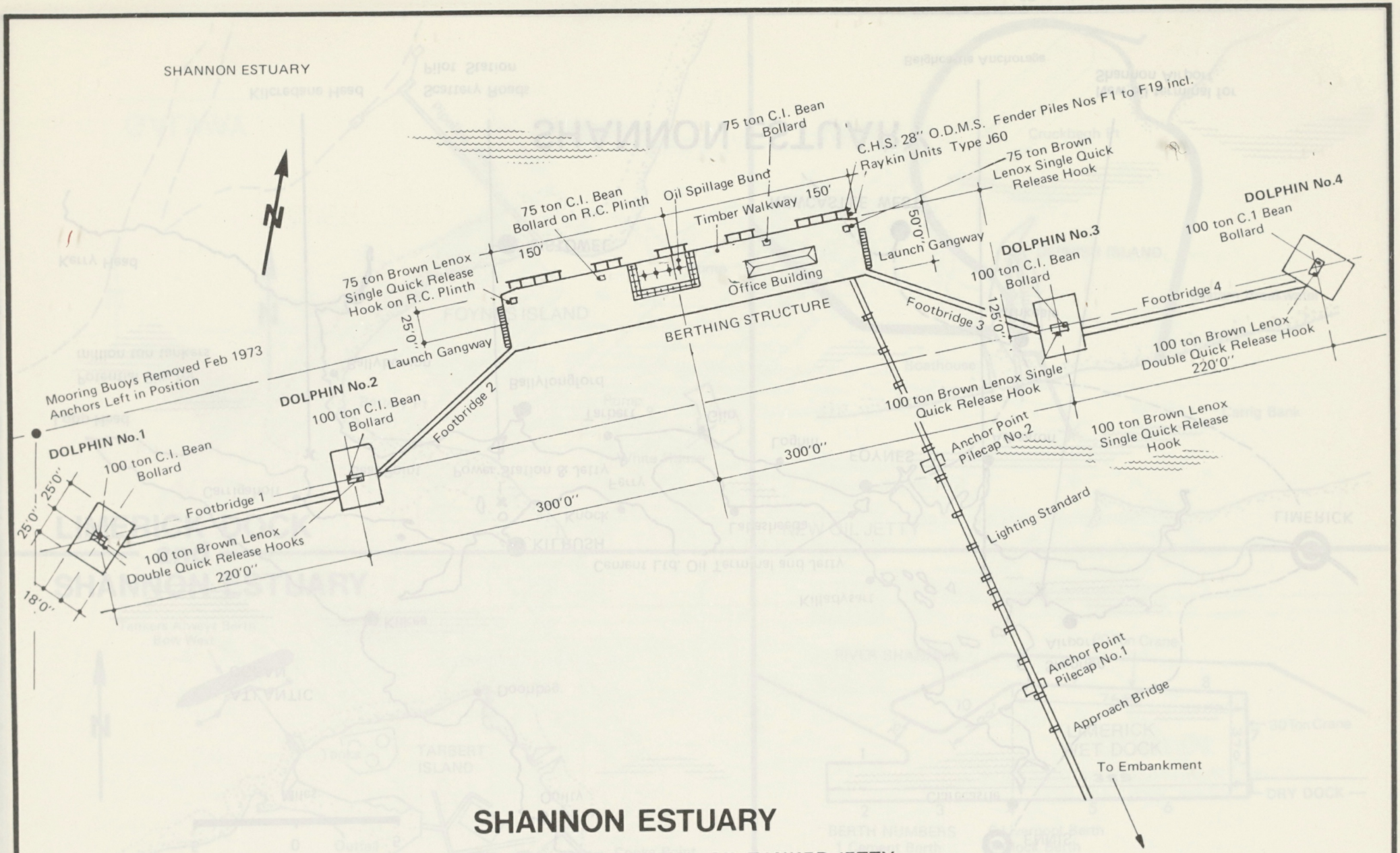

SHANNON ESTUARY

TARBERT GENERATING STATION OIL TANKER JETTY

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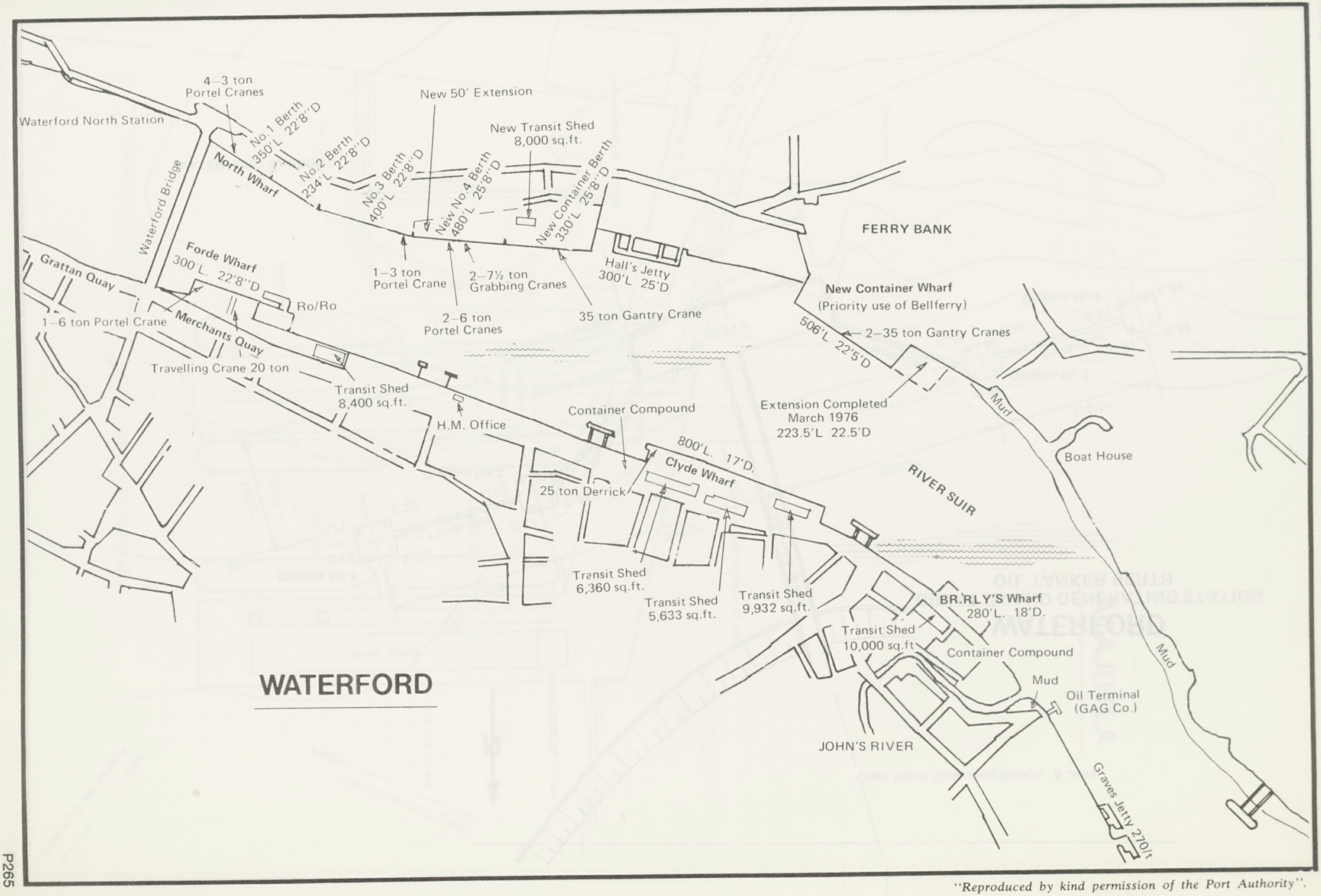

WATERFORD

P265

EIRE

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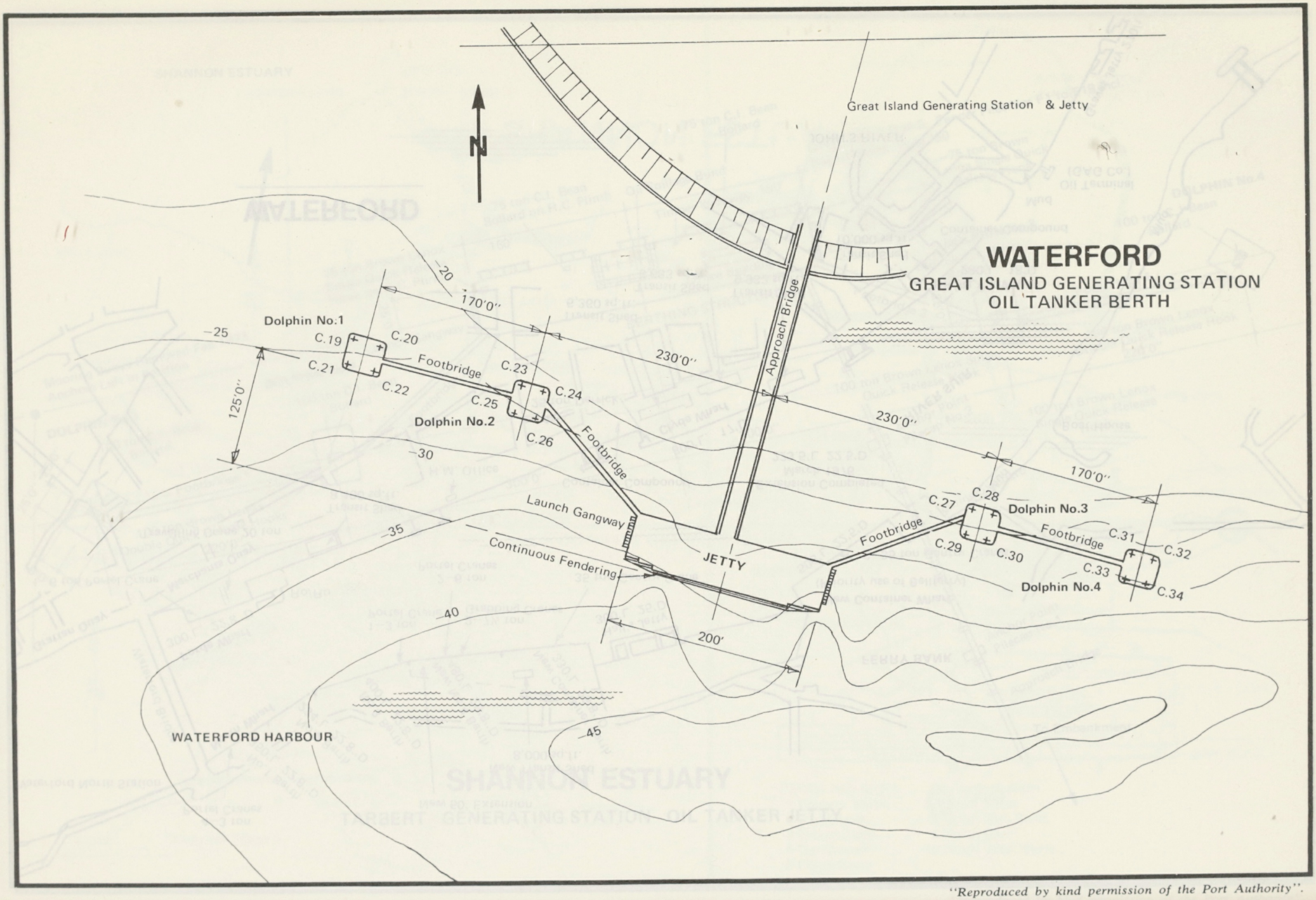

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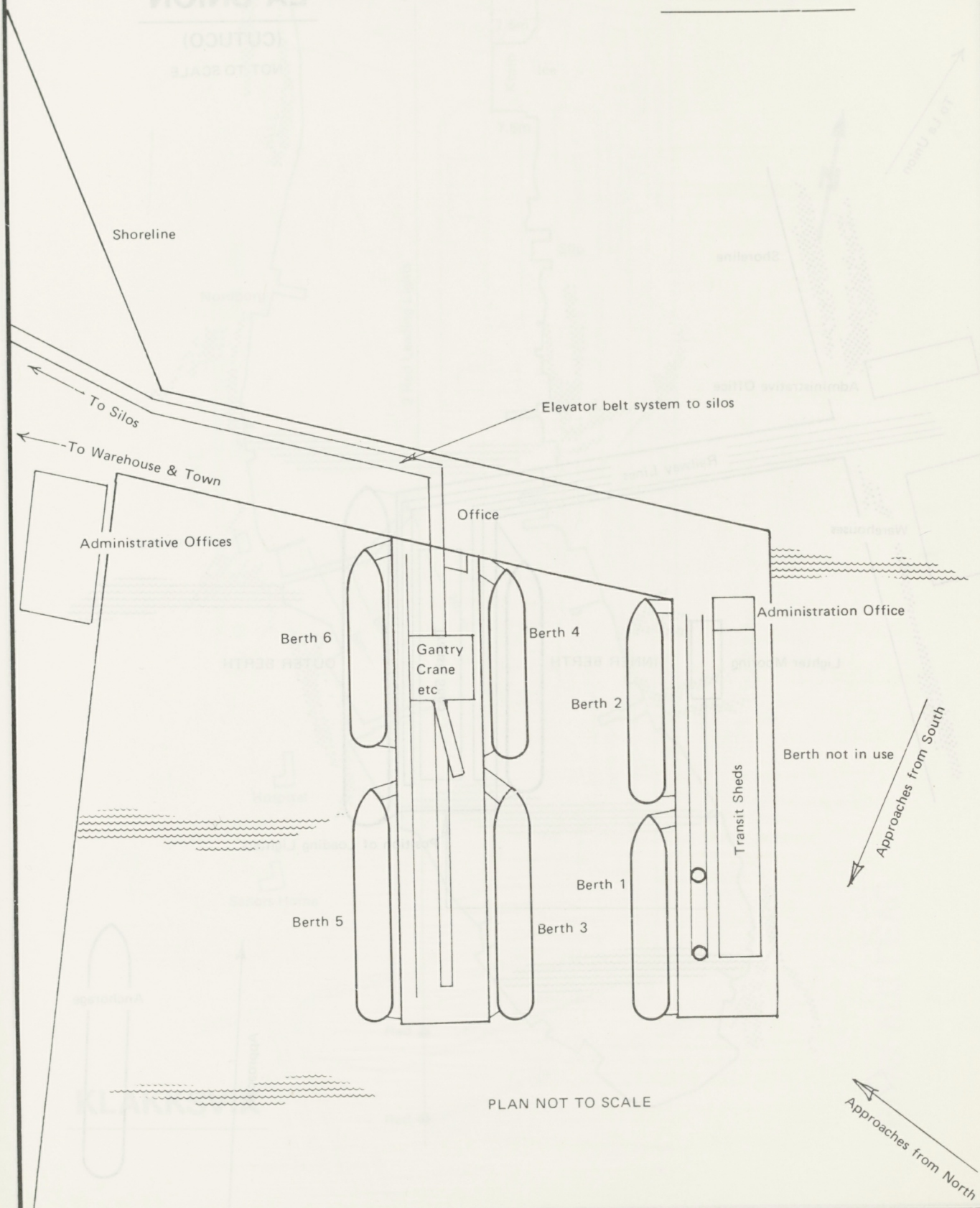
ACAJUTLA

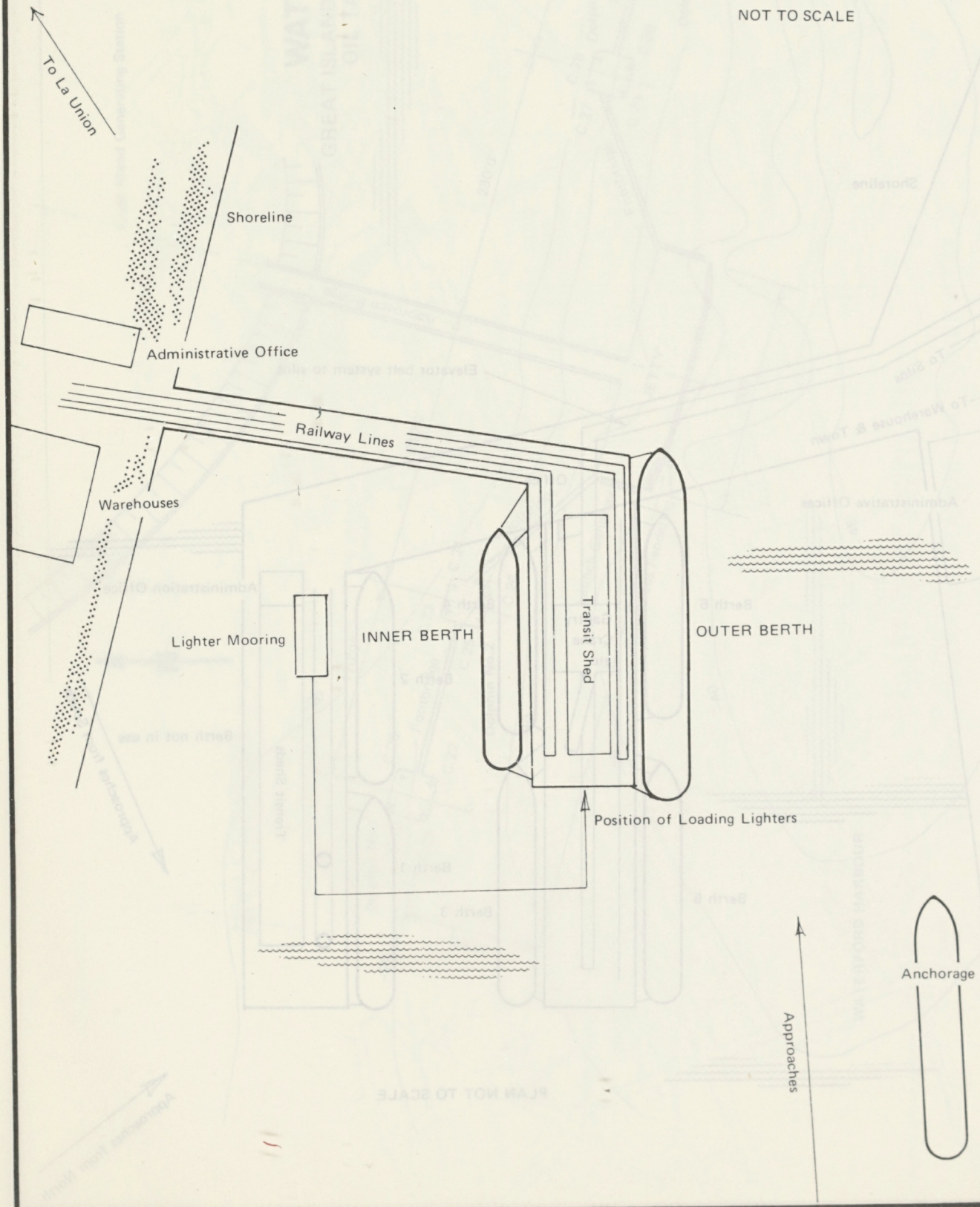


"Plan supplied by Supercargo"

LA UNION

(CUTUCO)

NOT TO SCALE



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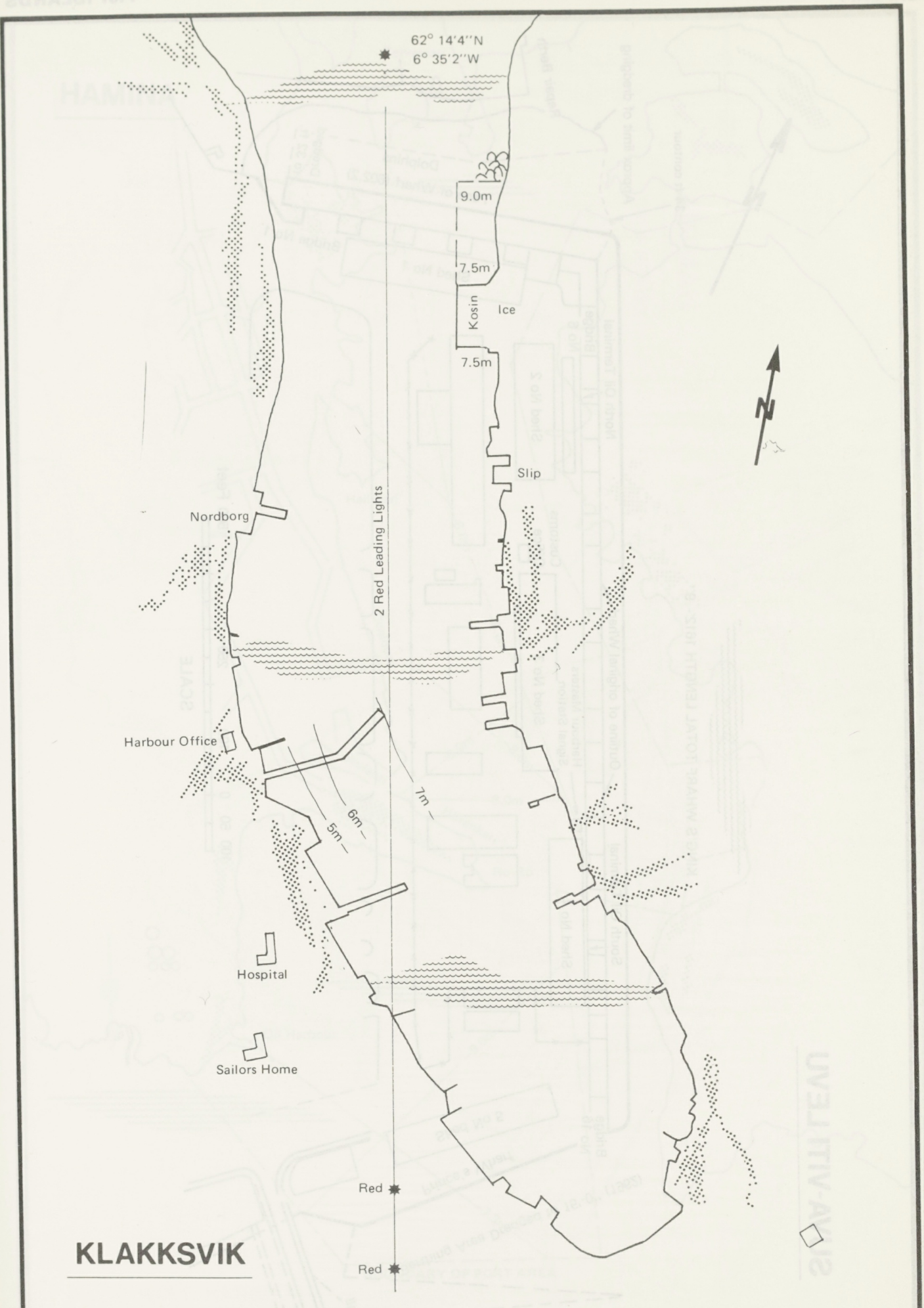

KLAKKSVIK

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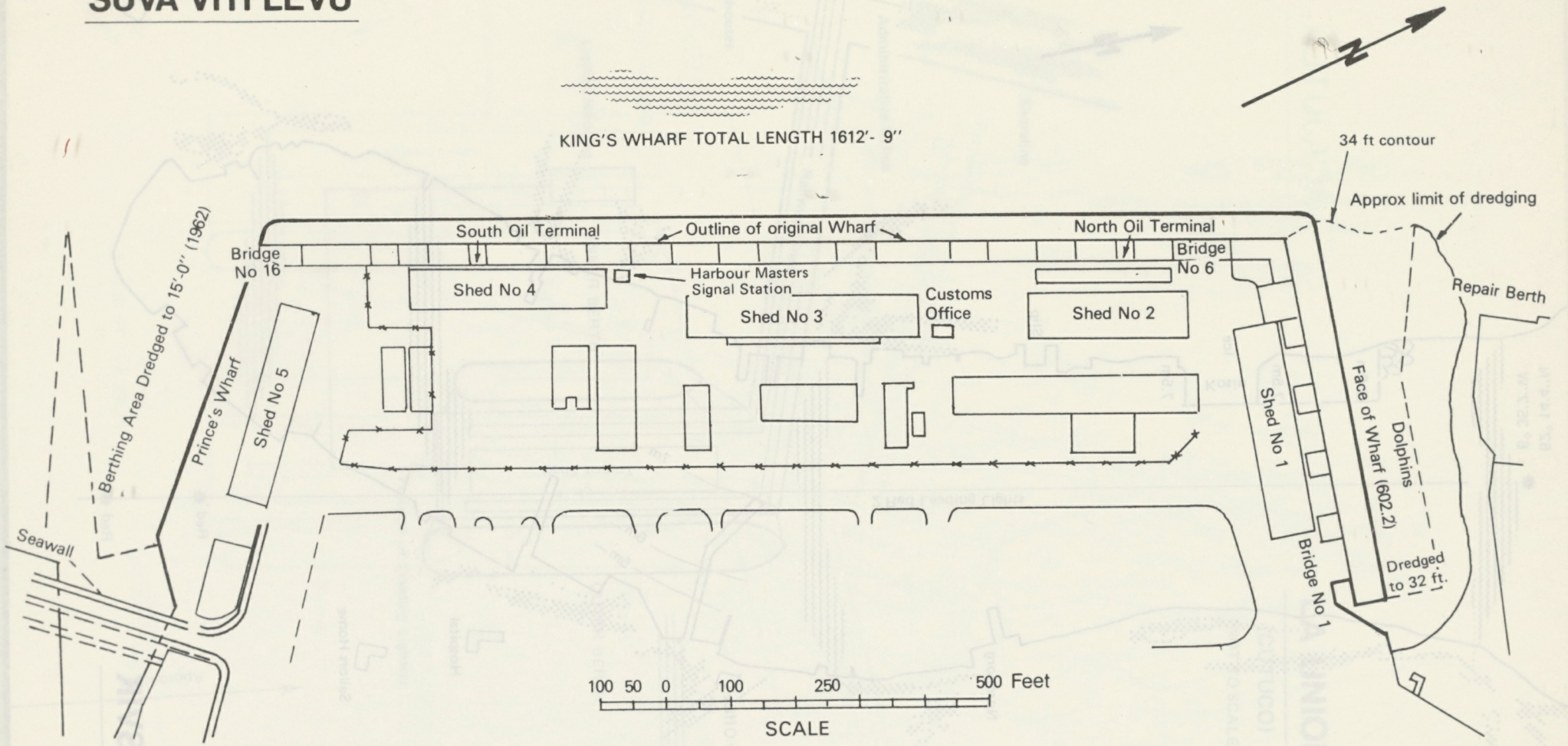
SUVA-VITI LEVU



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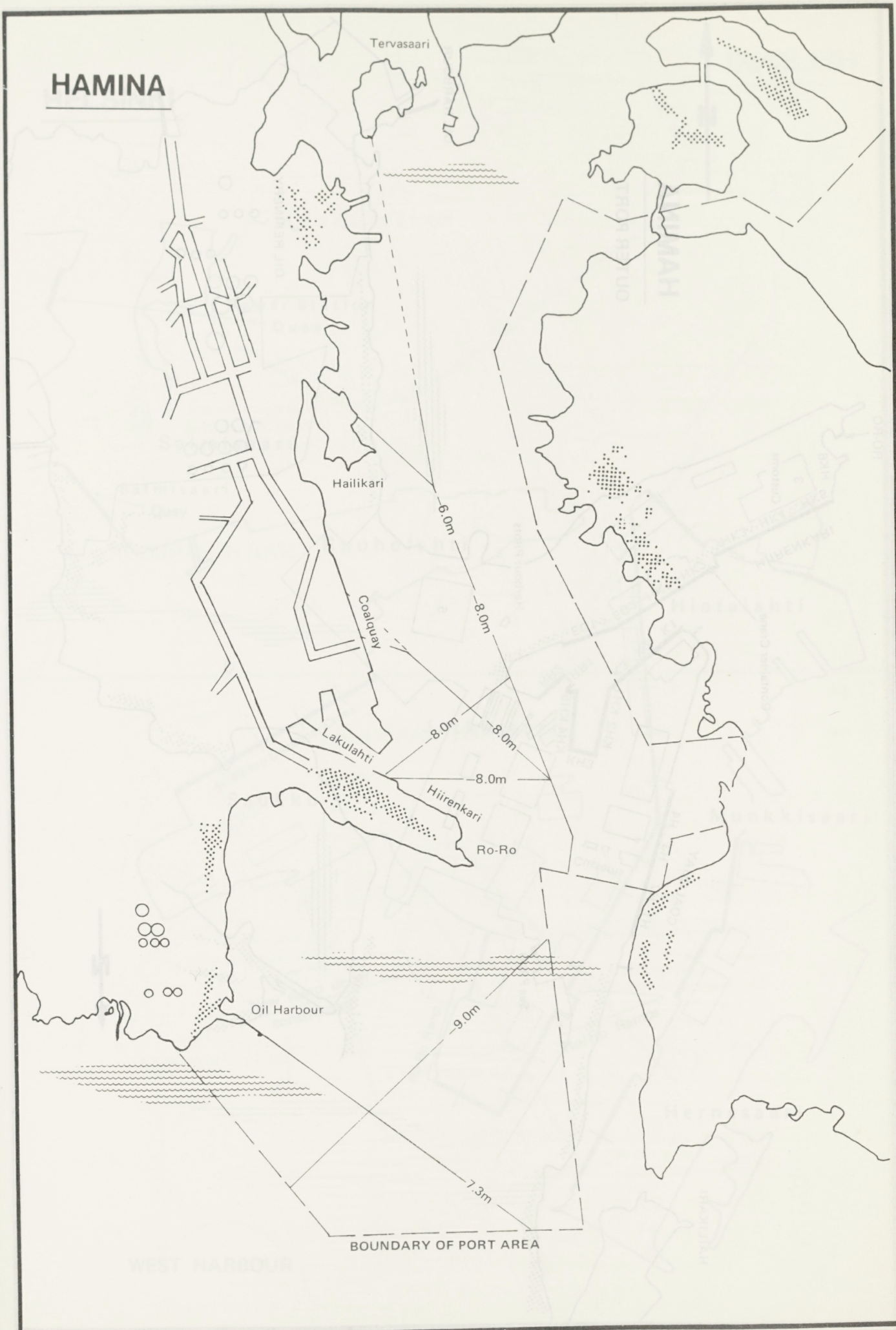

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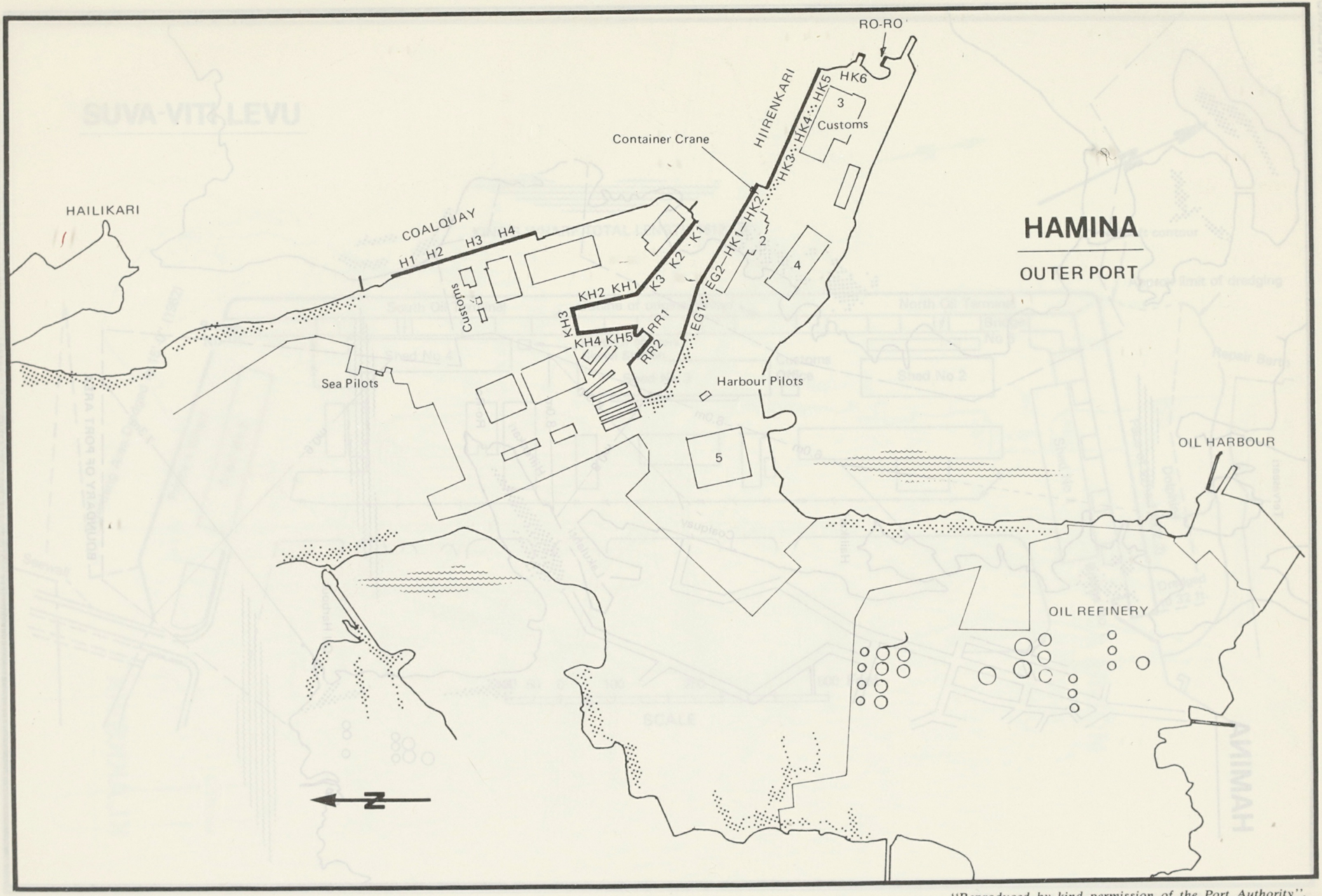

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HELSINKI

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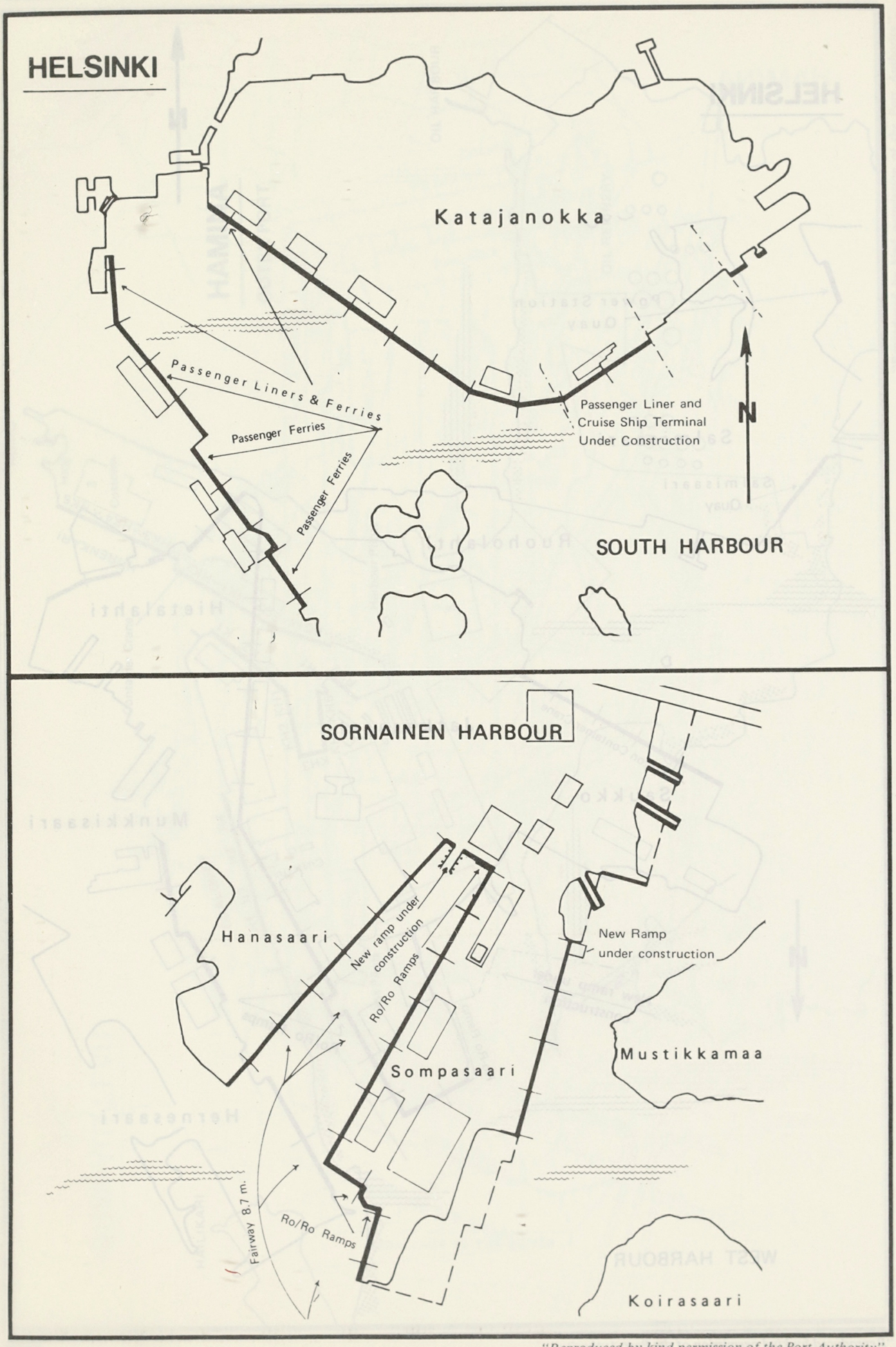

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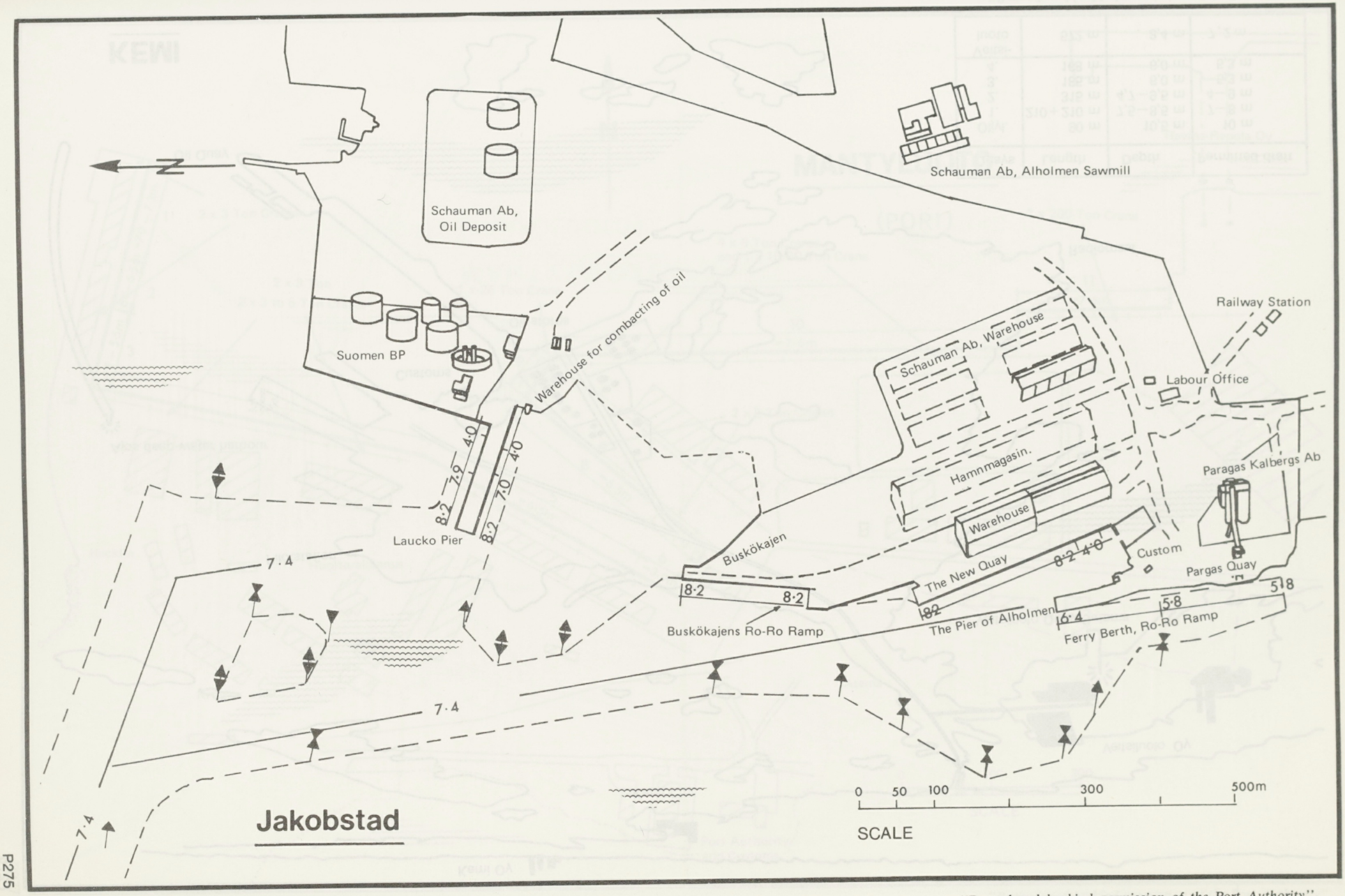

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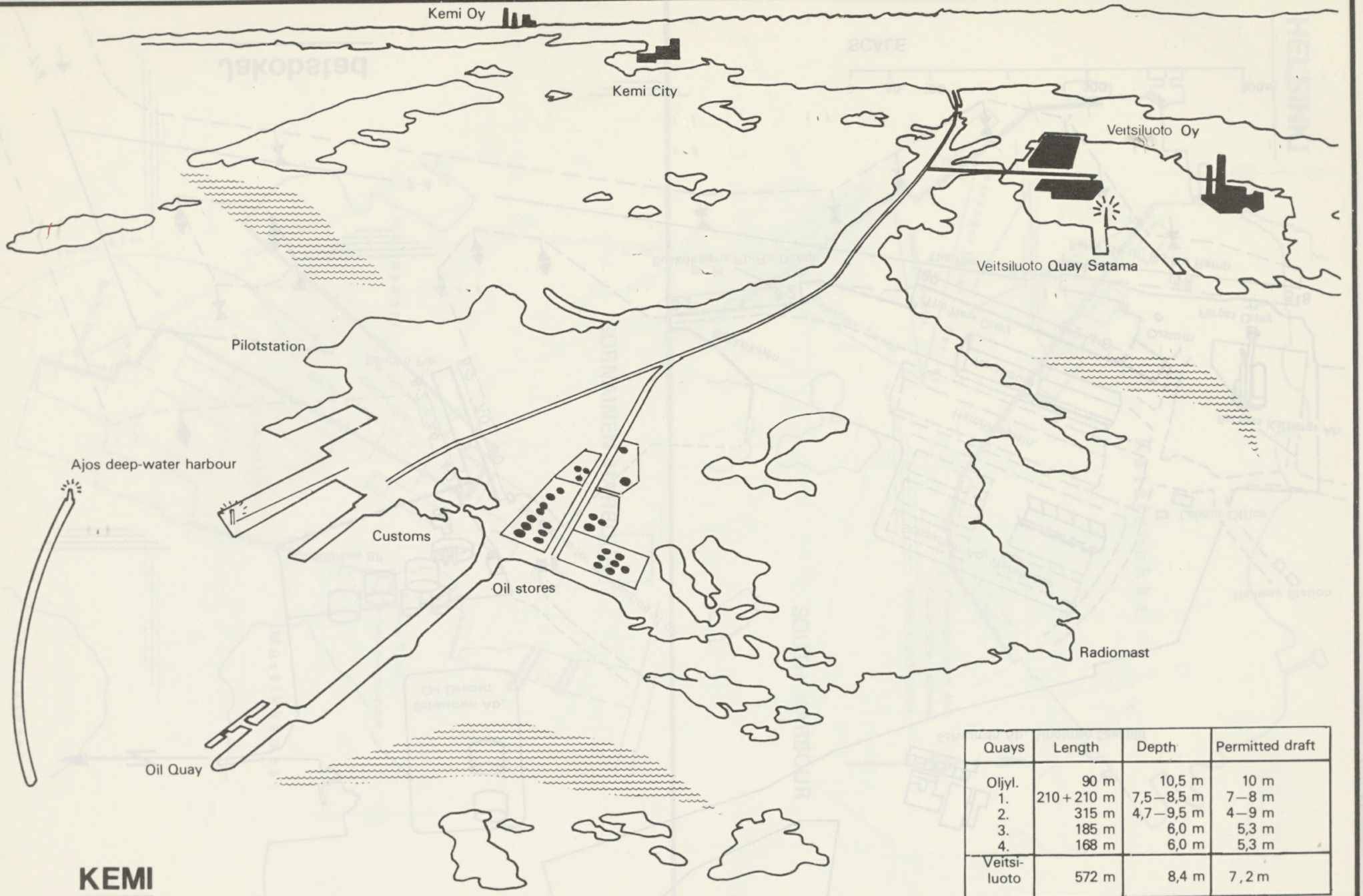

KEMI

Quays	Length	Depth	Permitted draft
Oljyl.	90 m	10,5 m	10 m
1.	210 + 210 m	7,5—8,5 m	7—8 m
2.	315 m	4,7—9,5 m	4—9 m
3.	185 m	6,0 m	5,3 m
4.	168 m	6,0 m	5,3 m
Veitsi-luoto	572 m	8,4 m	7,2 m

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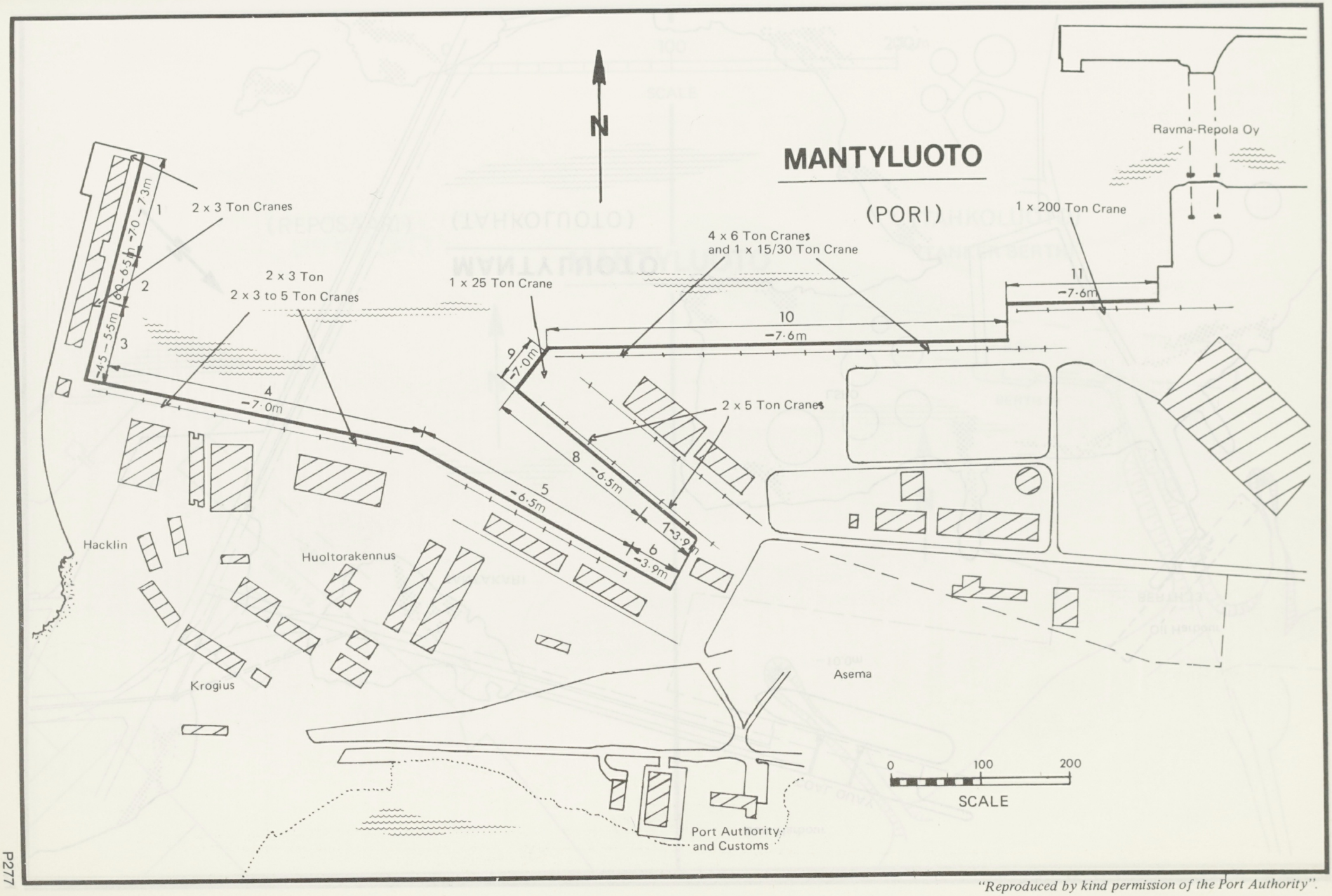

P277

FINLAND

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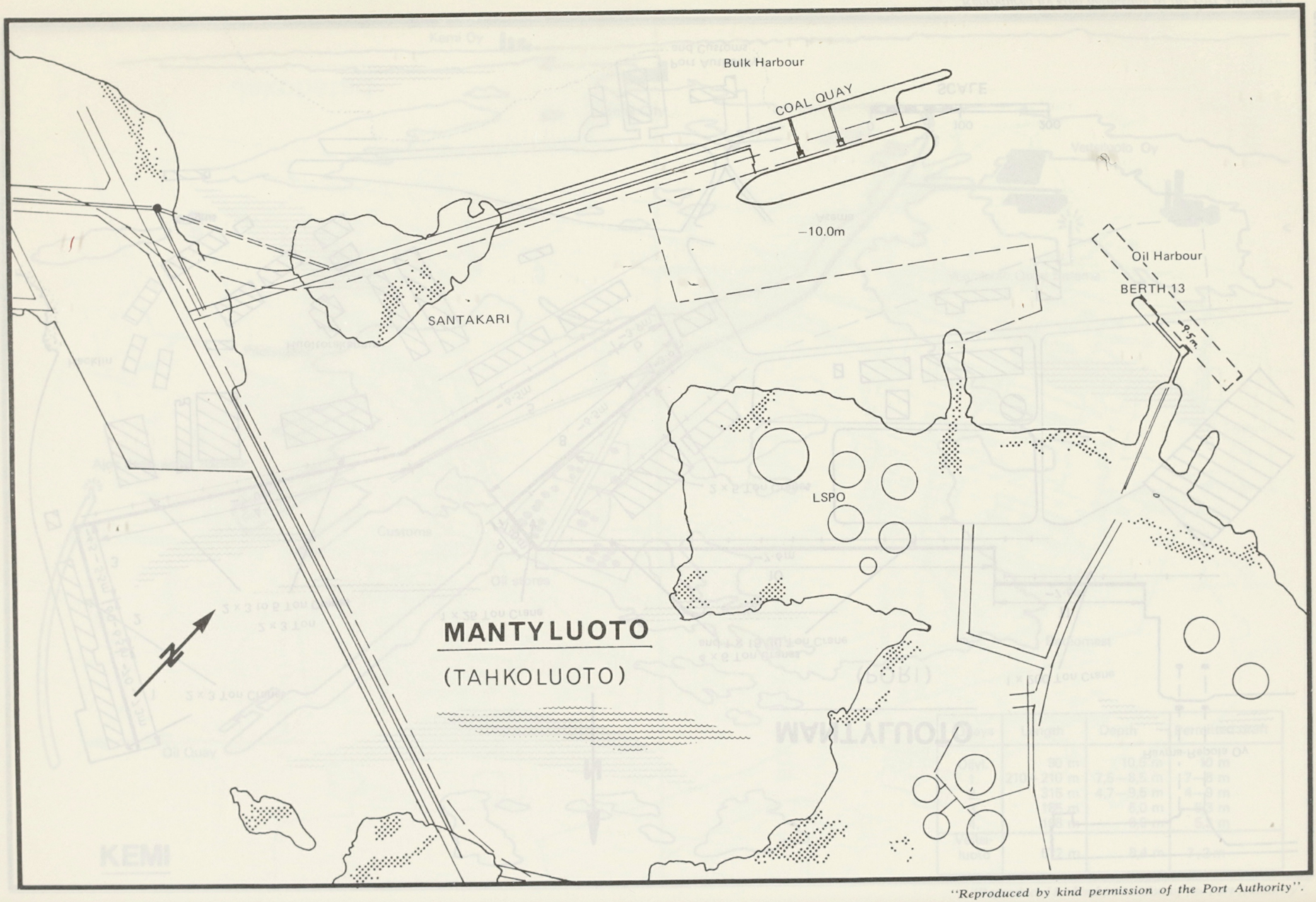

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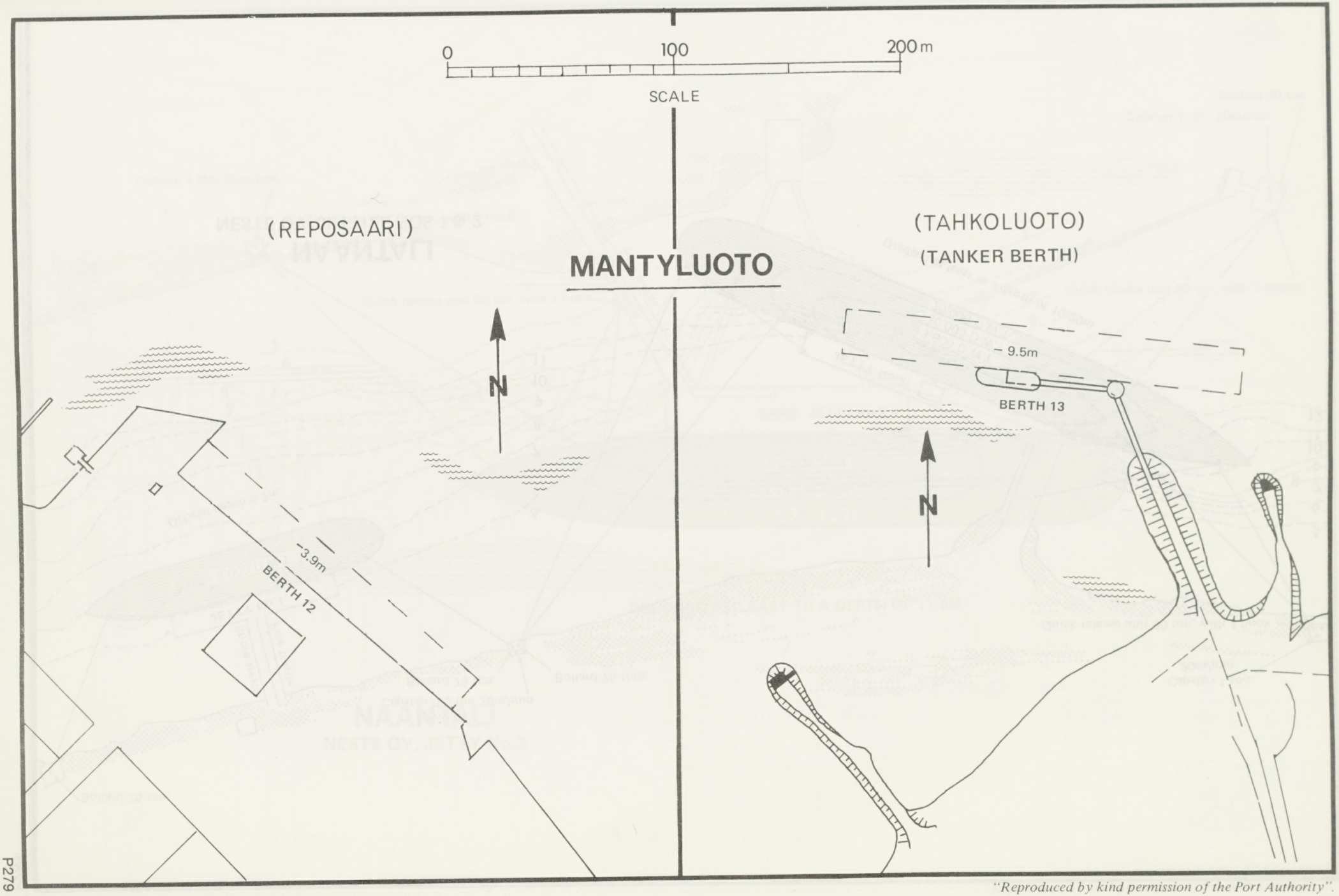

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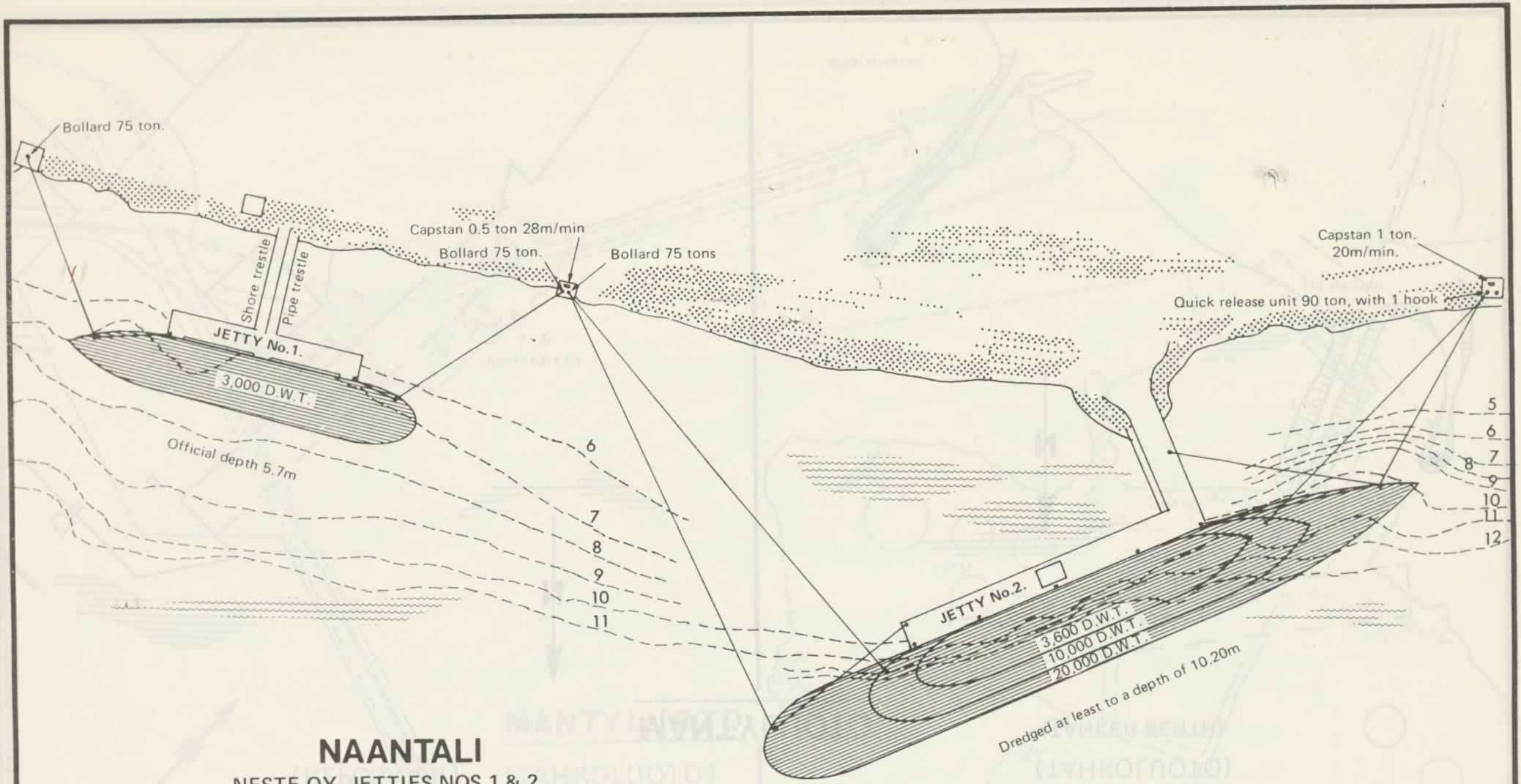
FINLAND



NAANTALI

NESTE OY, JETTIES NOS 1 & 2

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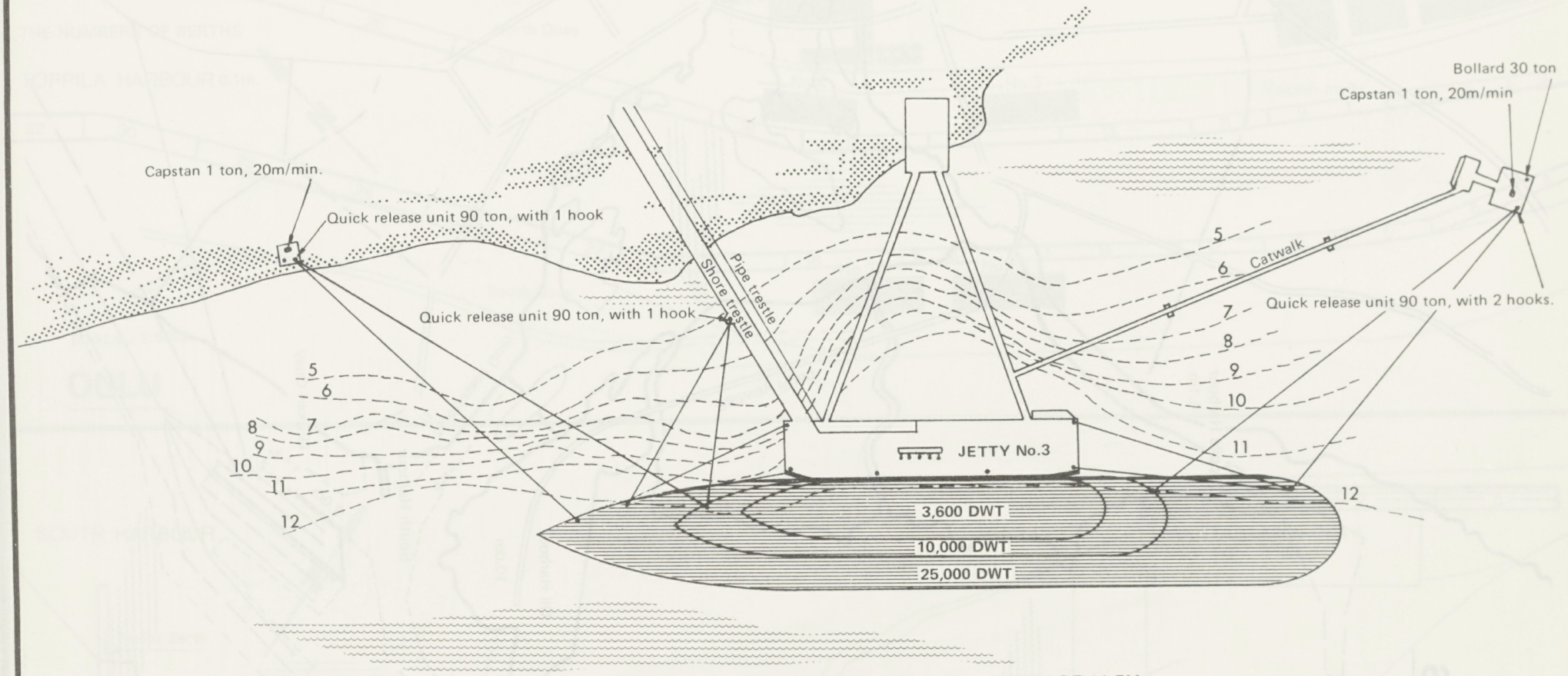

DREDGED AT LEAST TO A DEPTH OF 11.5M

NAANTALI

NESTE OY, JETTY No.3

FINLAND

P281

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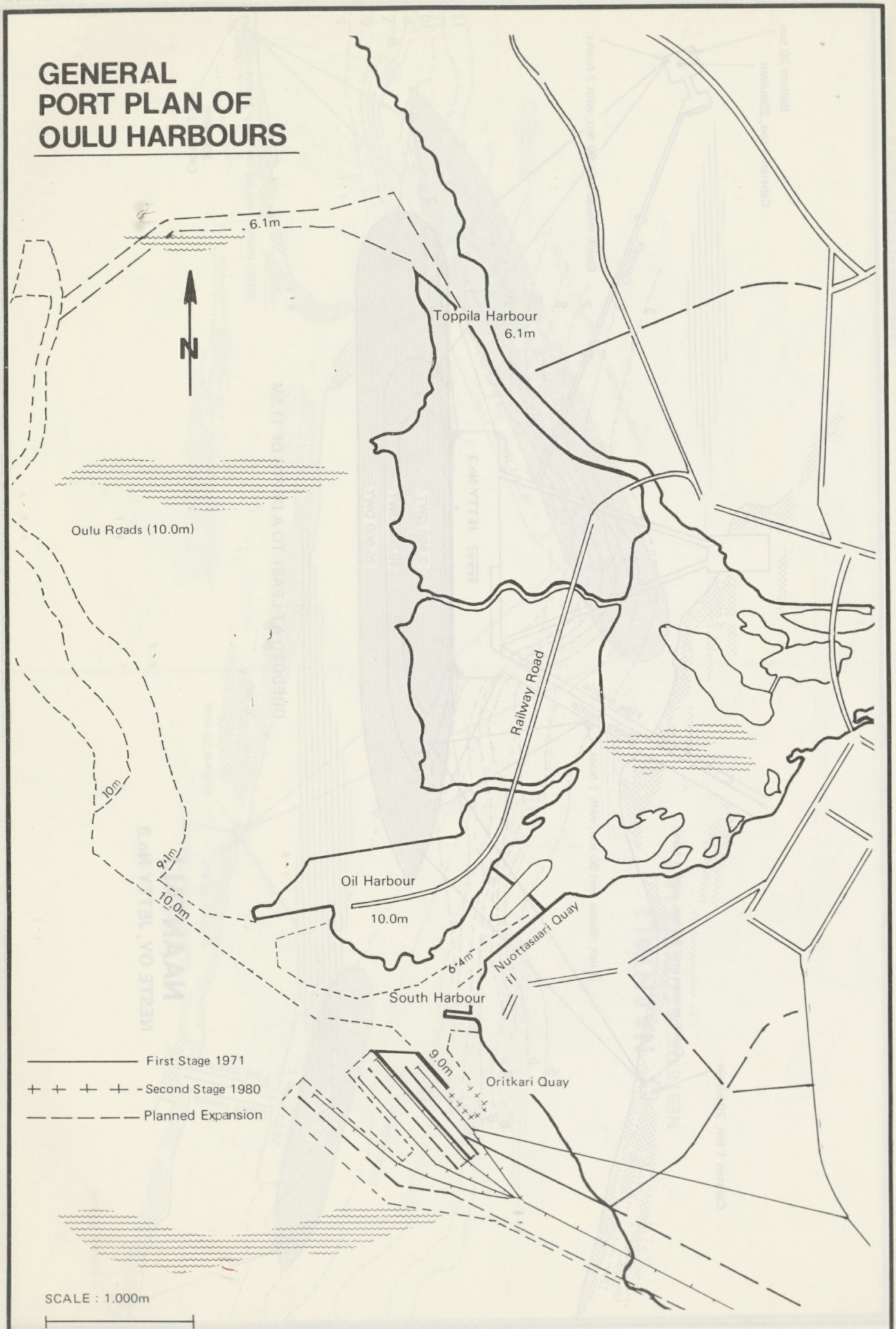

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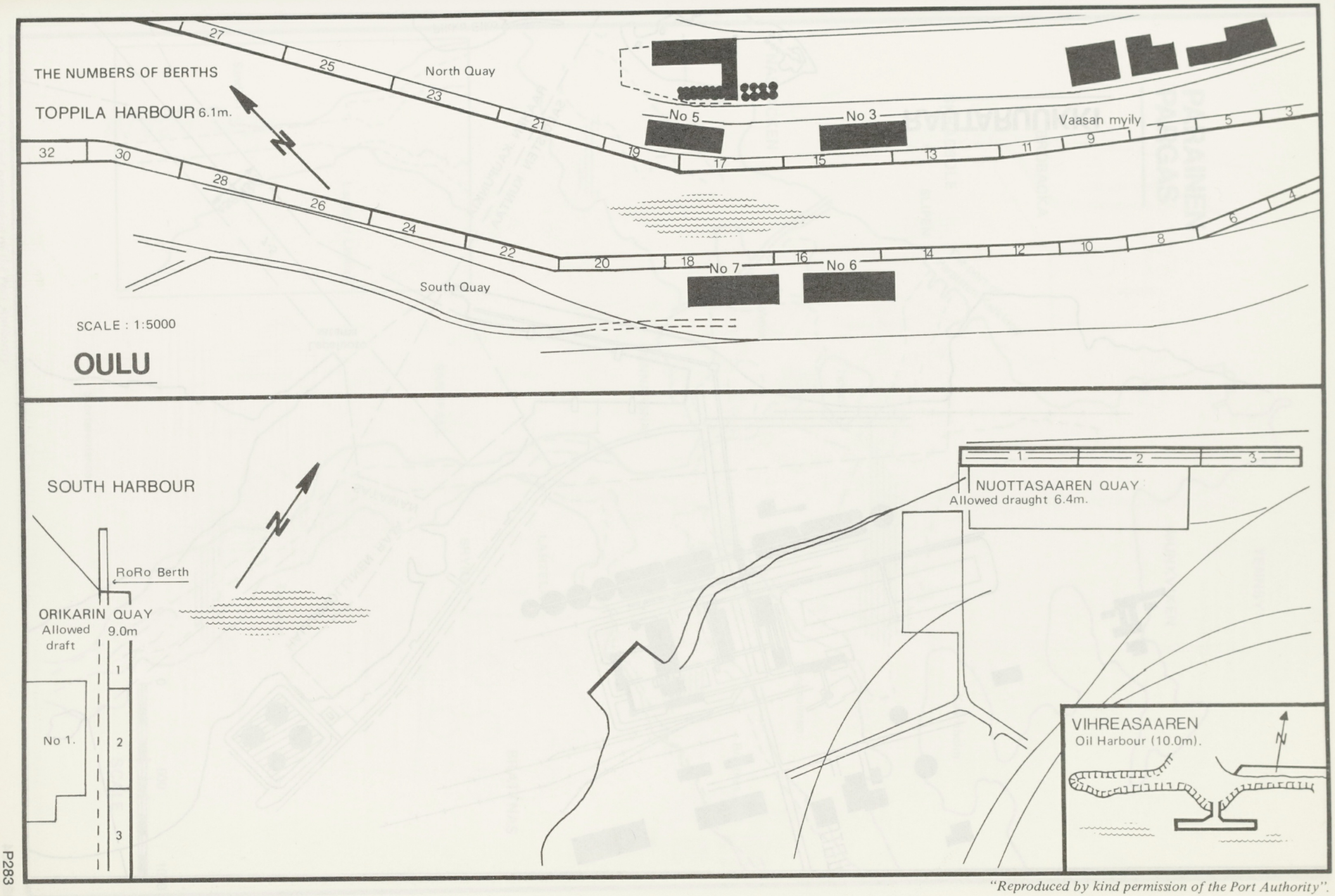

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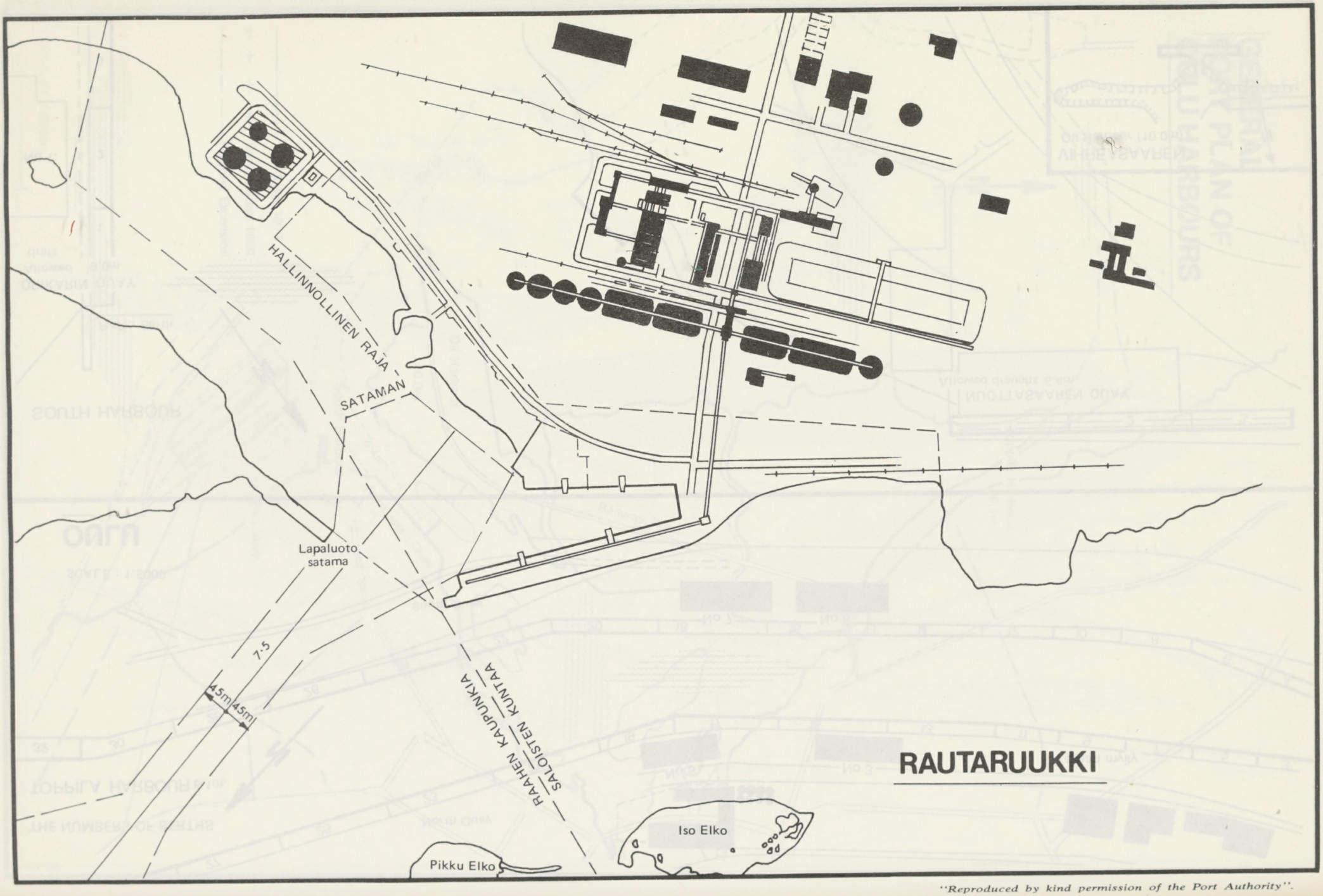

RAUTARUUKKI

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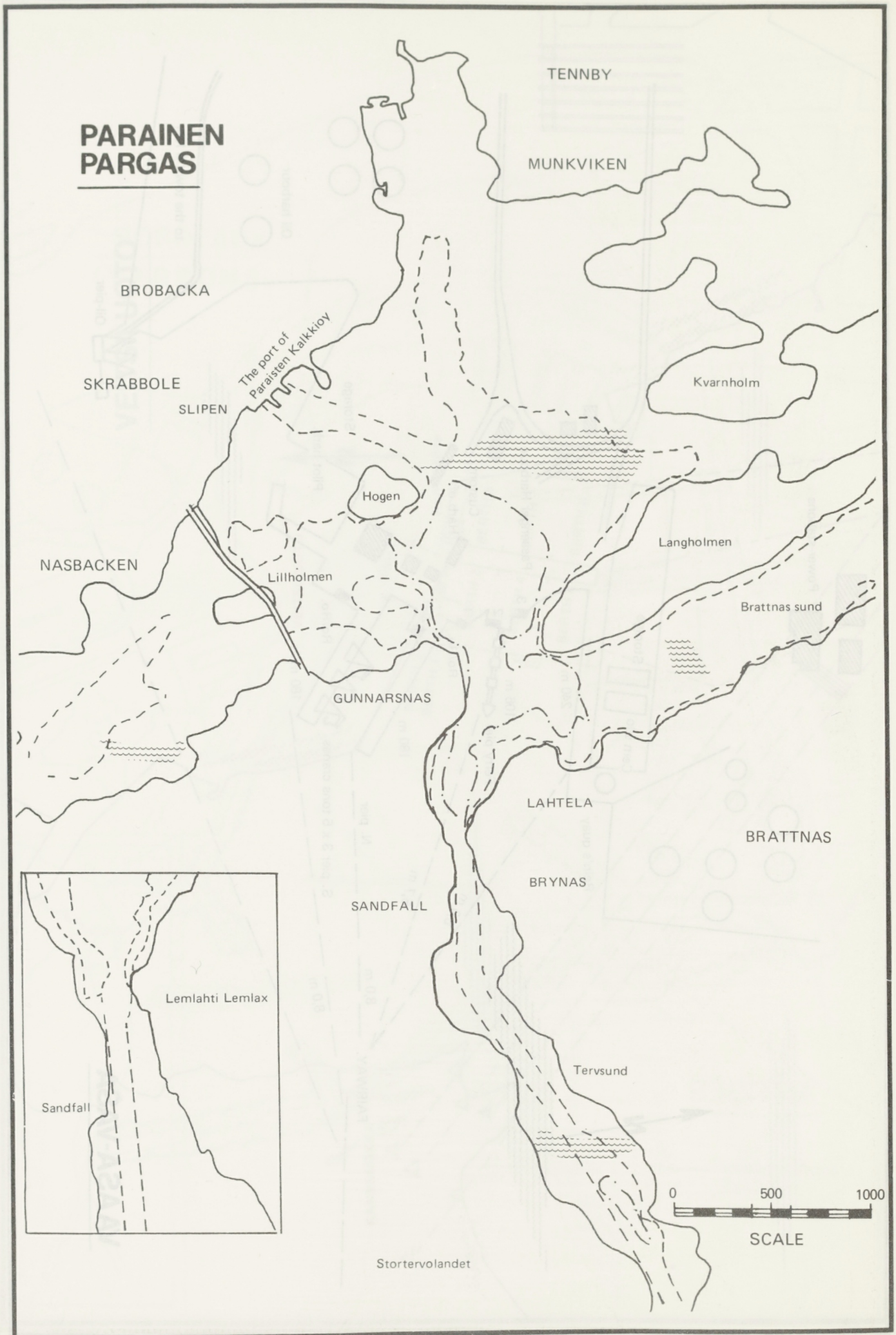

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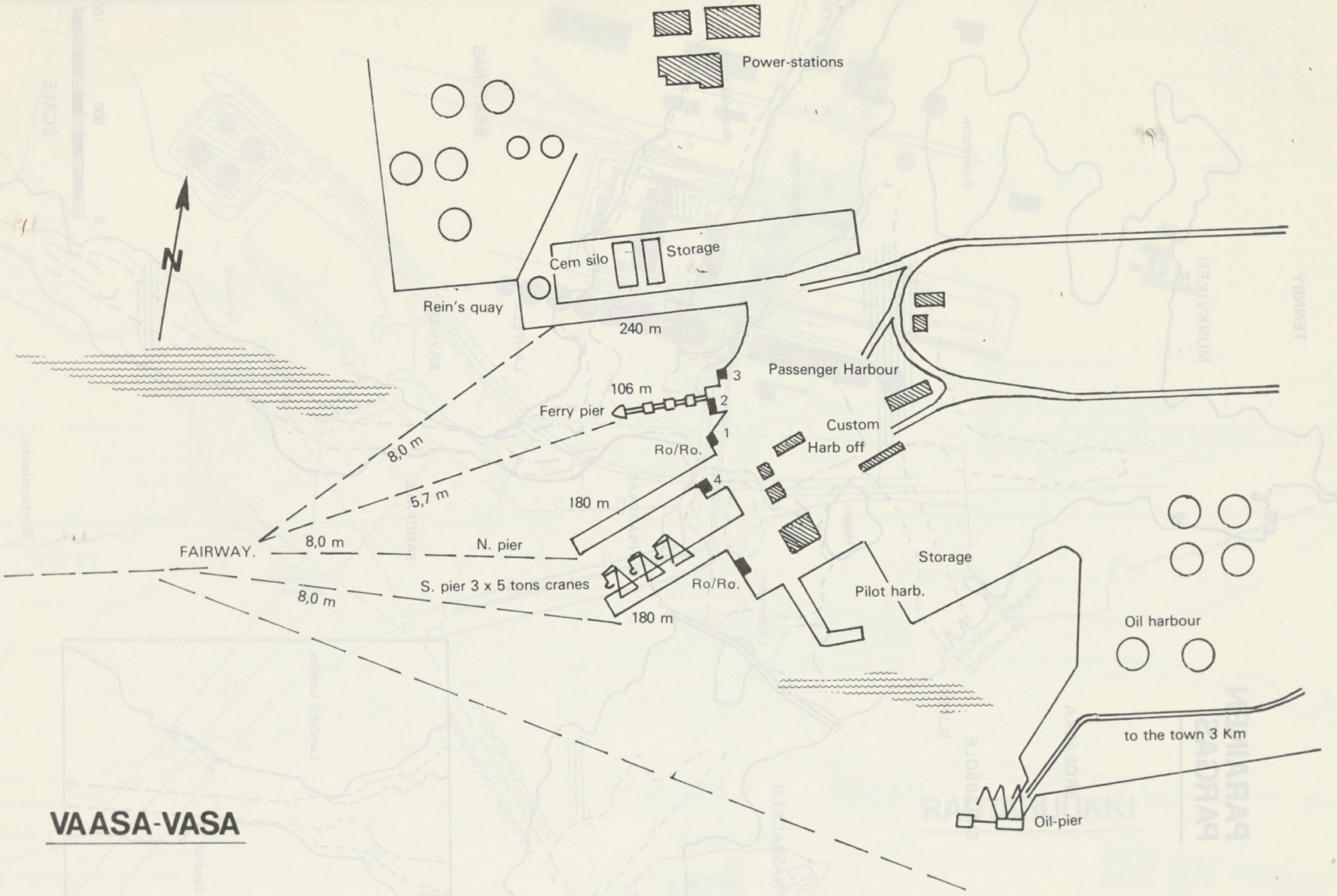

VAASA-VASA

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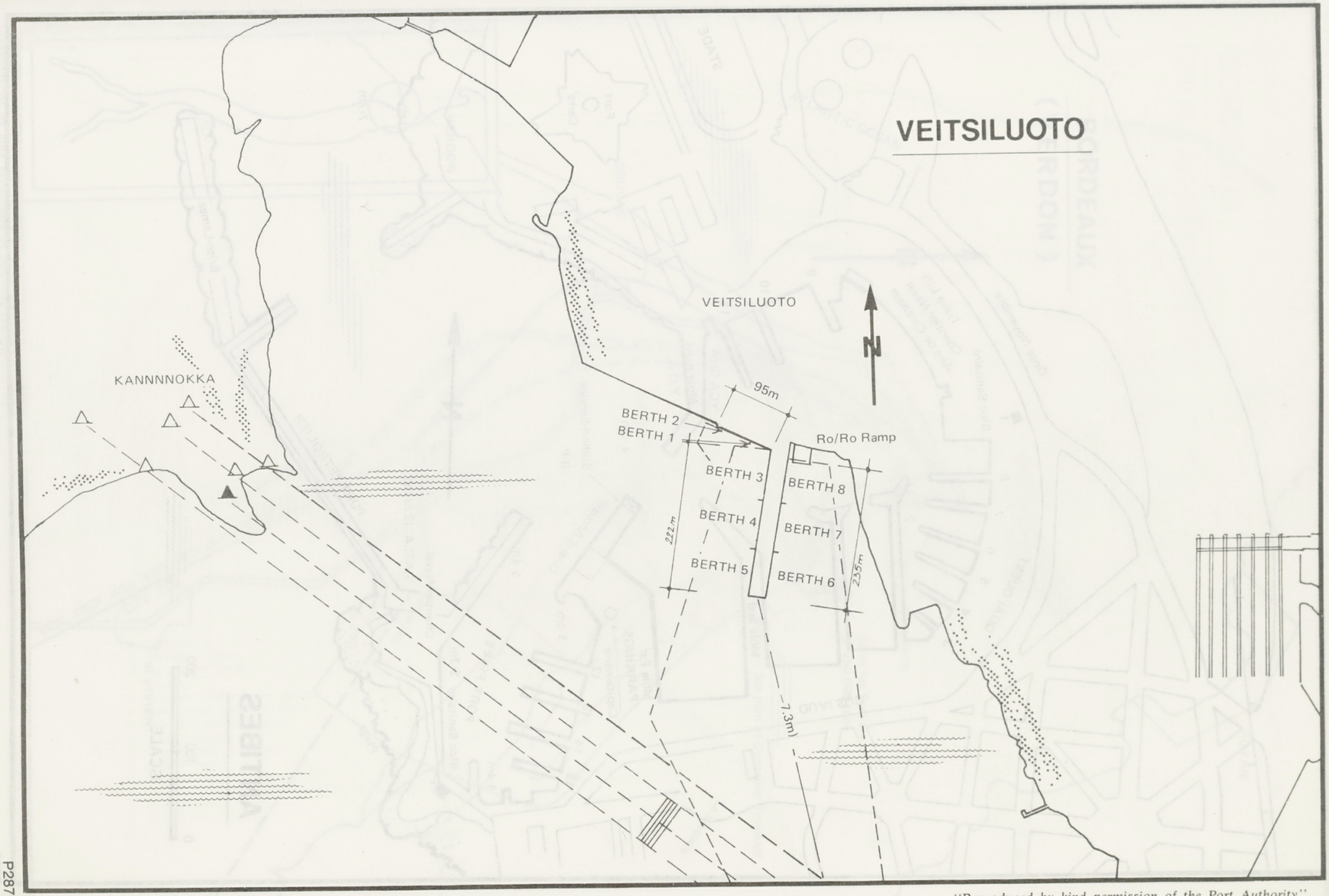

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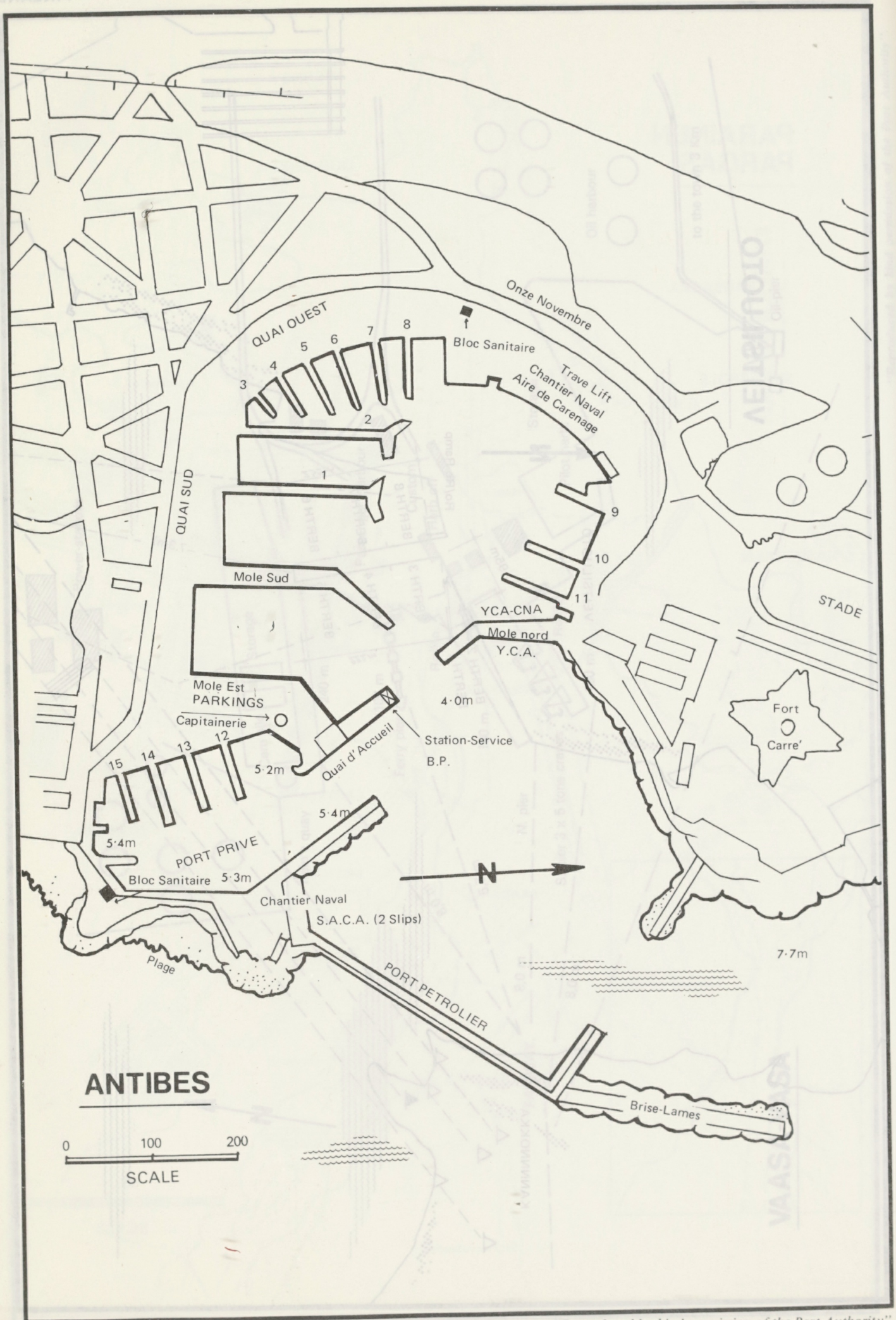

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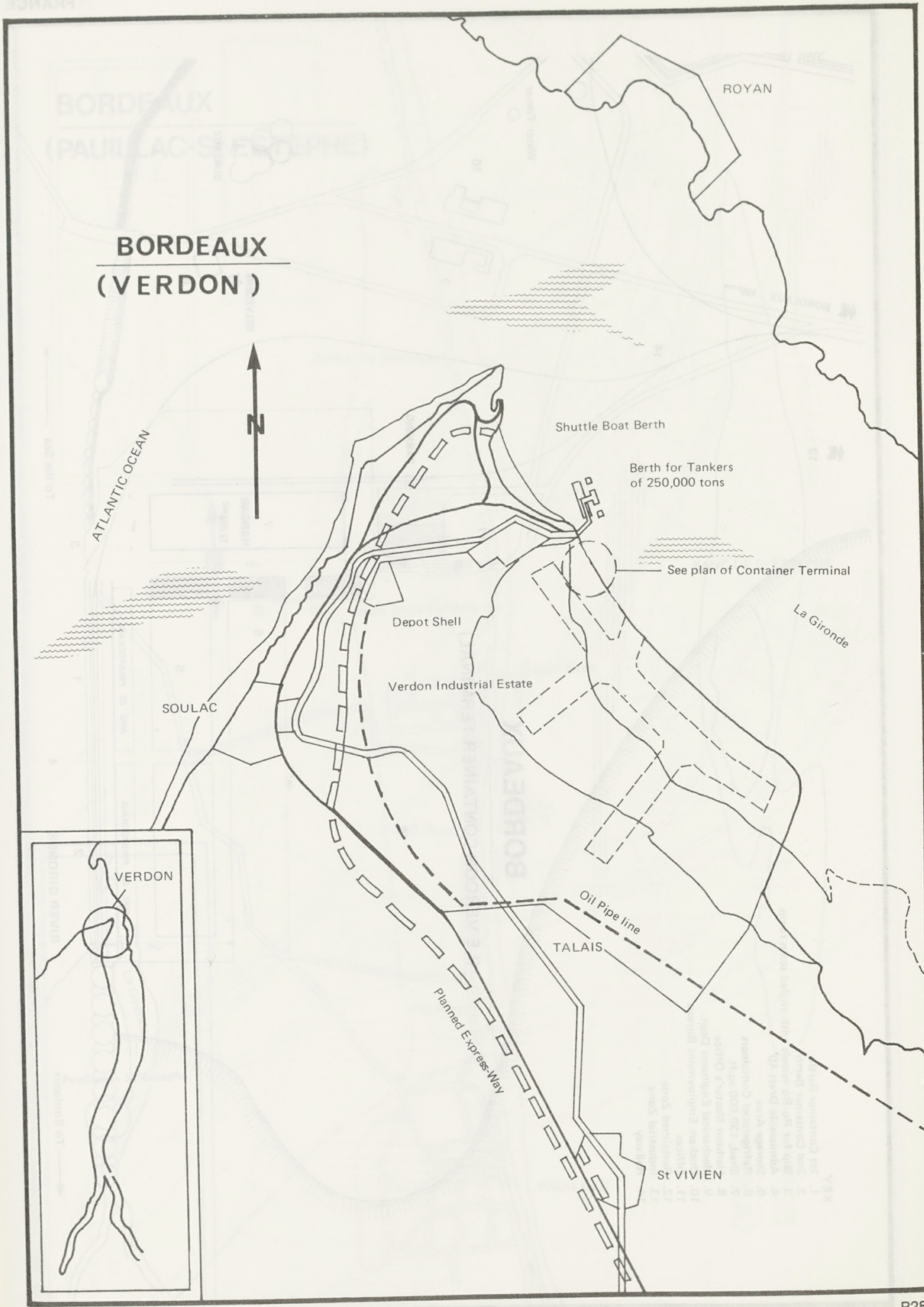

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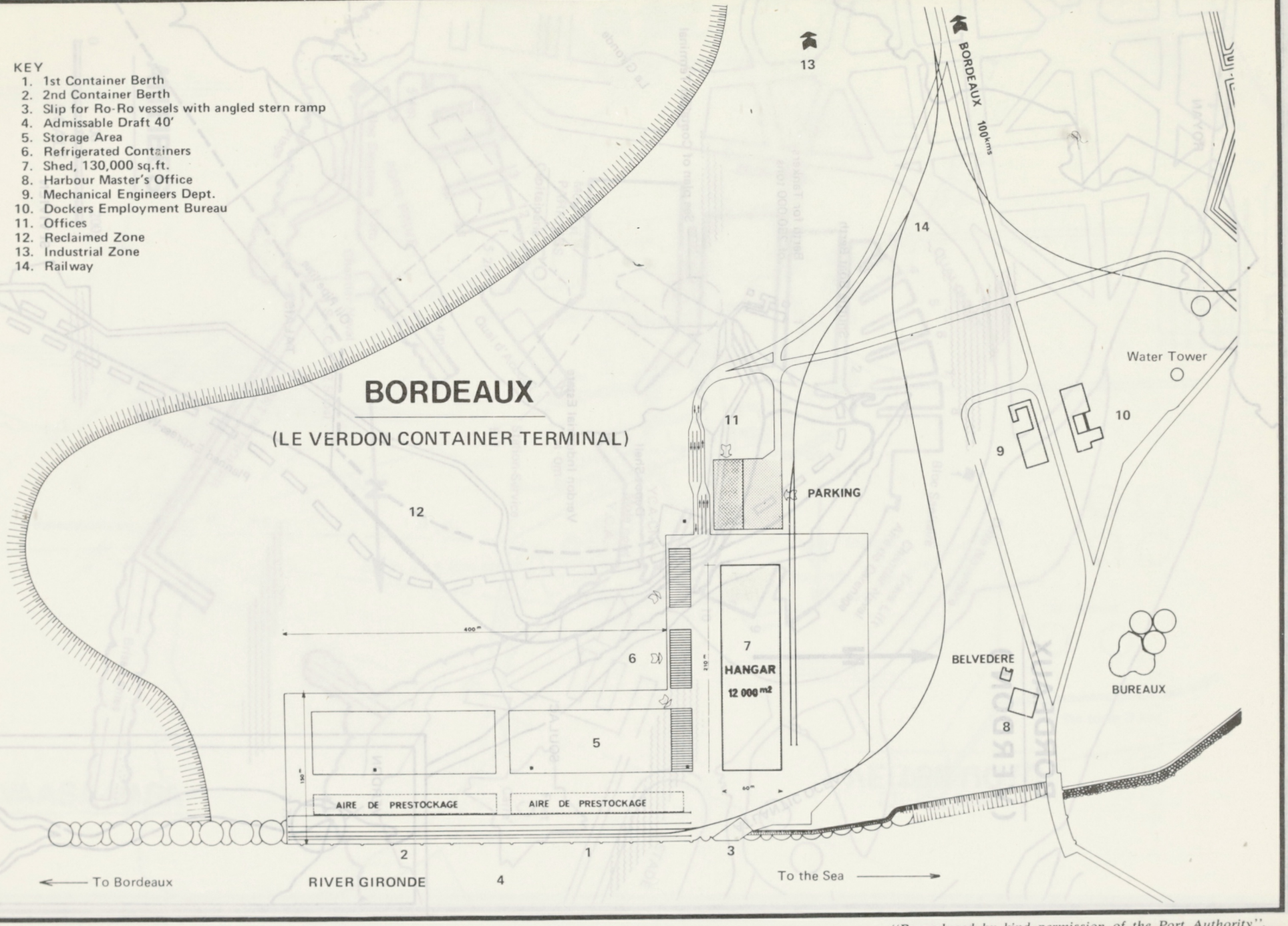

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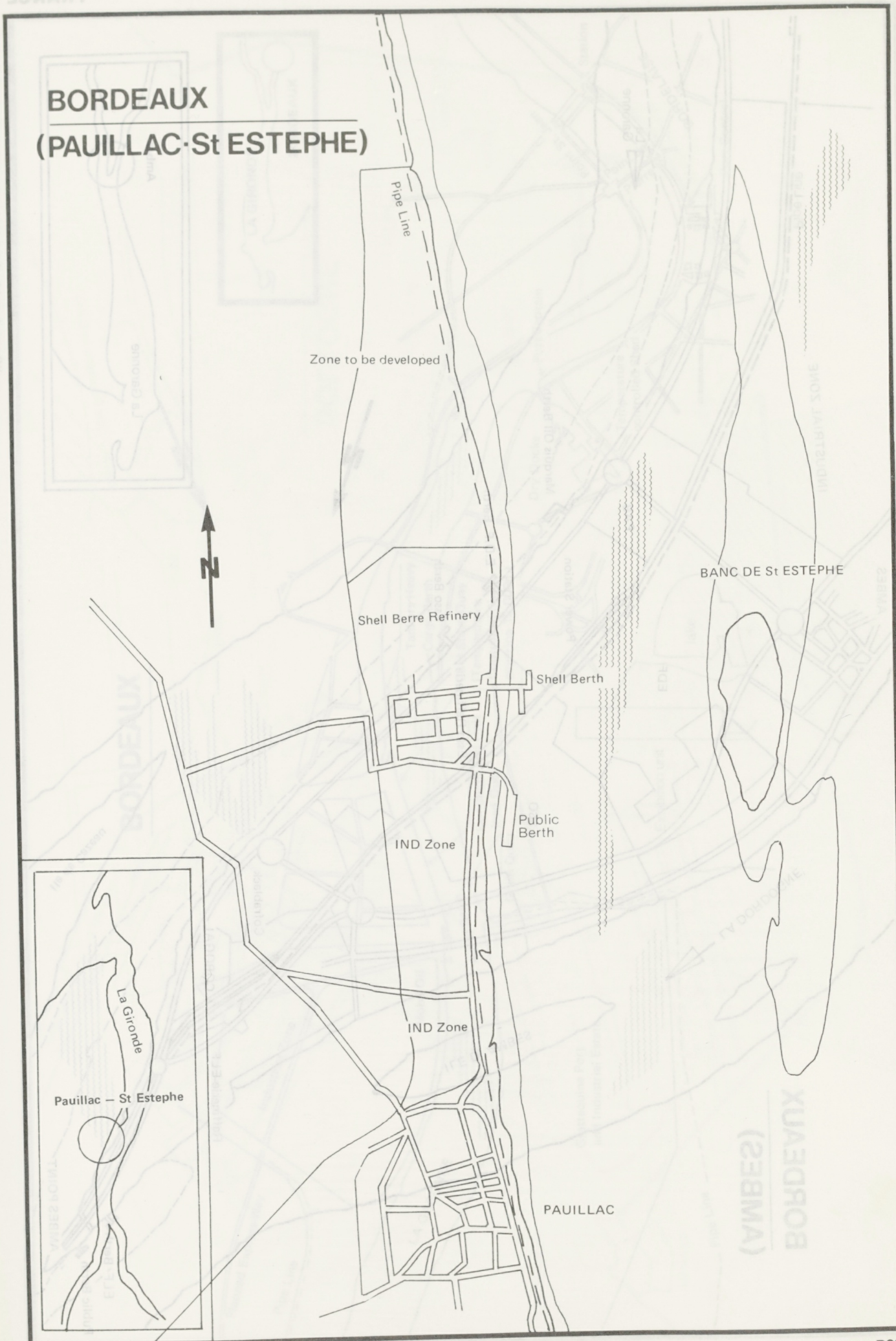

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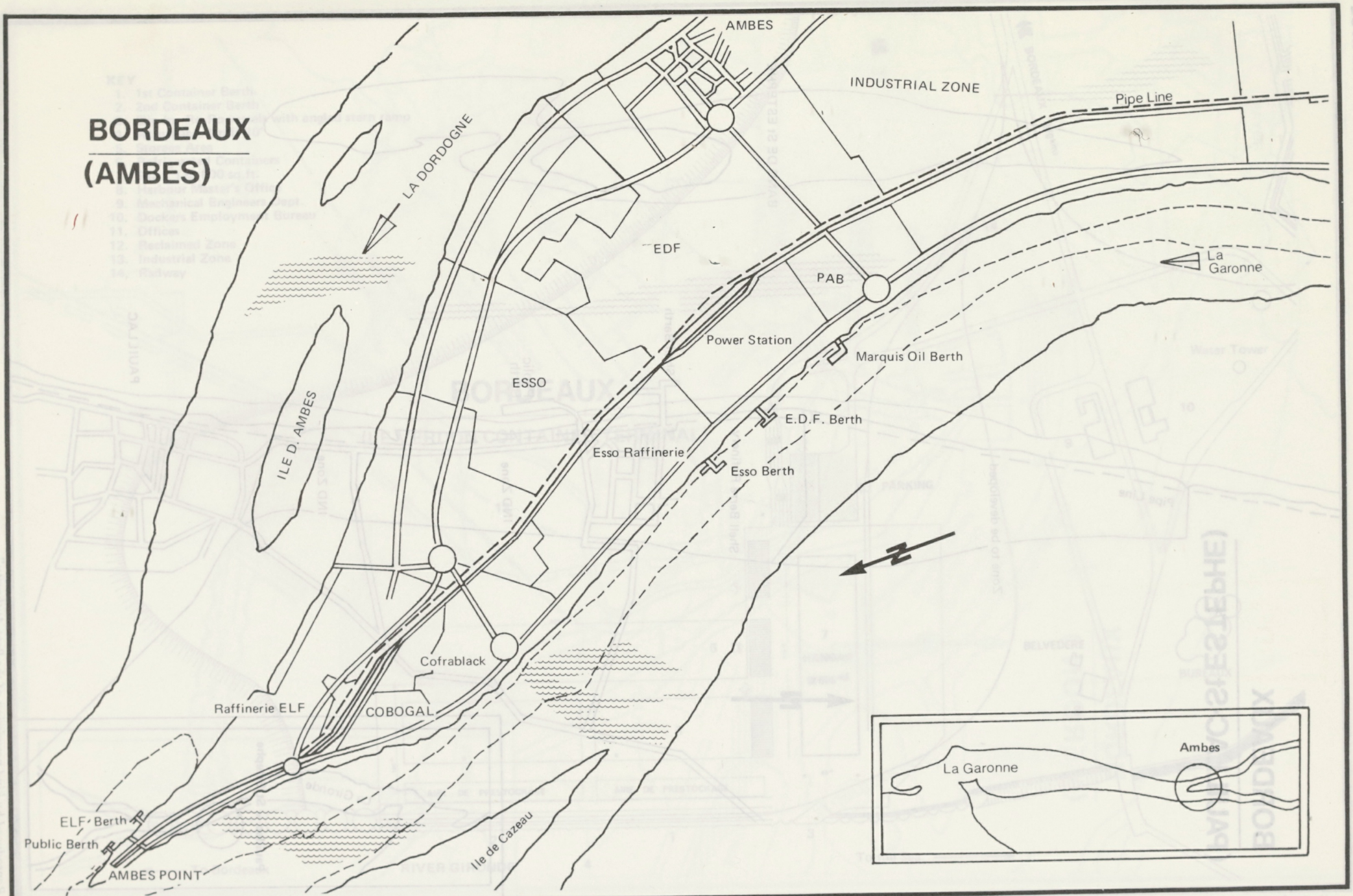

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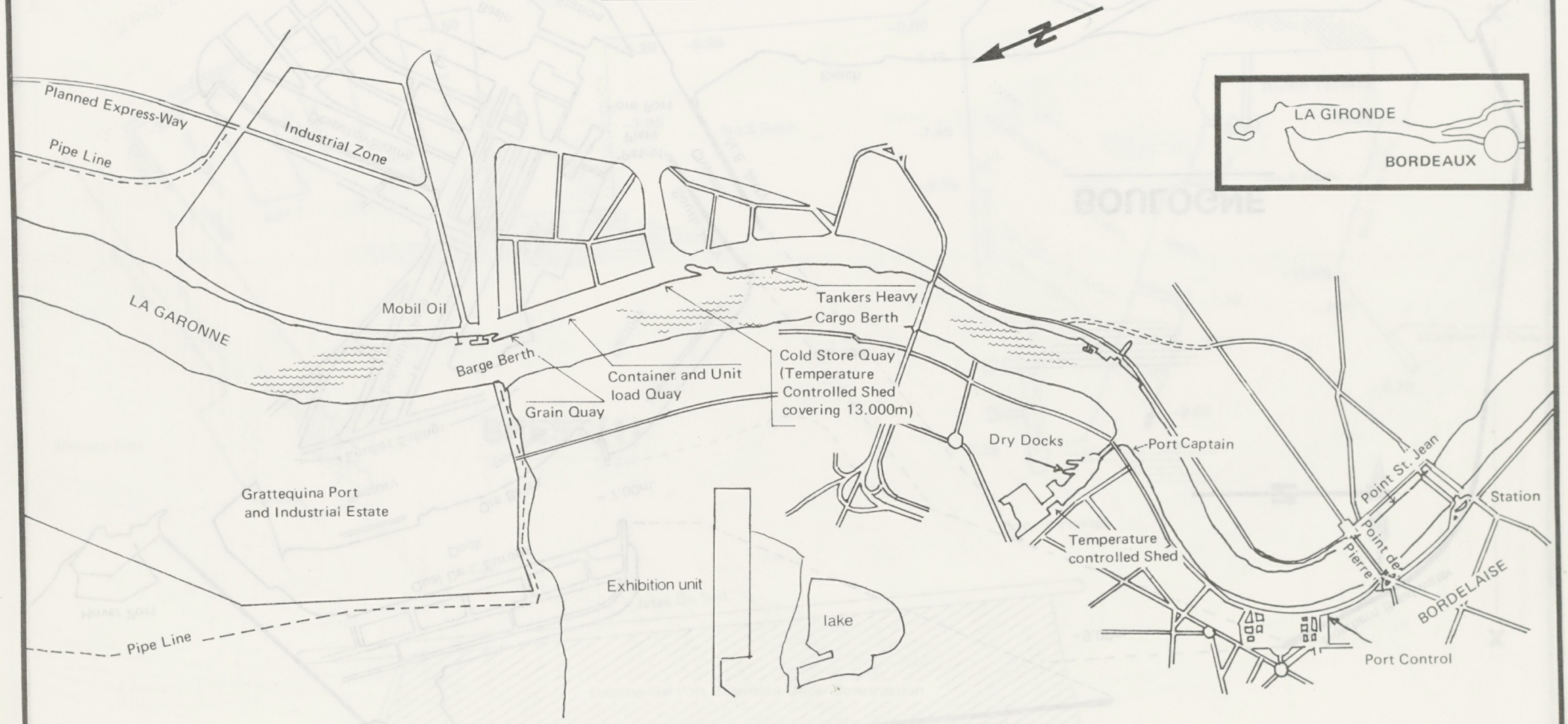
BORDEAUX



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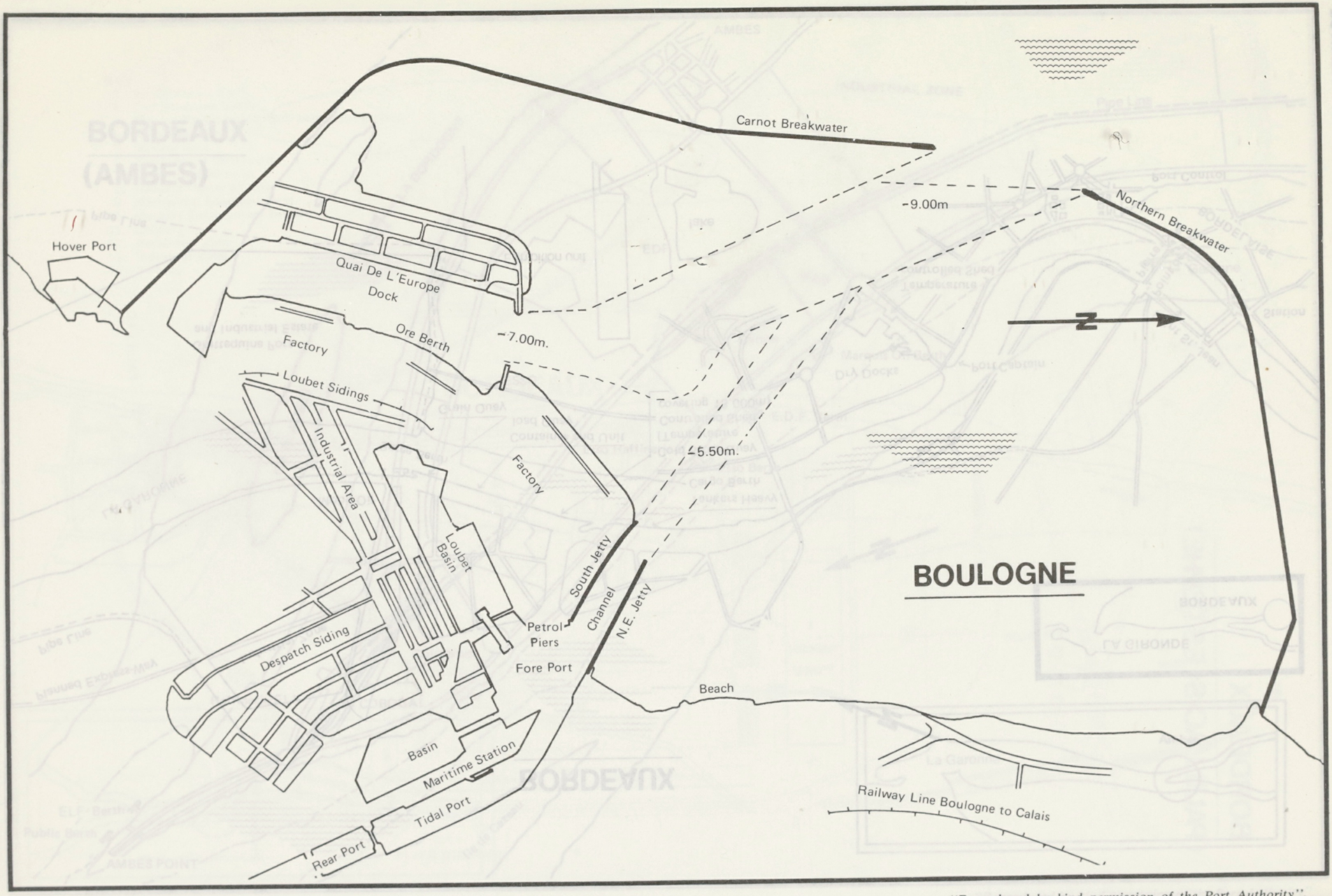

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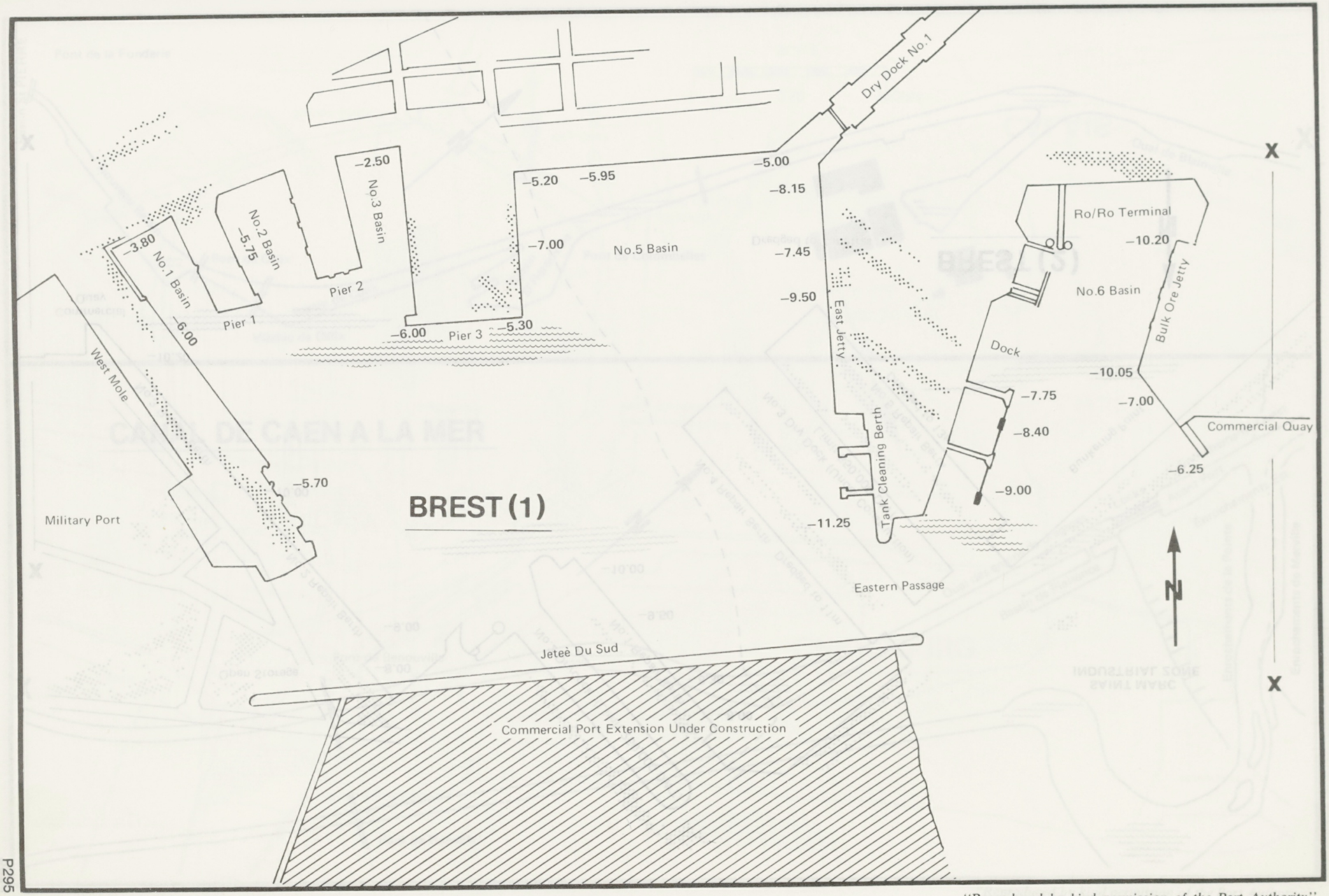

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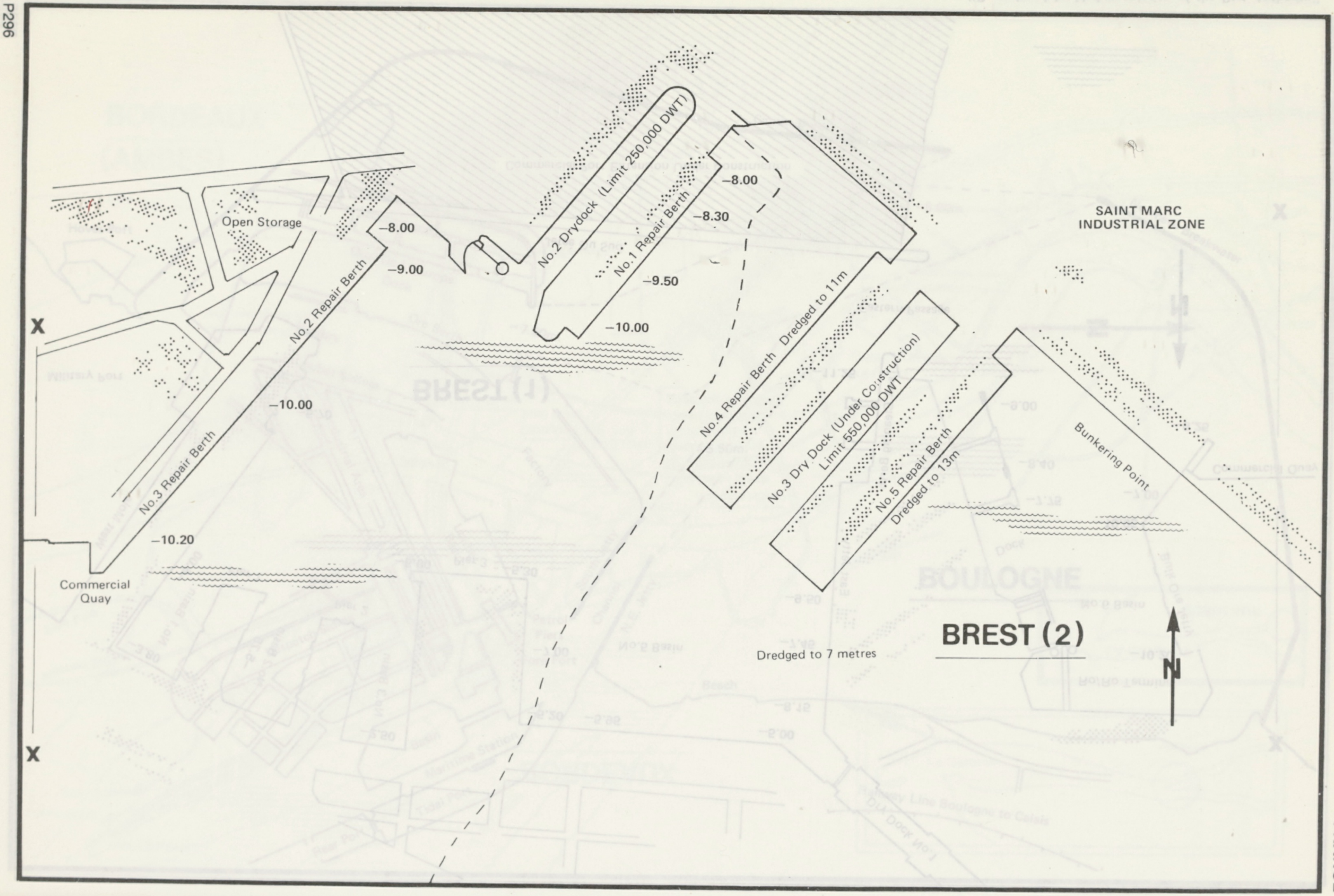

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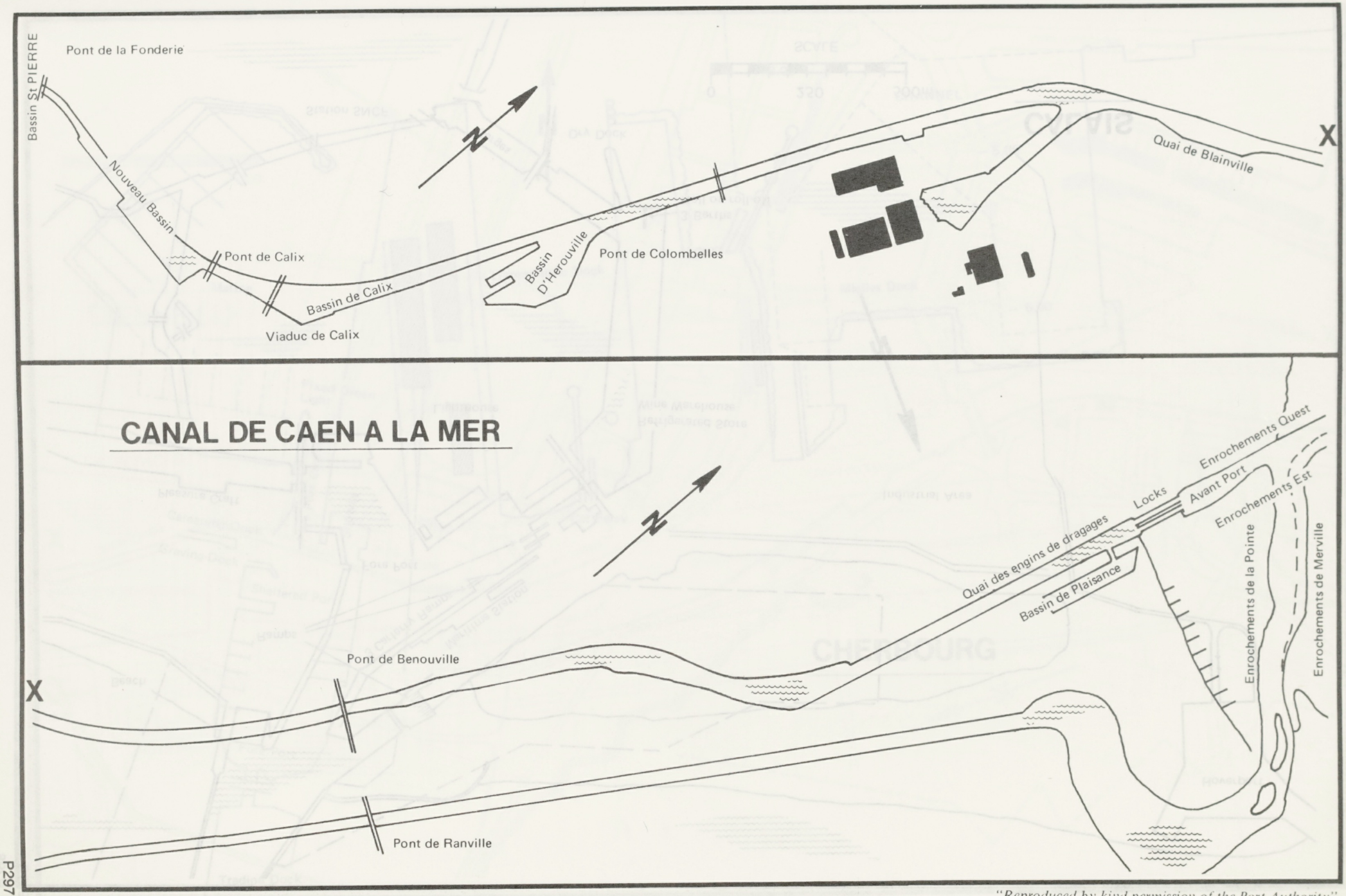

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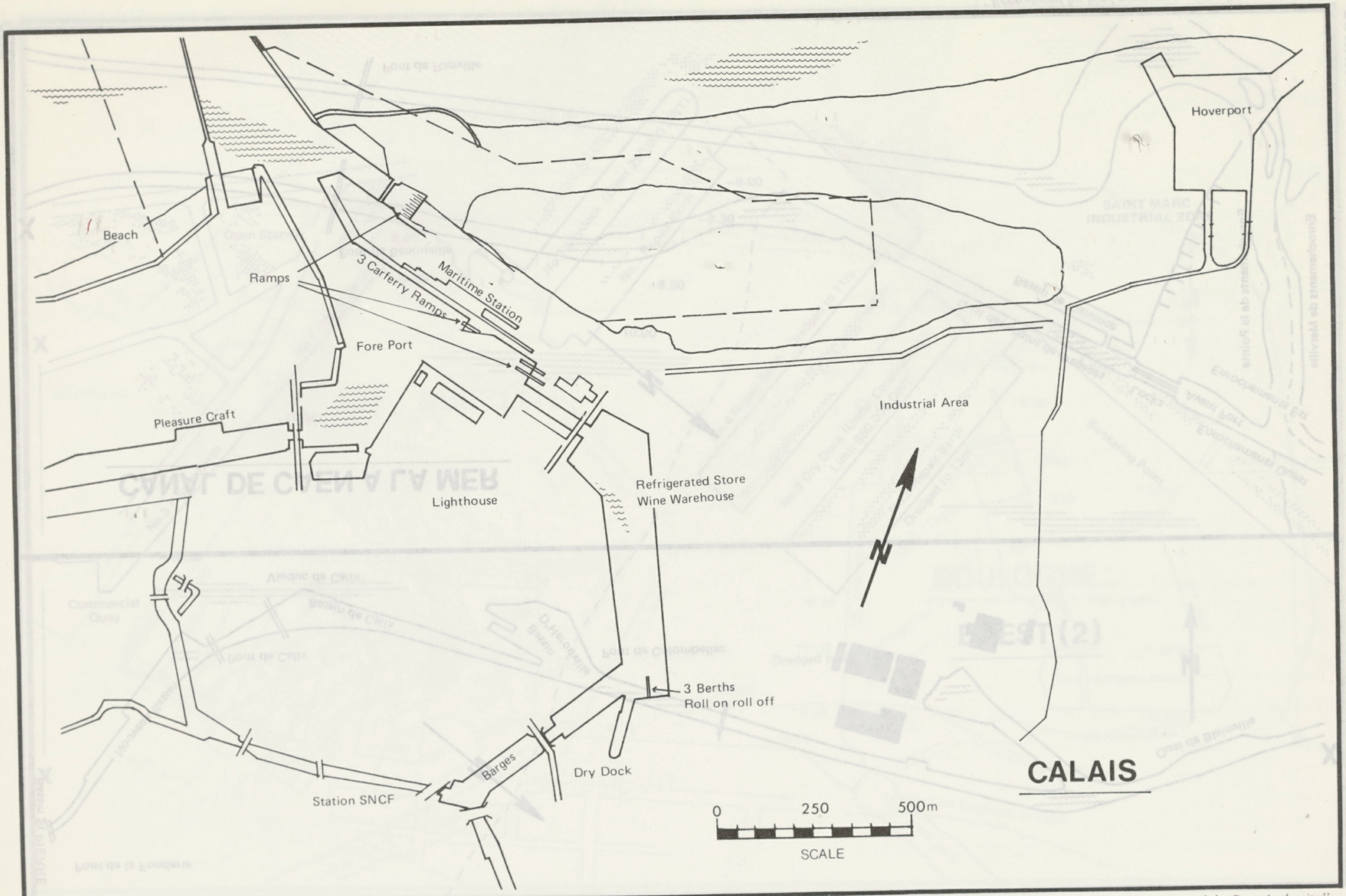

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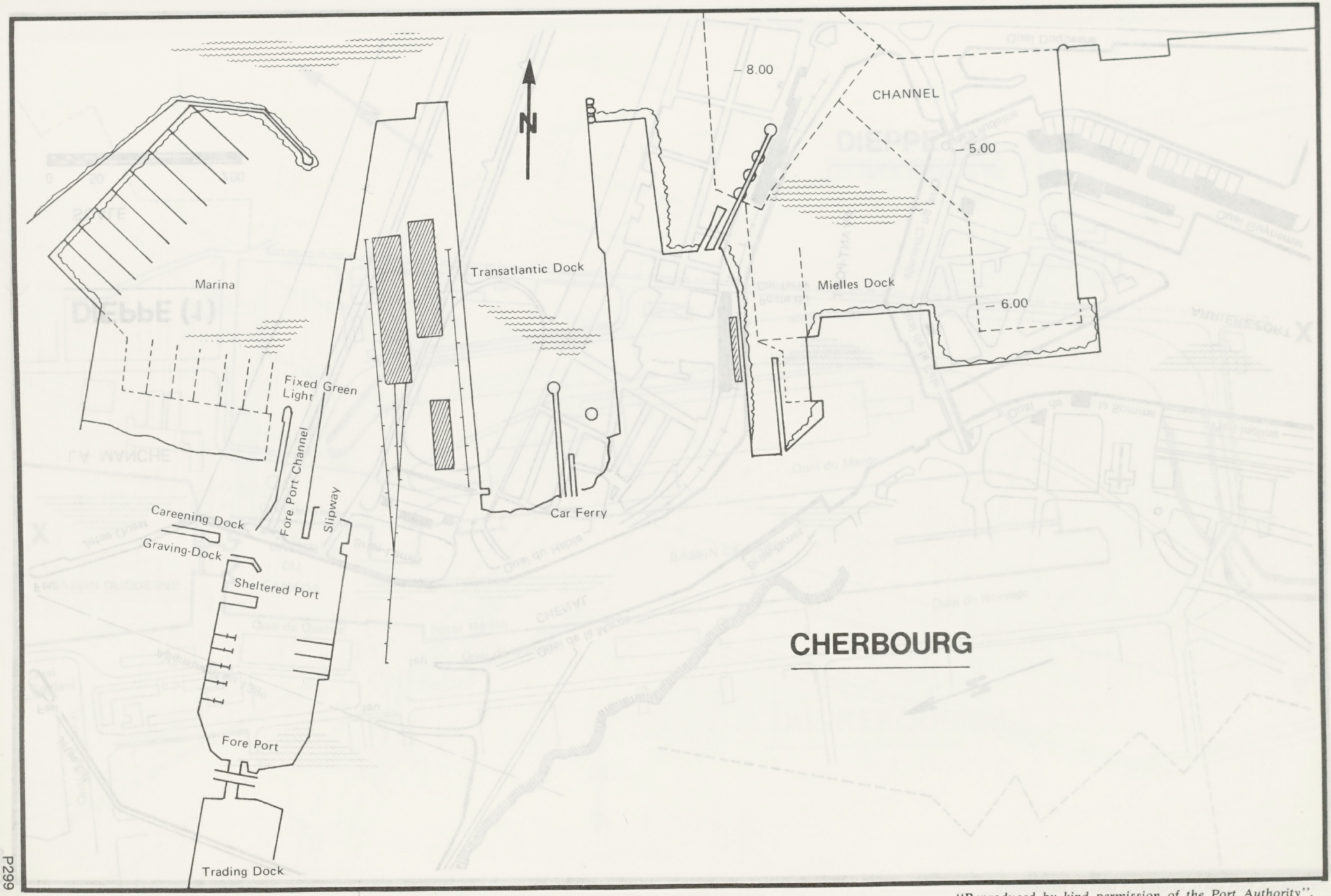

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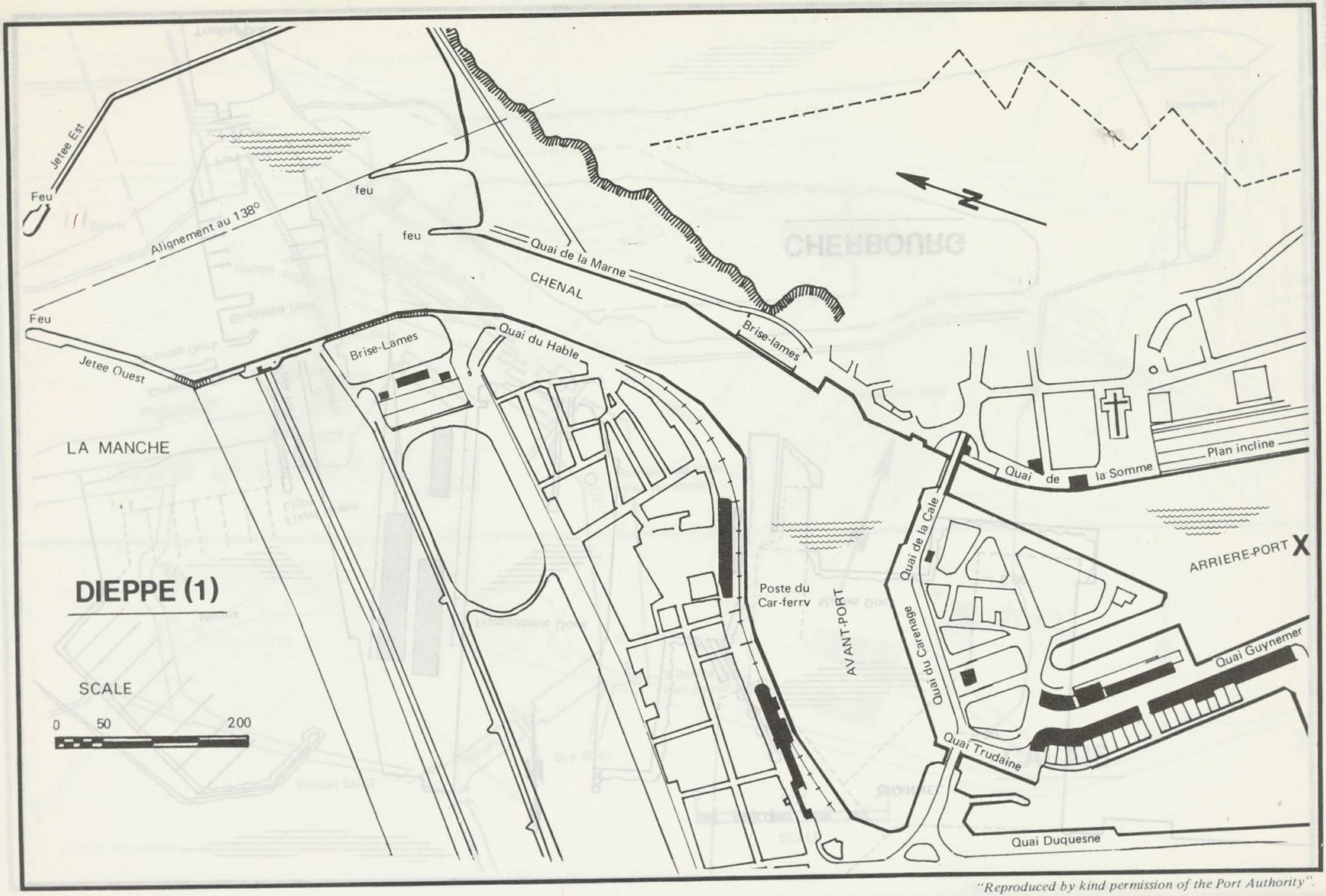

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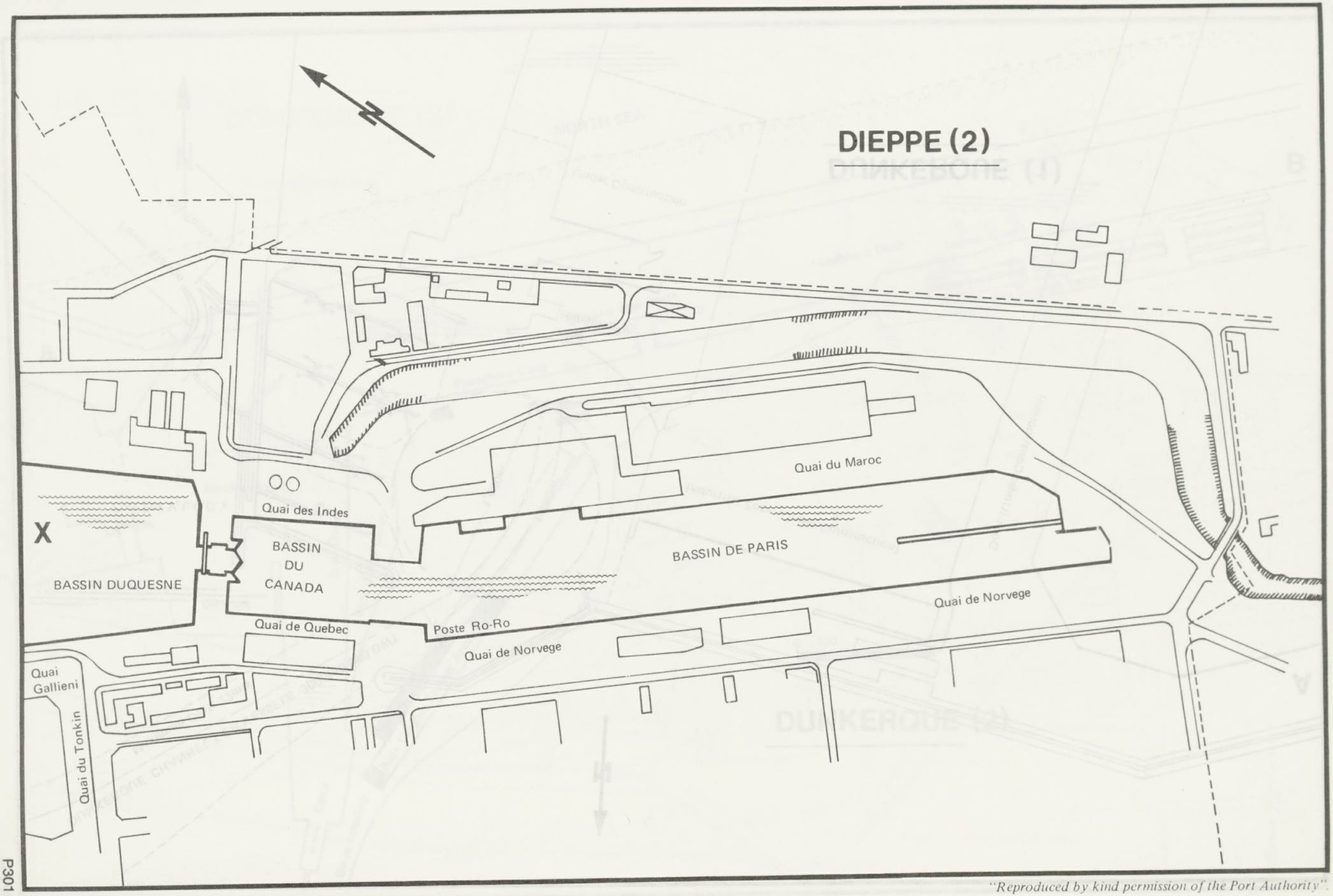

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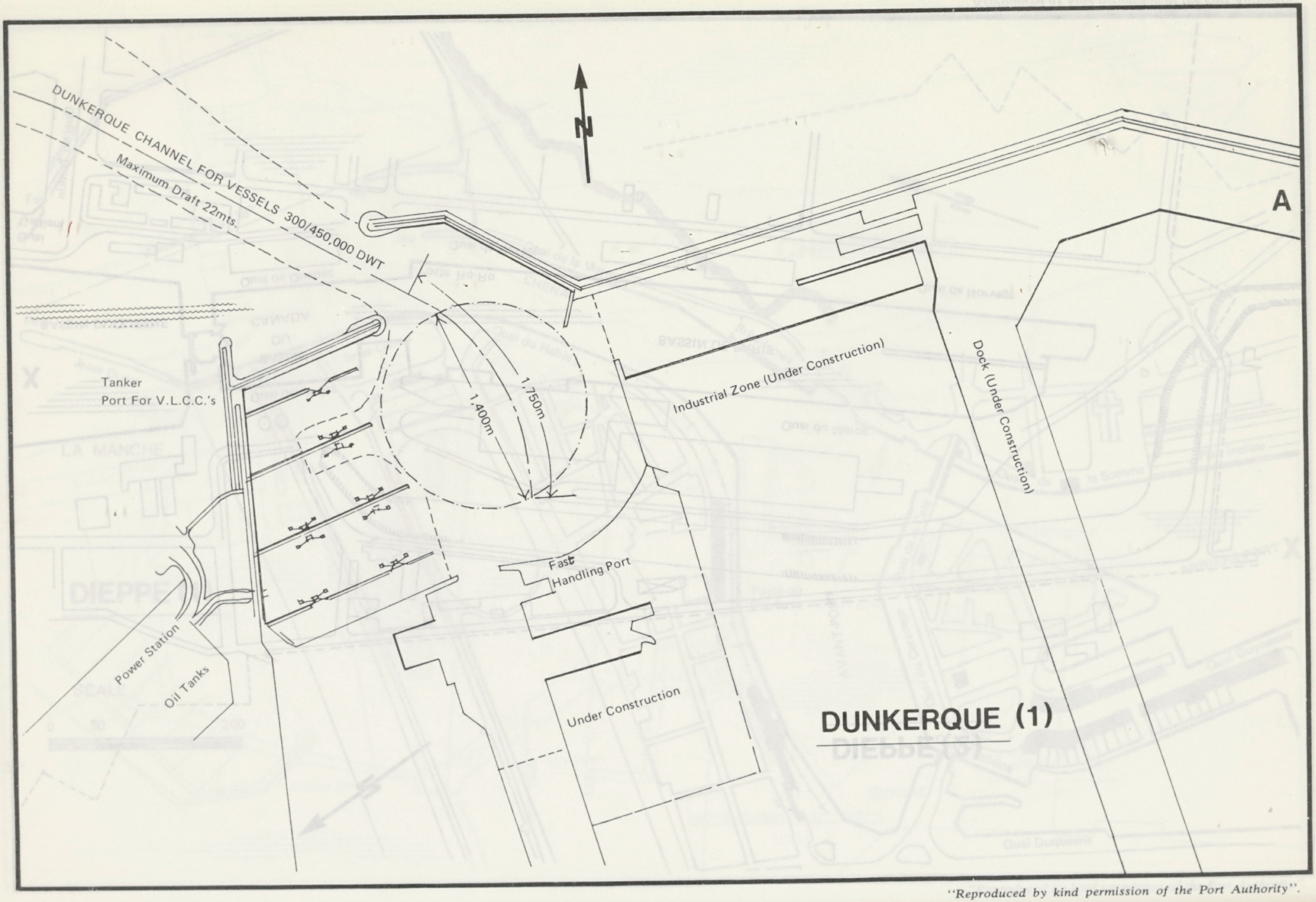

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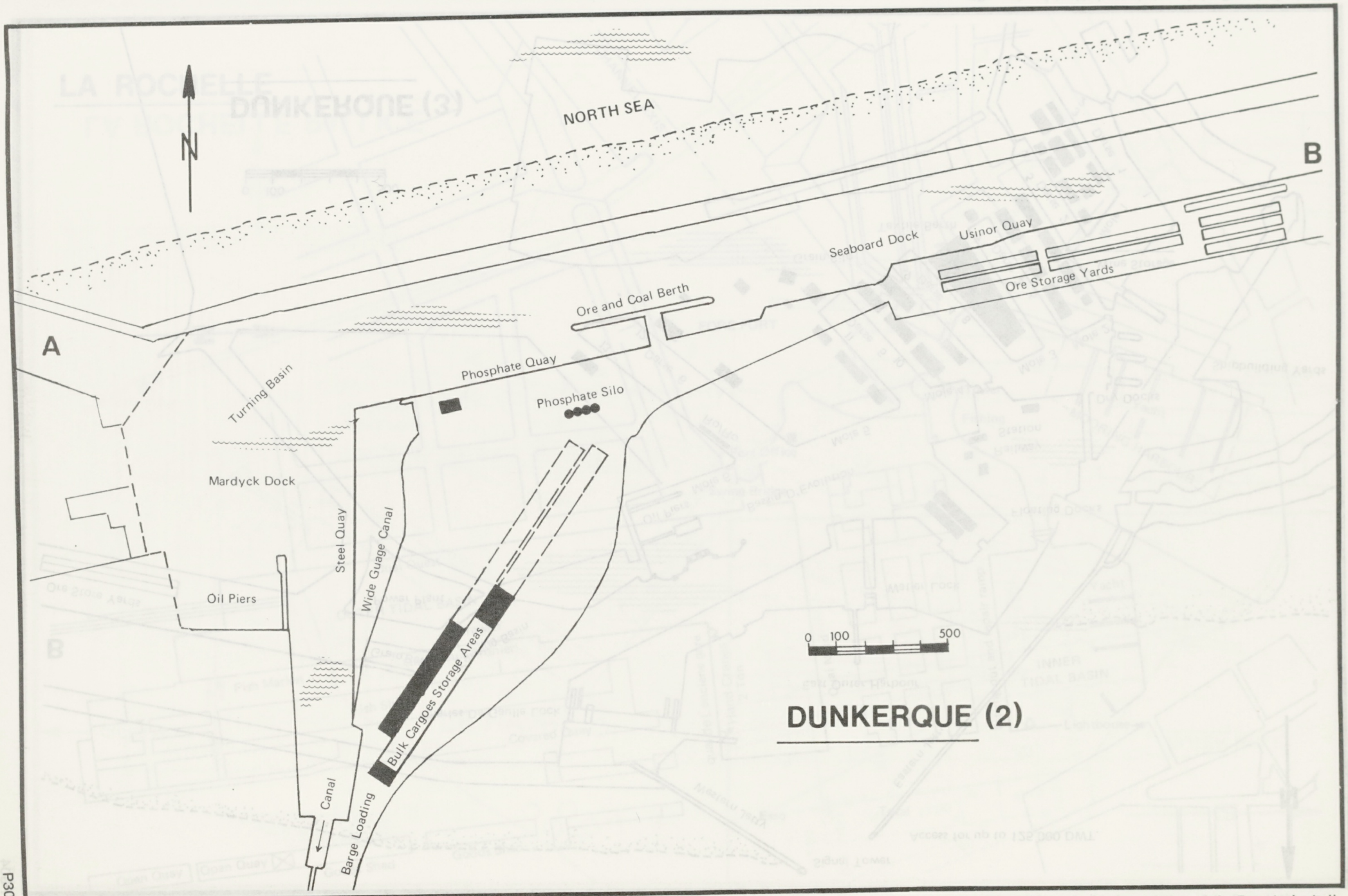

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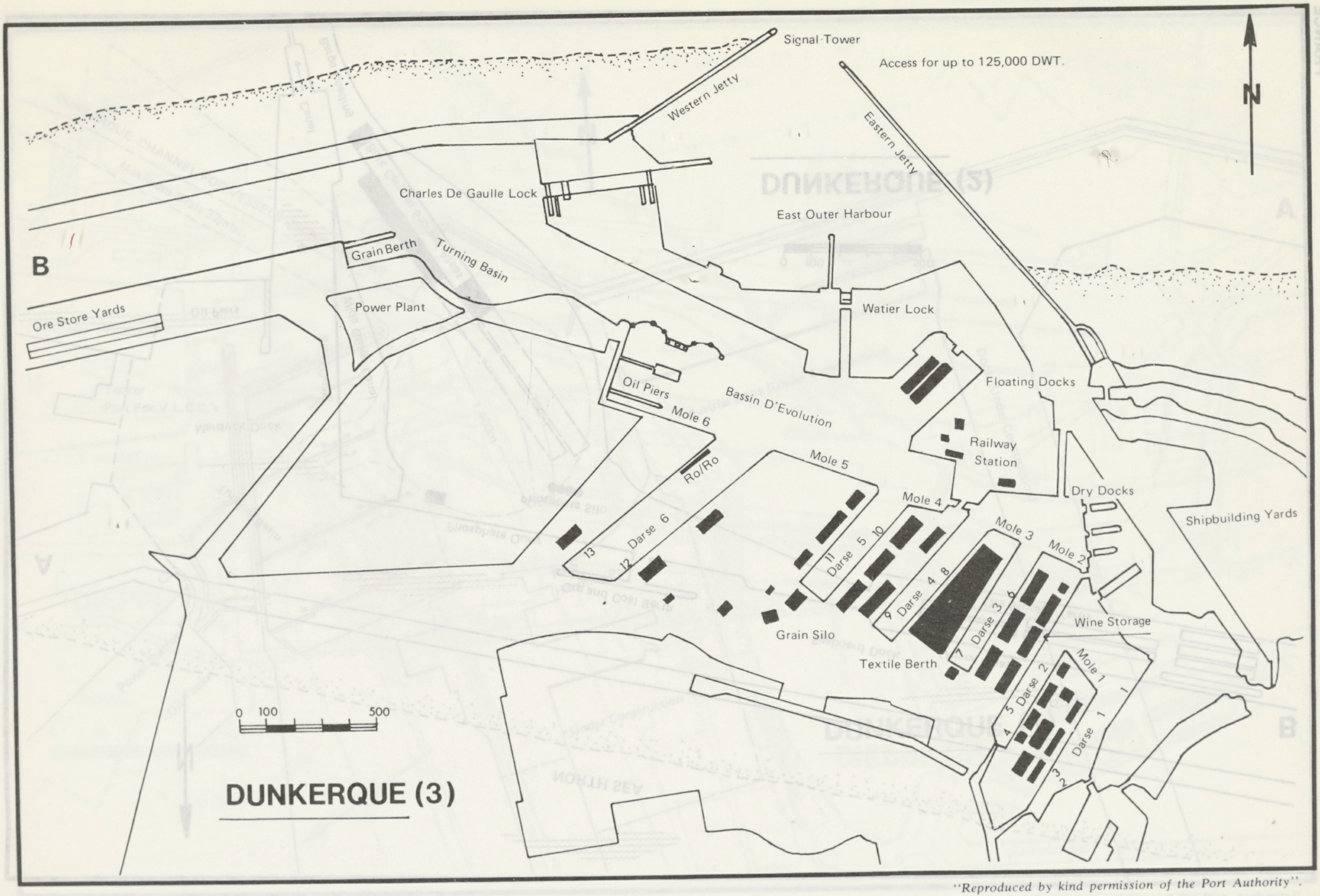

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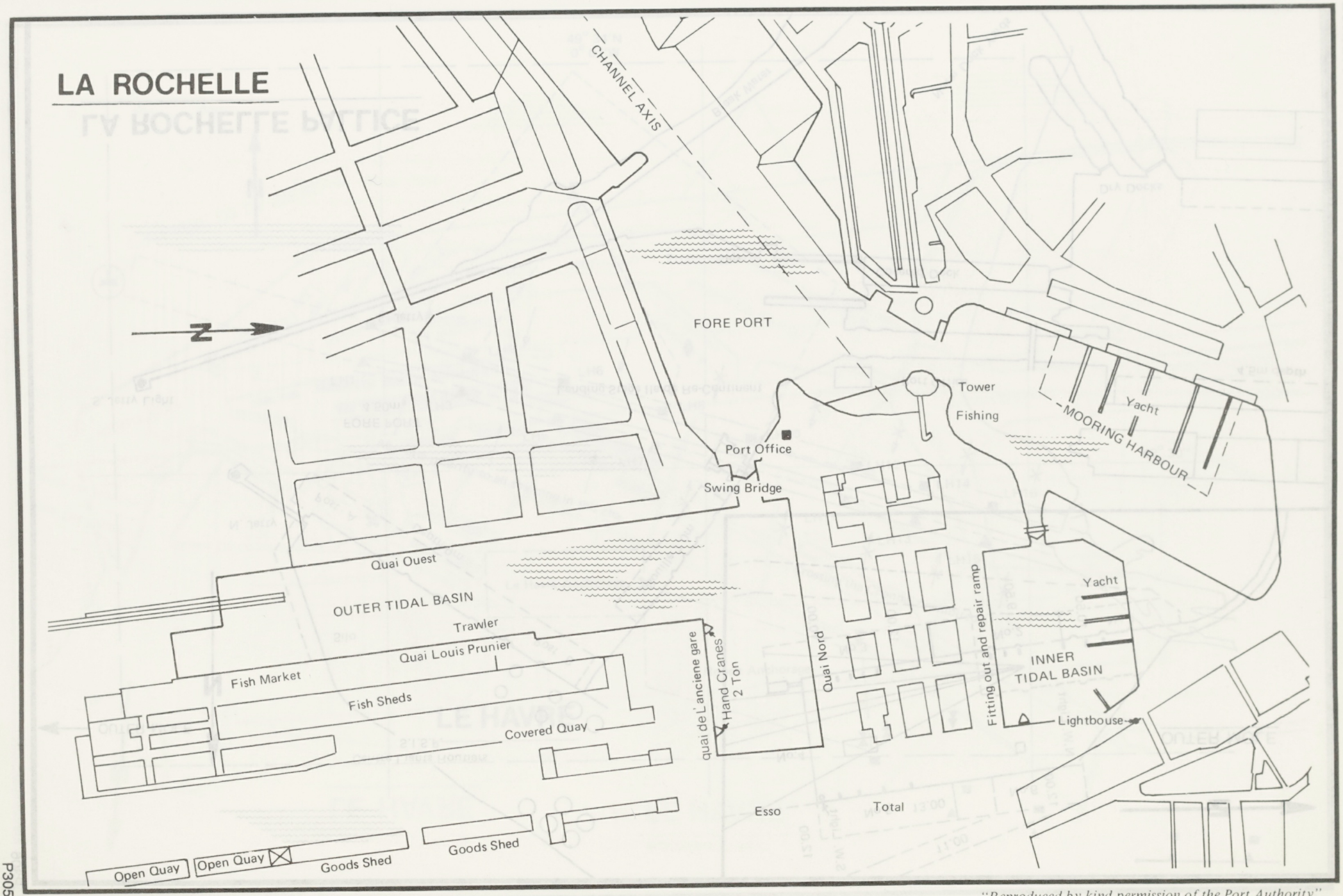

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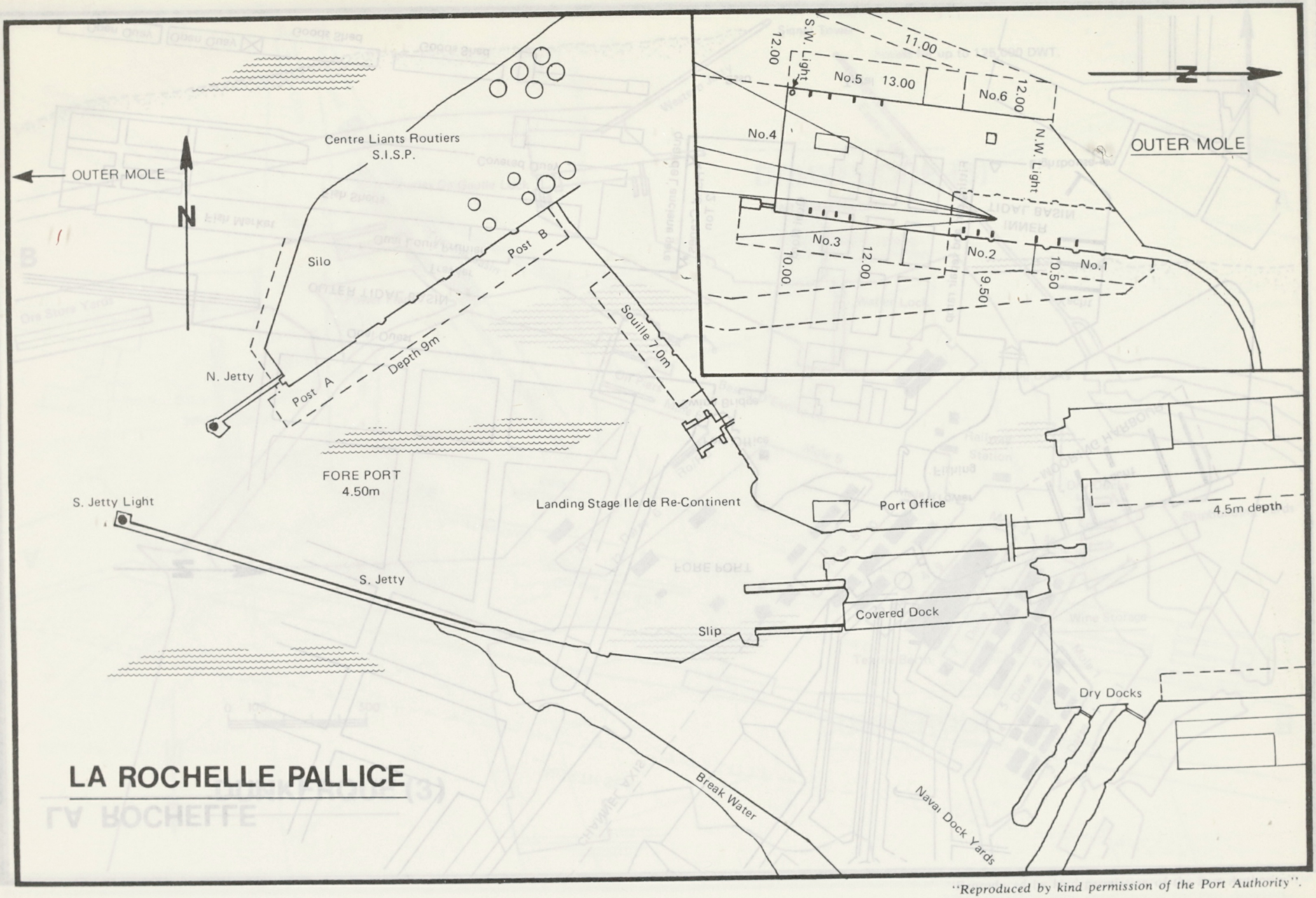

LA ROCHELLE PALLICE

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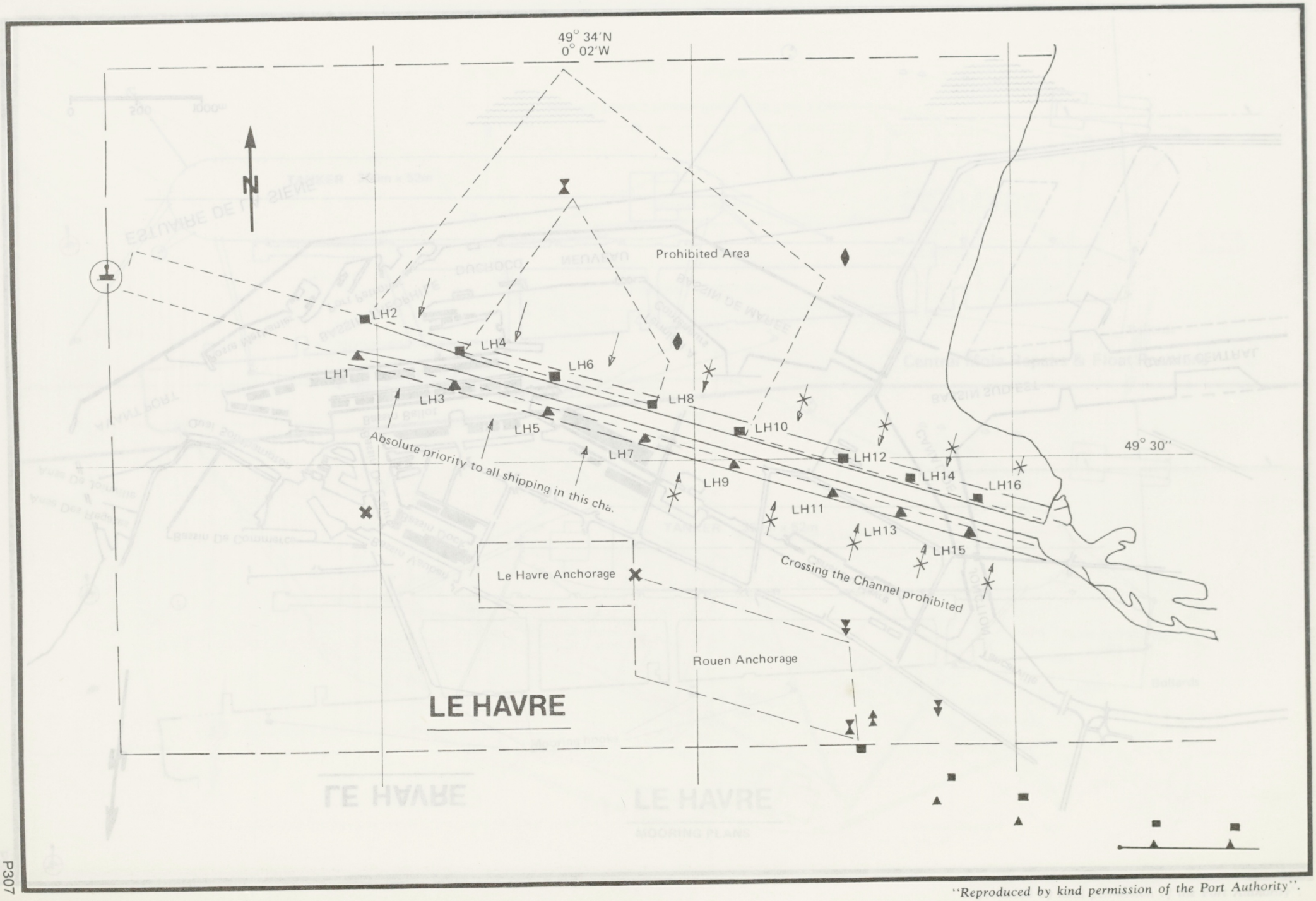

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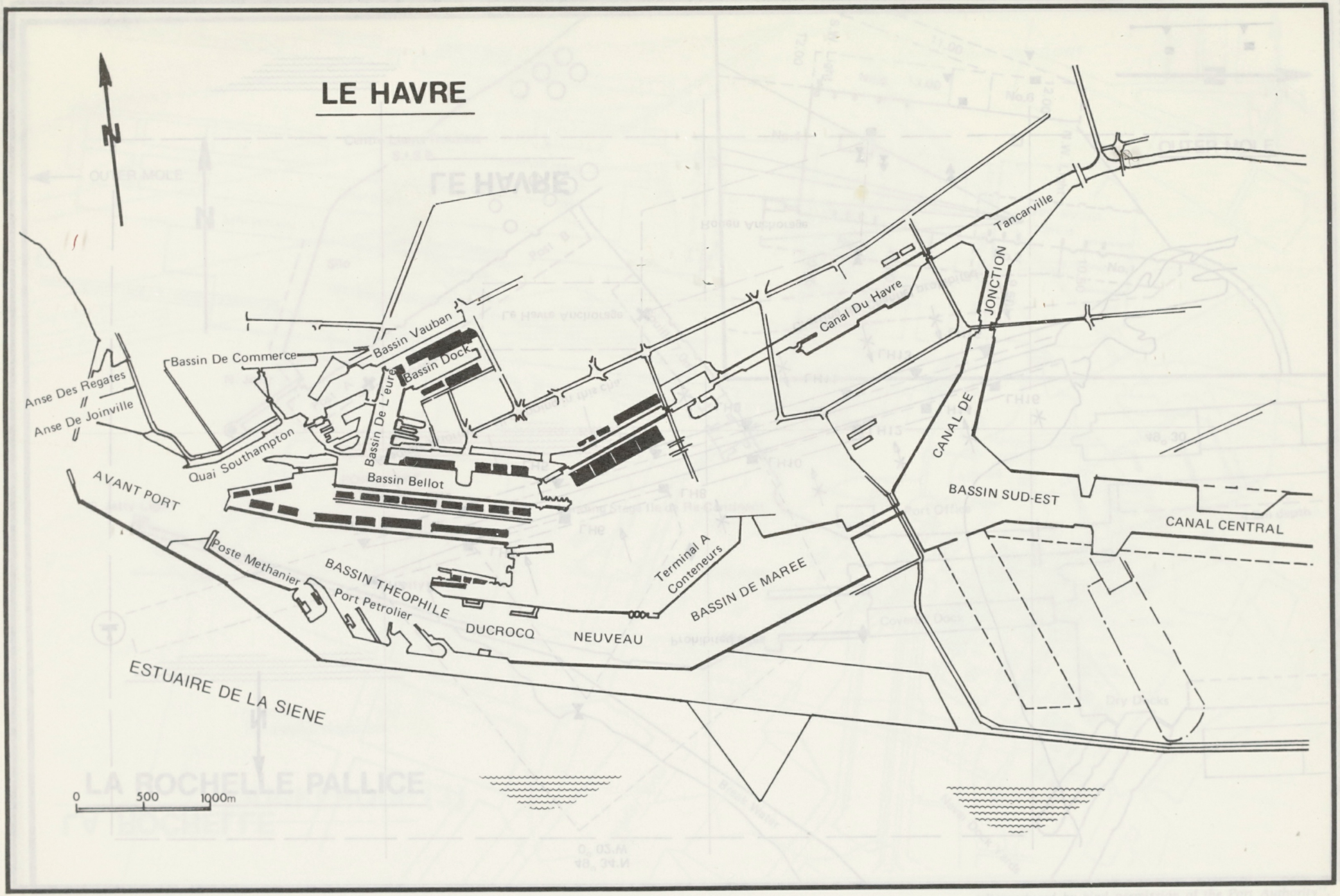

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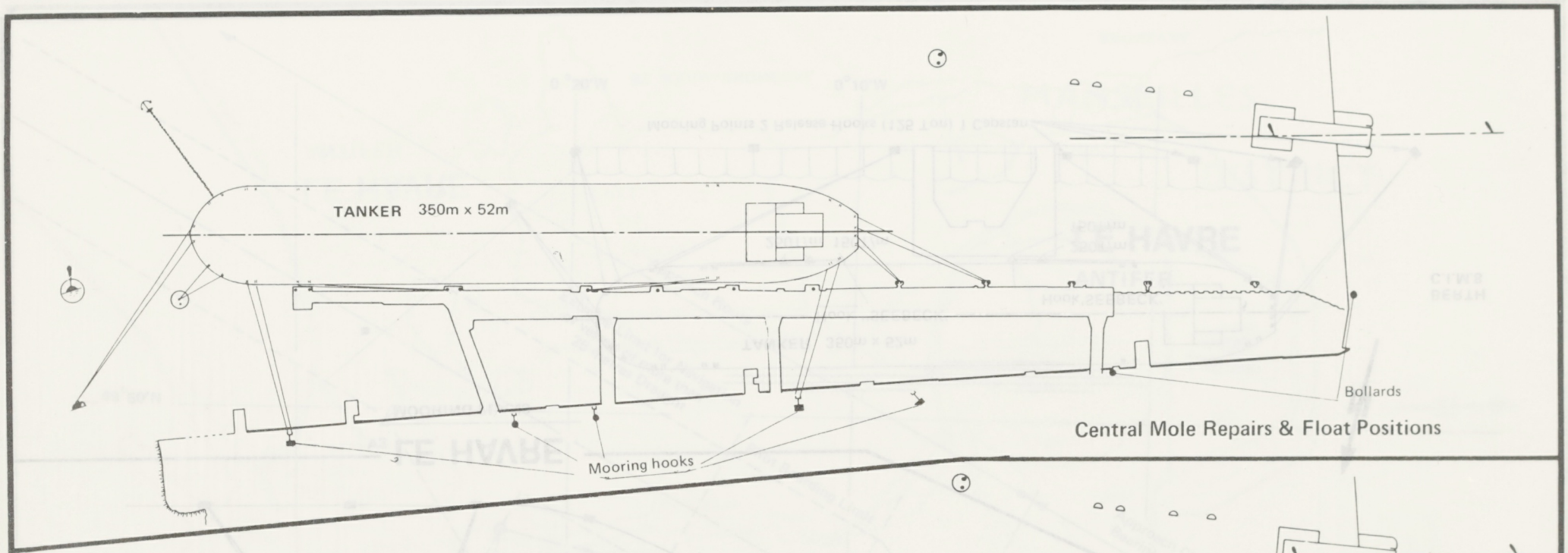
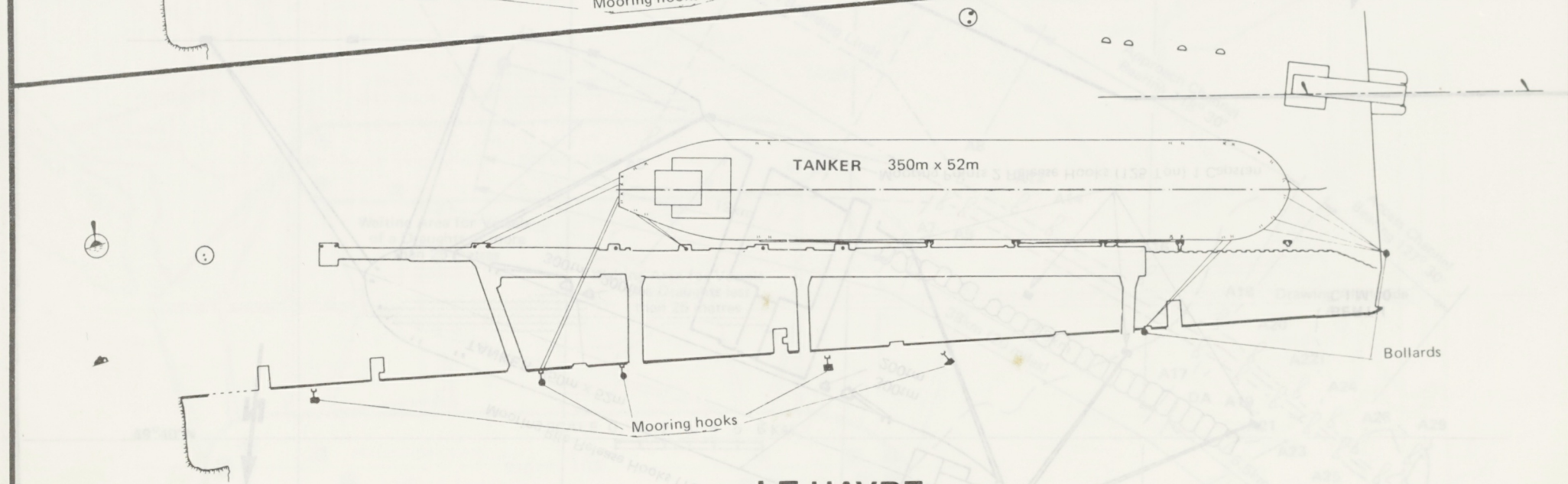


Central Mole Repairs & Float Positions



LE HAVRE

MOORING PLANS

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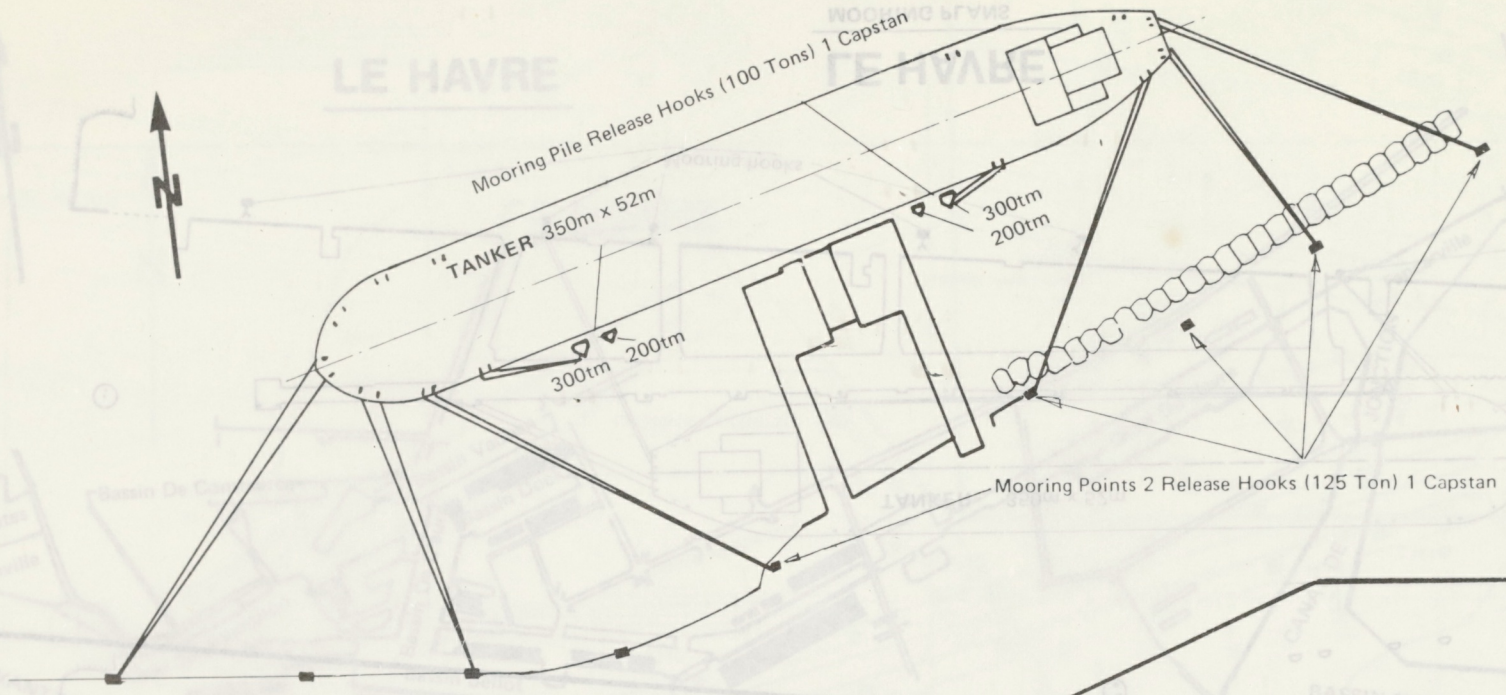

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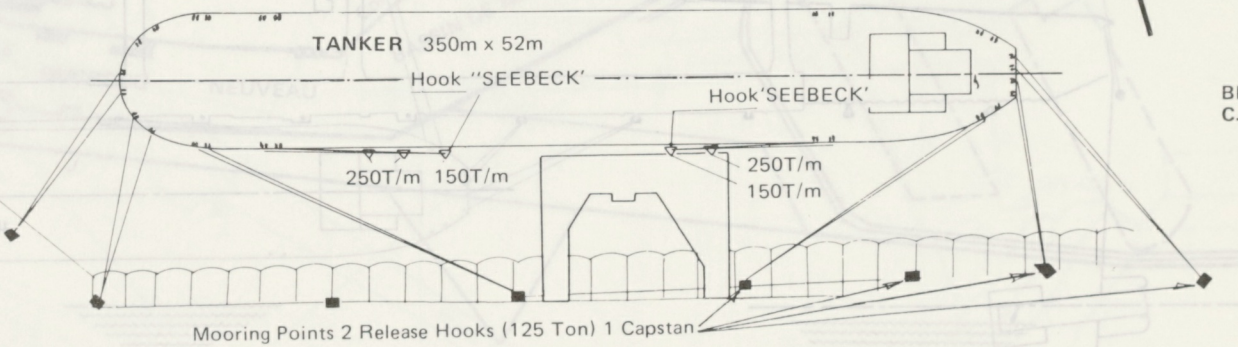
MOORING PLANS



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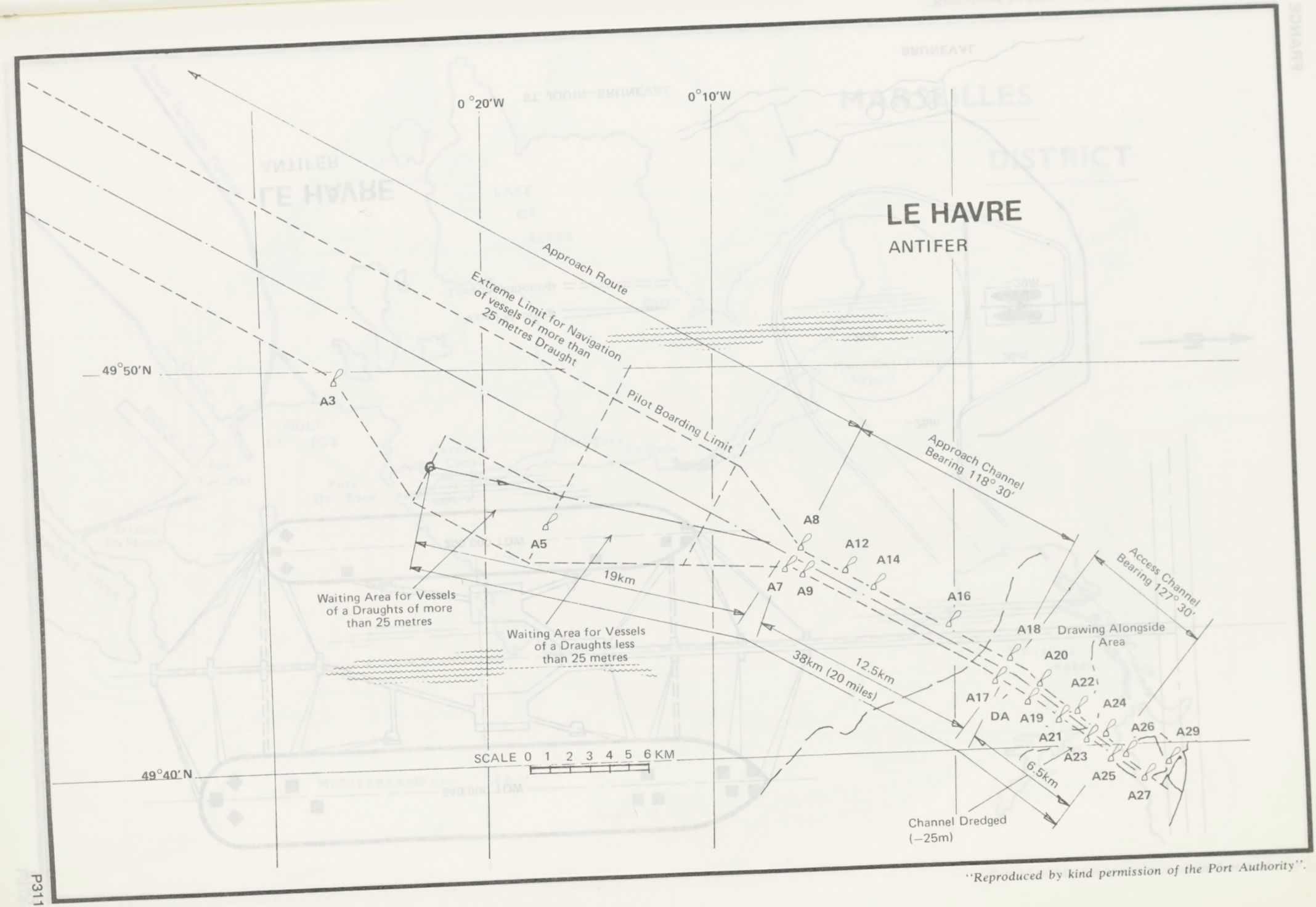

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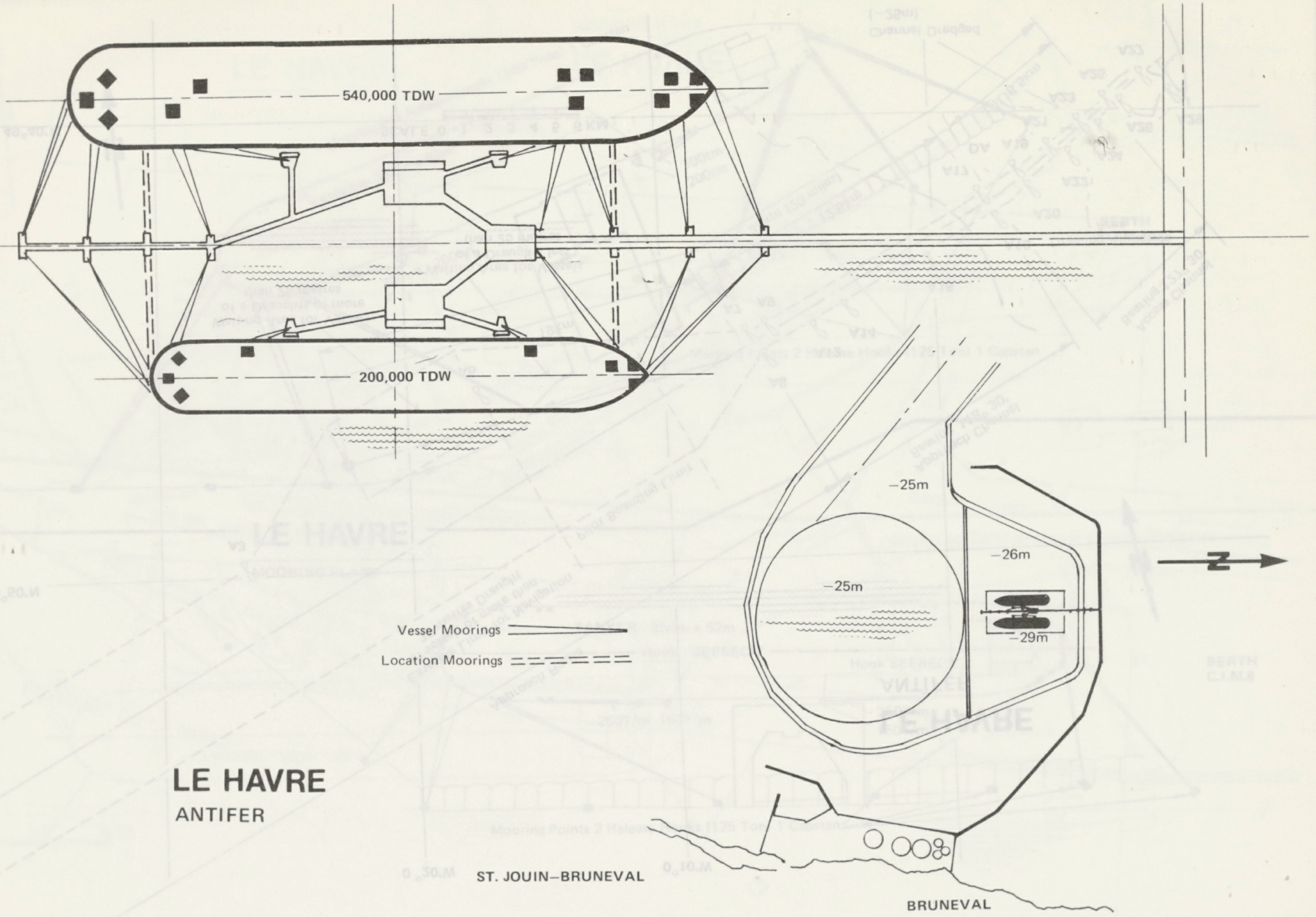

LE HAVRE

ANTIFER

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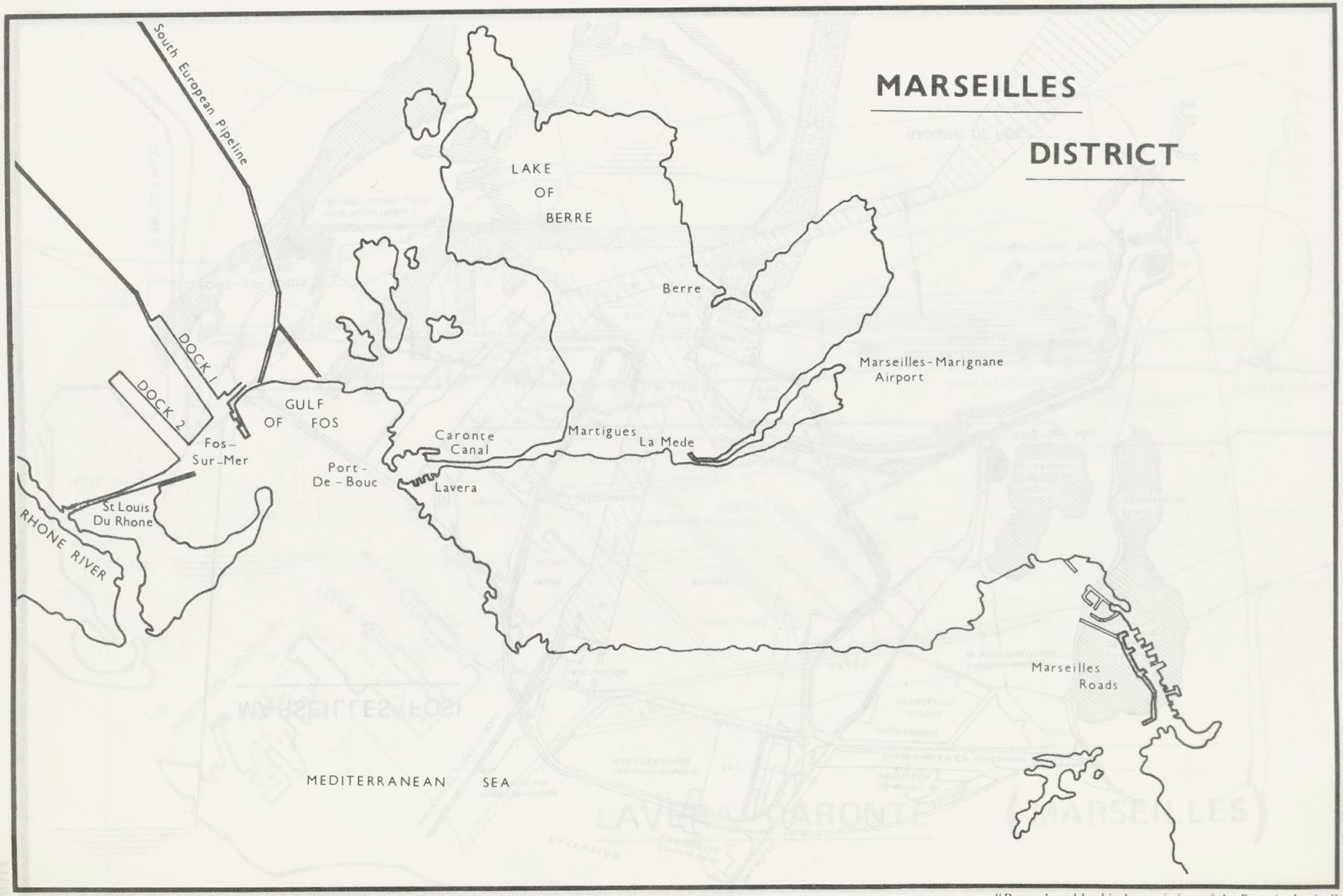

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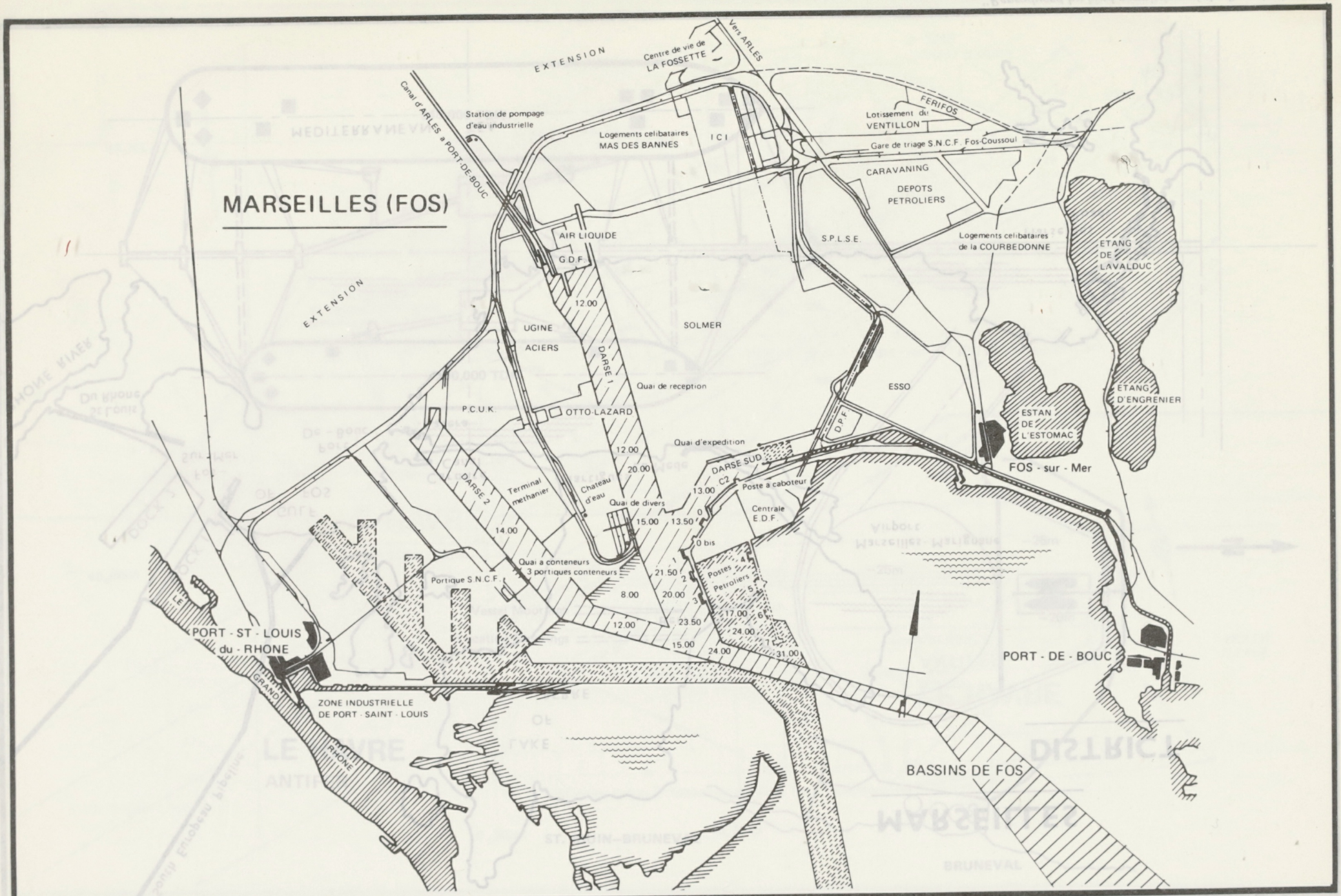

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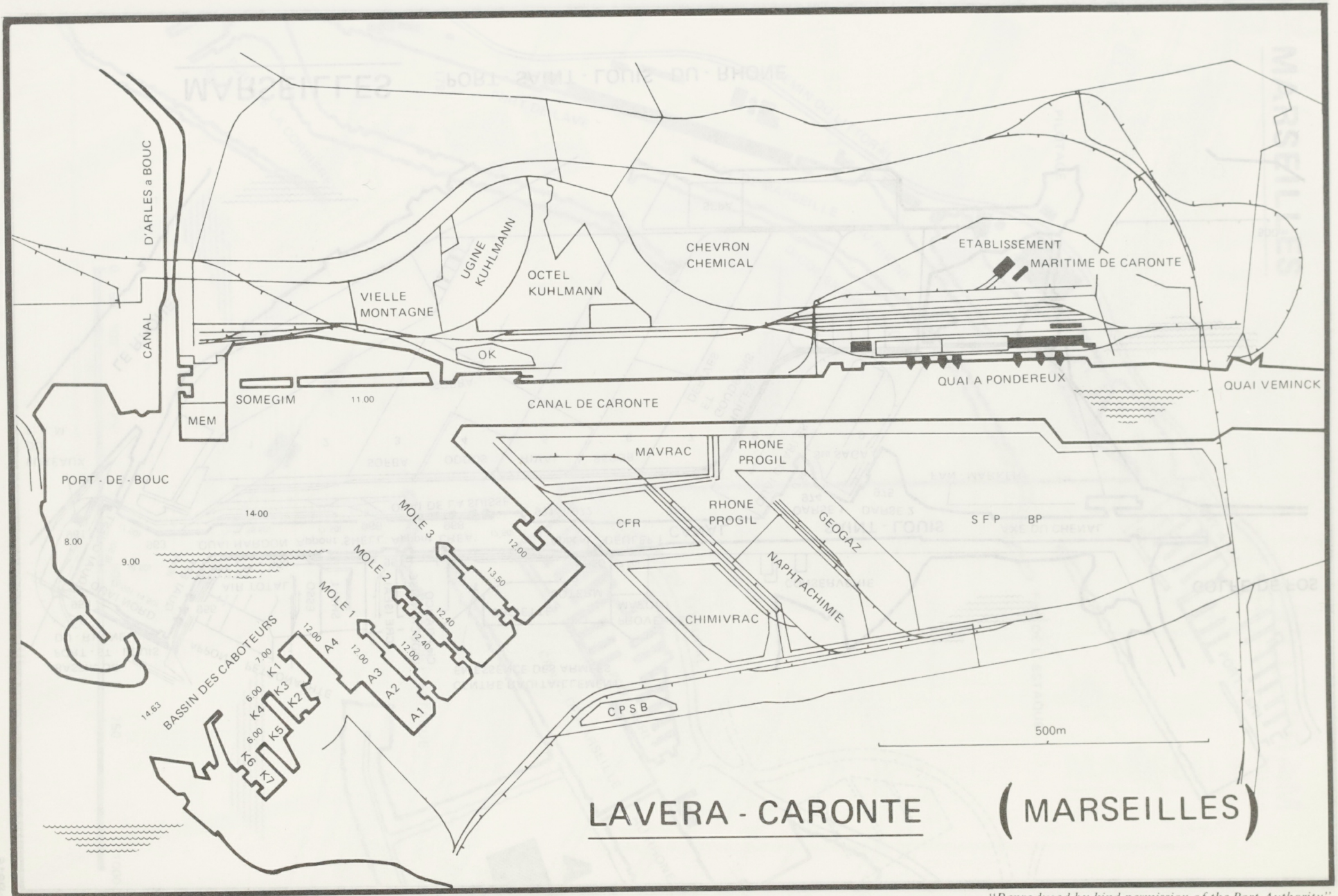

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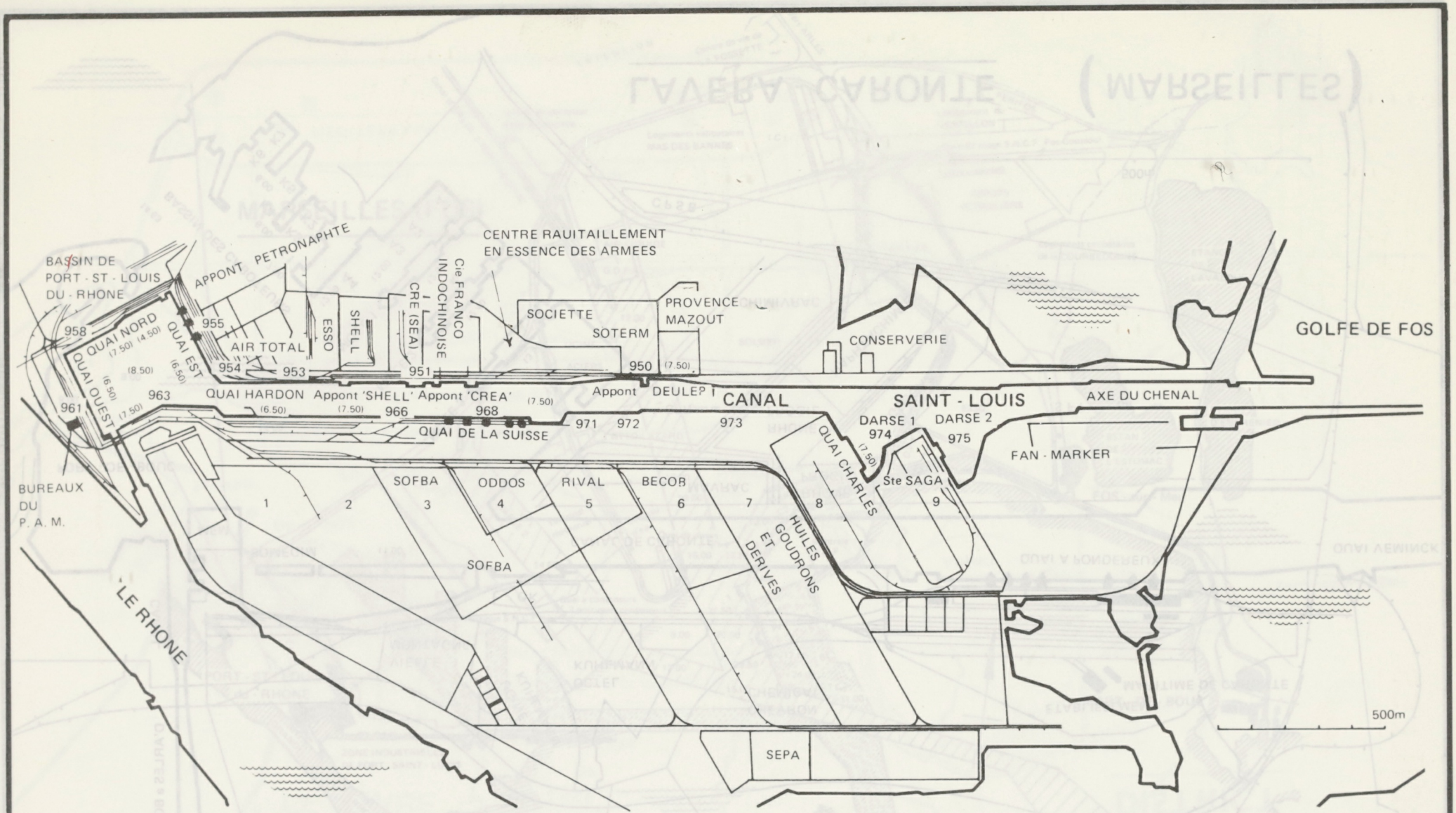

MARSEILLES

PORT - SAINT - LOUIS - DU - RHONE

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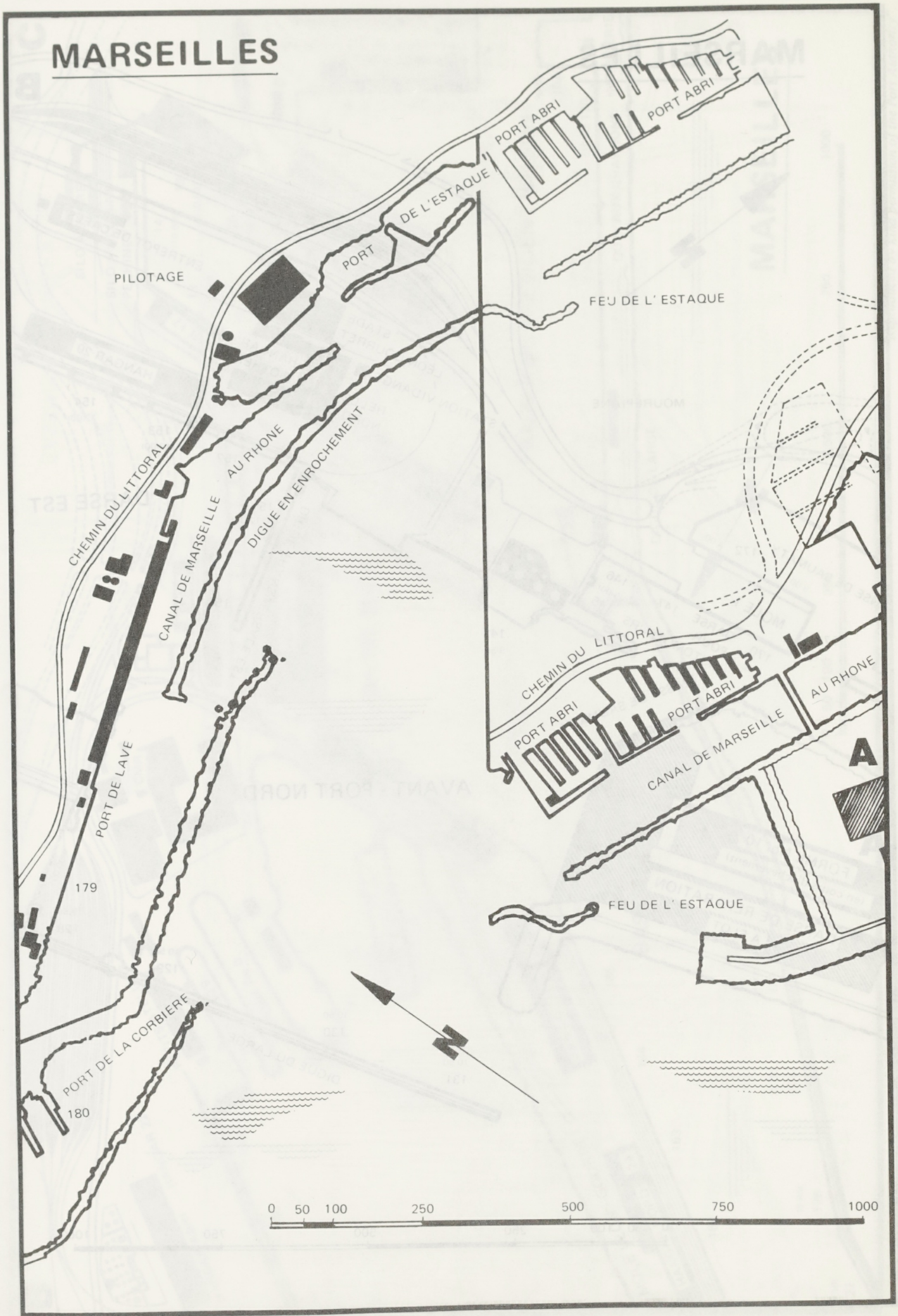

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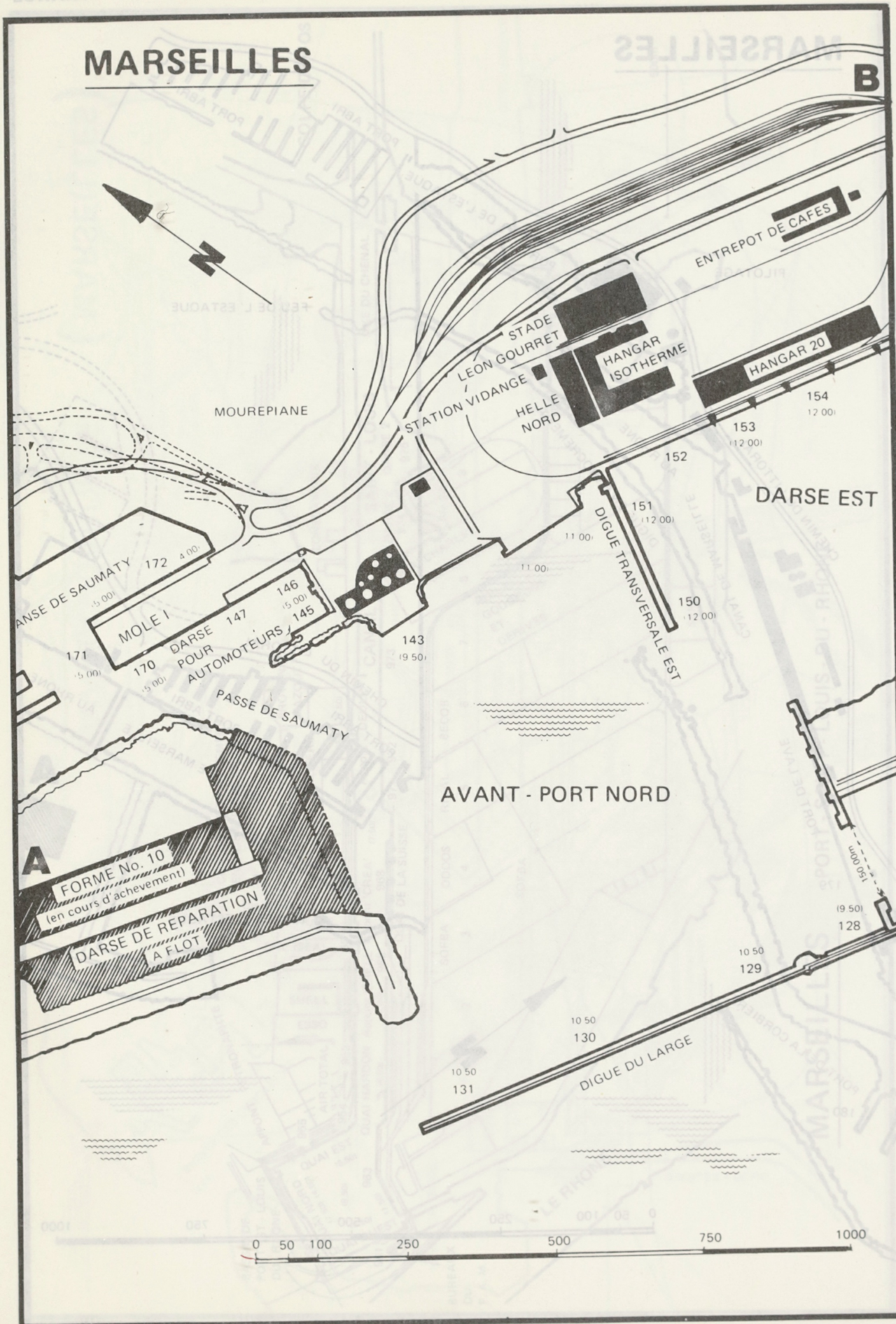

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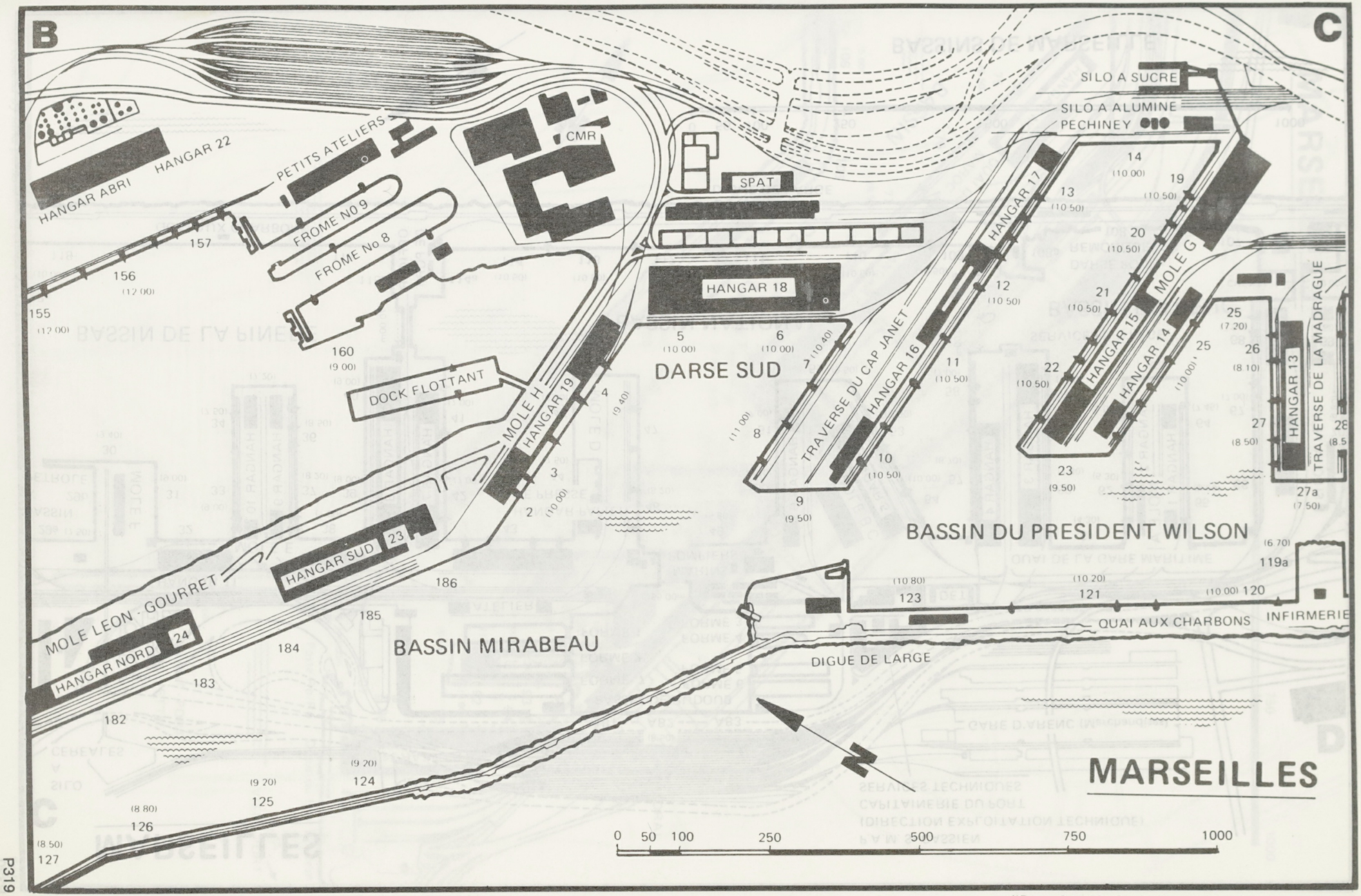

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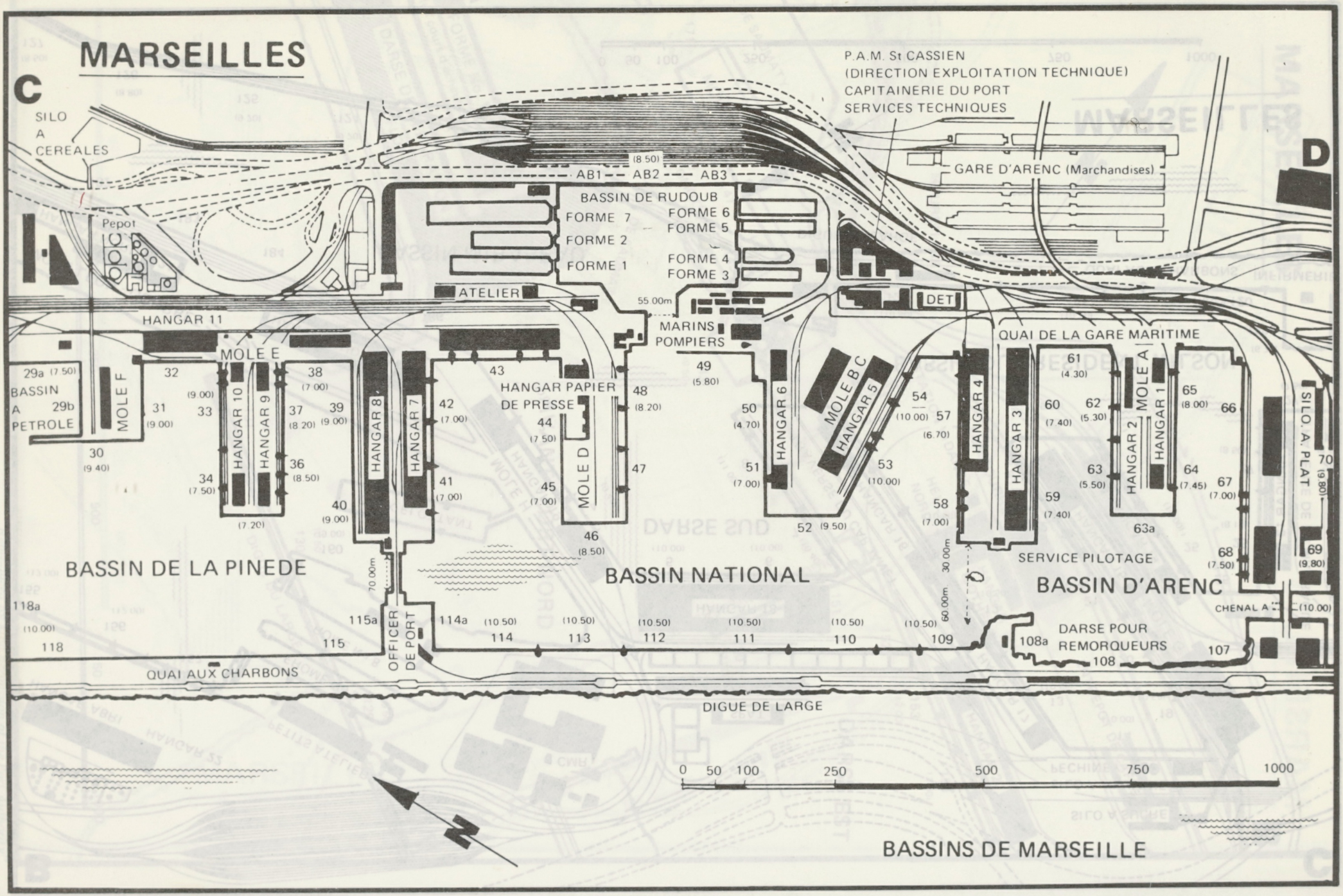

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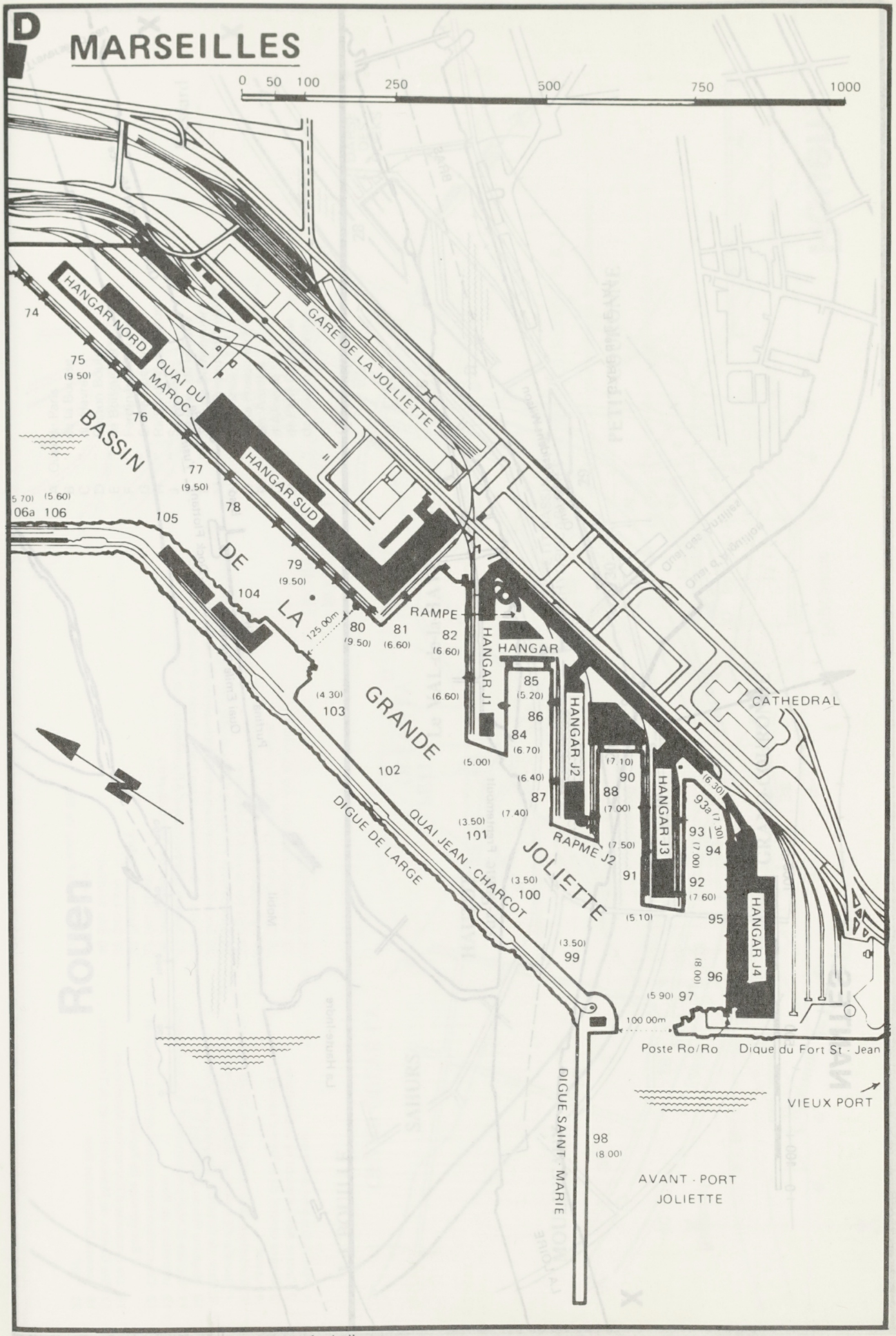

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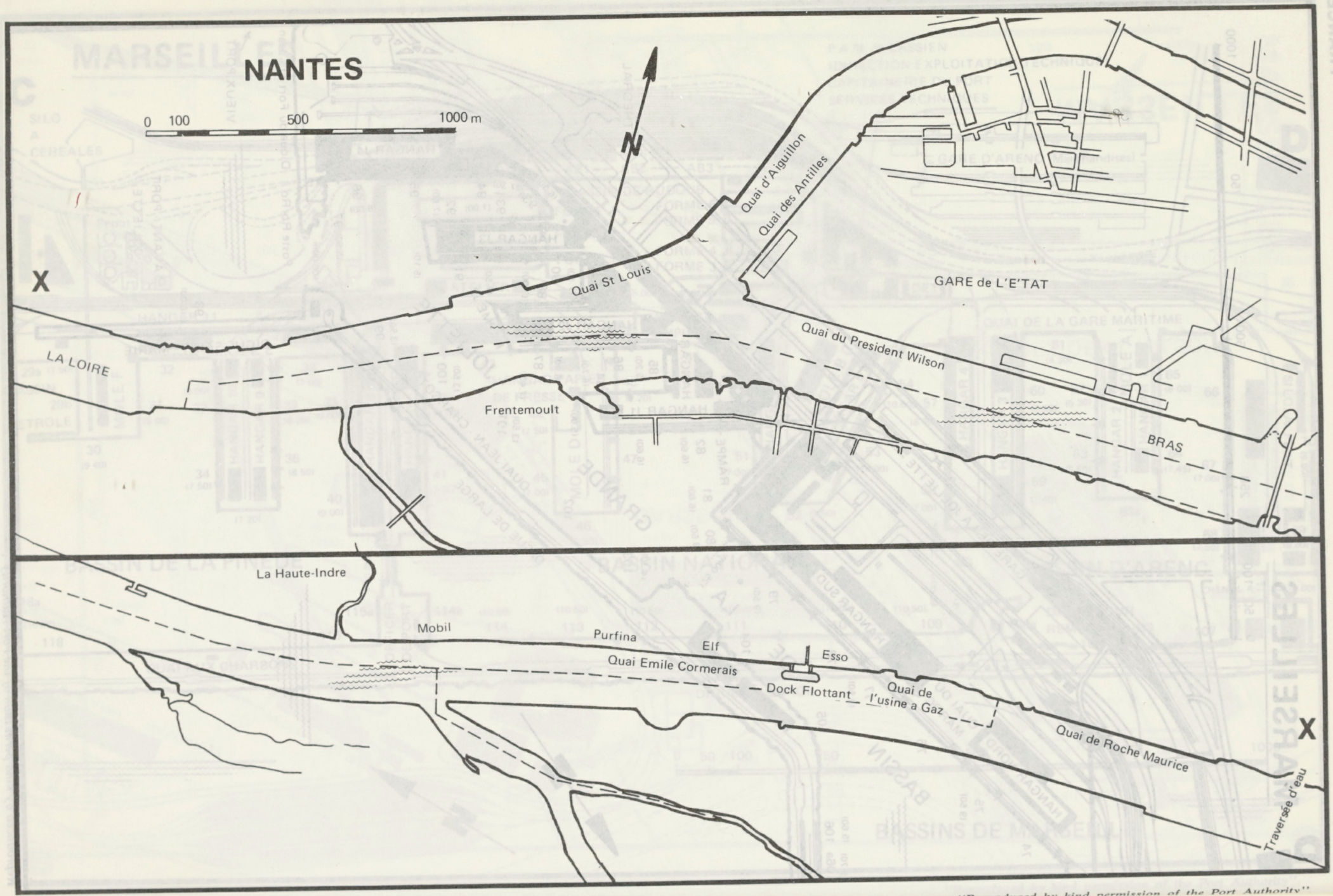
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X
Quai d'Aiguillon
Quai des Antilles
Quai St Louis
GARE de L'E'TAT
Quai du President Wilson
LA LOIRE
Frentemoult
BRAS
La Haute-Indre
Mobil
Purfina
Elf
Esso
Quai Emile Cormerais
Dock Flottant
Quai de l'usine a Gaz
Quai de Roche Maurice
Traversée d'eau
X

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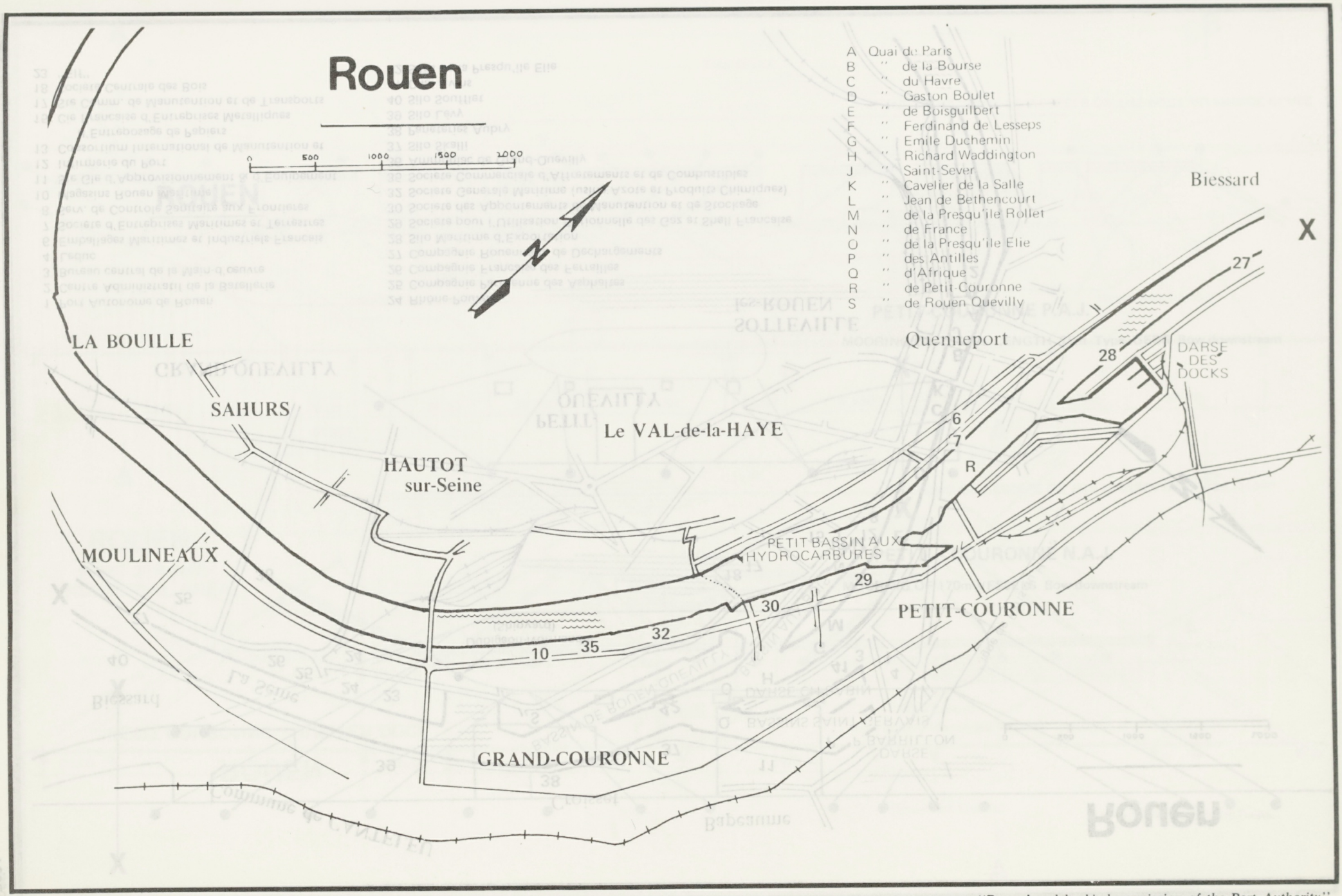

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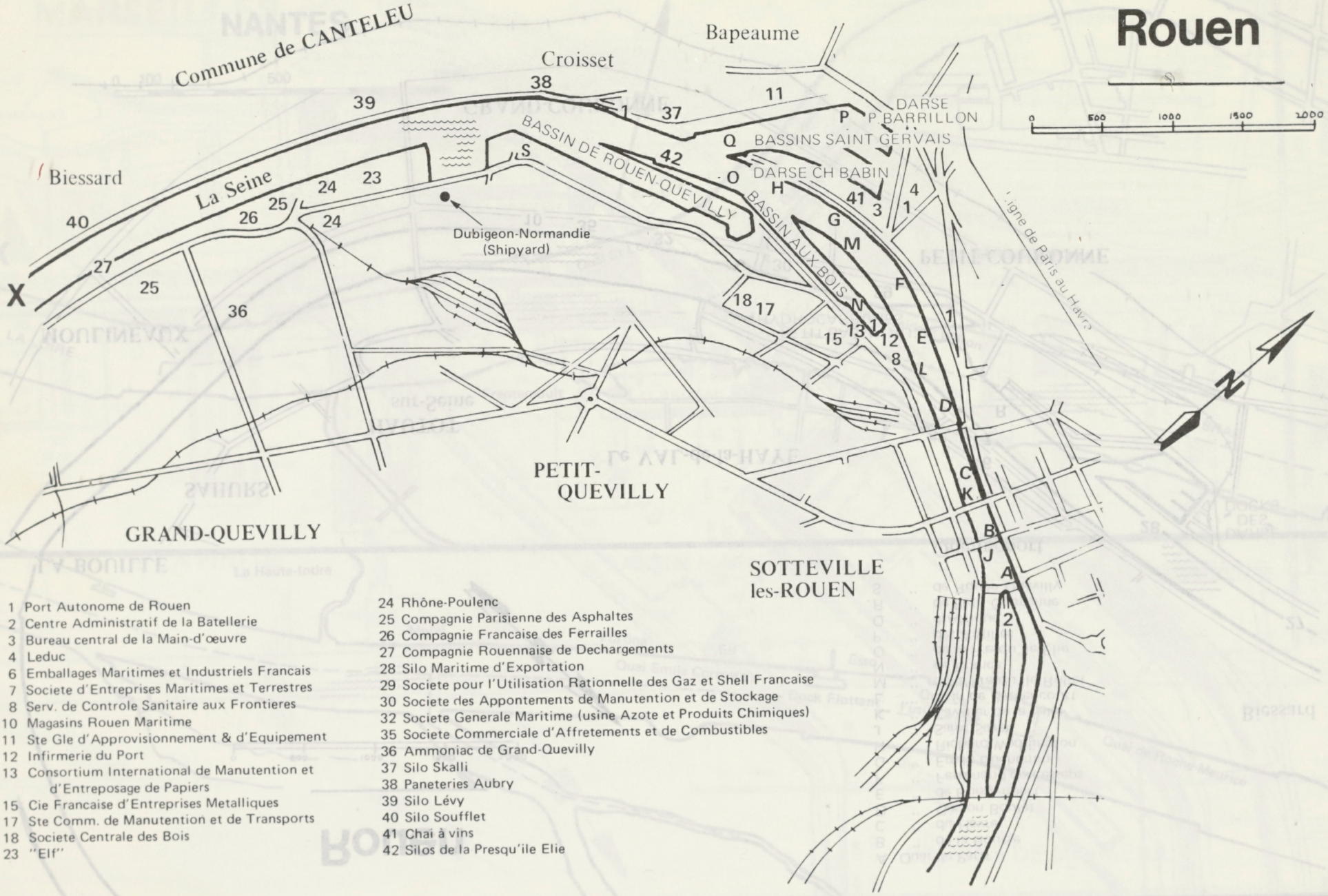
Rouen



1 Port Autonome de Rouen
2 Centre Administratif de la Batellerie
3 Bureau central de la Main-d'oeuvre
4 Leduc
6 Emballages Maritimes et Industriels Francais
7 Societe d'Entreprises Maritimes et Terrestres
8 Serv. de Controle Sanitaire aux Frontieres
10 Magasins Rouen Maritime
11 Ste Gle d'Approvisionnement & d'Equipement
12 Infirmerie du Port
13 Consortium International de Manutention et d'Entreposage de Papiers
15 Cie Francaise d'Entreprises Metalliques
17 Ste Comm. de Manutention et de Transports
18 Societe Centrale des Bois
23 "Elf"
24 Rhône-Poulenc
25 Compagnie Parisienne des Asphaltes
26 Compagnie Francaise des Ferrailles
27 Compagnie Rouennaise de Dechargements
28 Silo Maritime d'Exportation
29 Societe pour l'Utilisation Rationnelle des Gaz et Shell Francaise
30 Societe des Appontements de Manutention et de Stockage
32 Societe Generale Maritime (usine Azote et Produits Chimiques)
35 Societe Commerciale d'Affretements et de Combustibles
36 Ammoniac de Grand-Quevilly
37 Silo Skalli
38 Paneteries Aubry
39 Silo Lévy
40 Silo Soufflet
41 Chai à vins
42 Silos de la Presqu'ile Elie

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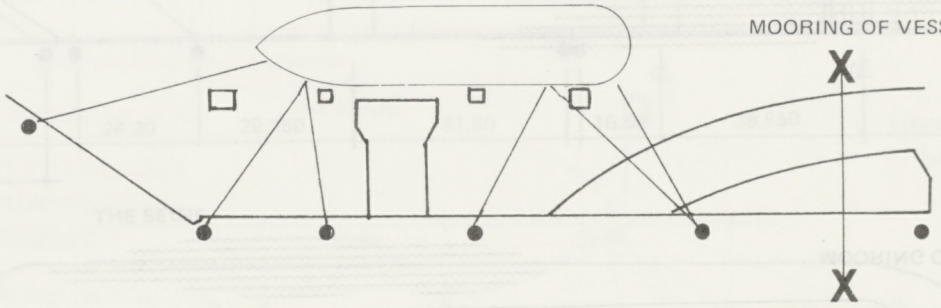
ROUEN

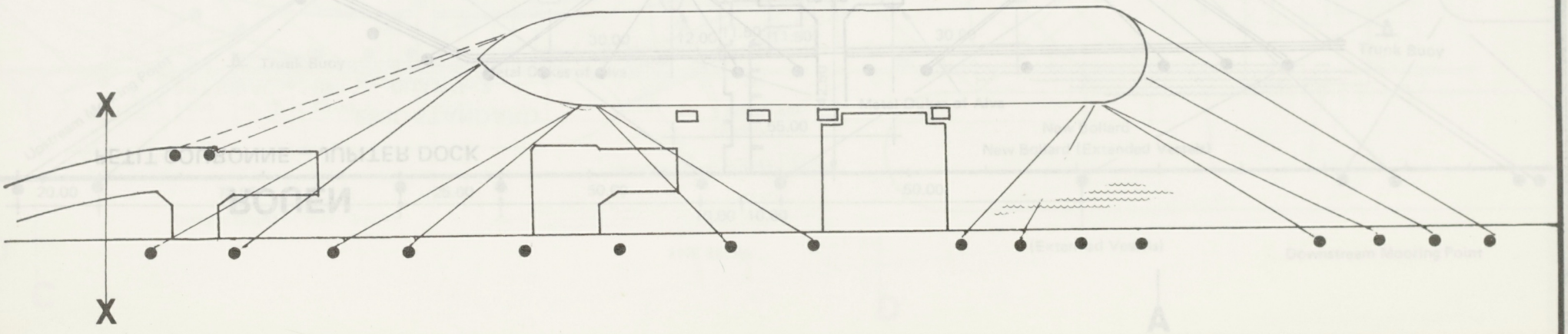
PETIT-COURONNE P.A.J.

MOORING OF VESSEL LENGTH 75m Type GERS Bow downstream



PETIT – COURONNE N.A.J.

MOORING OF 170m VESSELS Bow downstream



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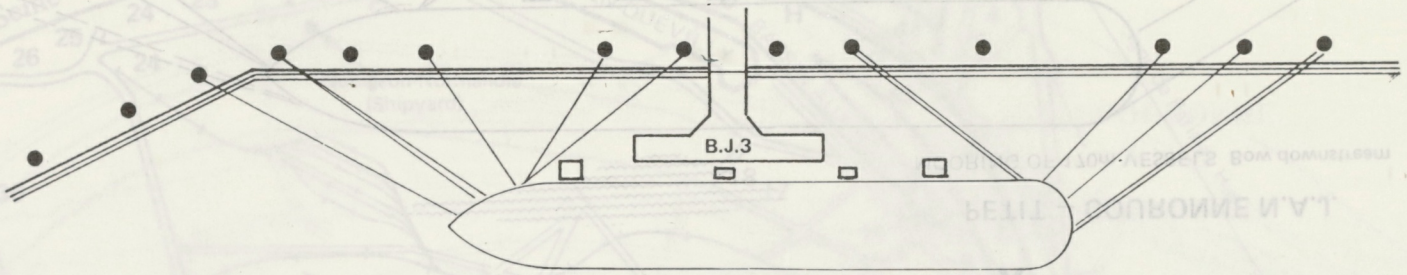
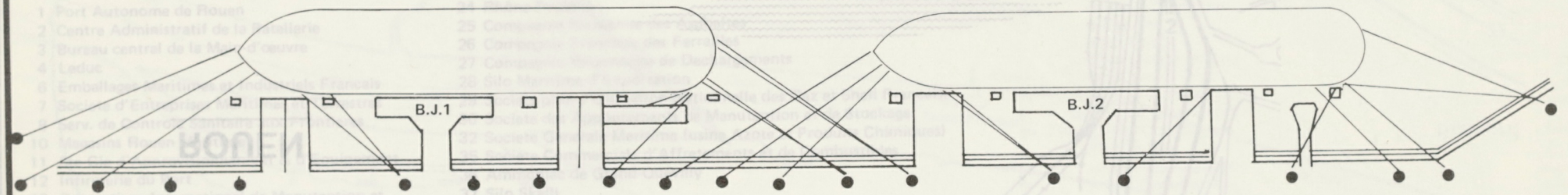
ROUEN

PETIT COURONNE – JUPITER DOCK



MOORING OF VESSELS OF THE HUMBOLDT CLASS (117m)



MOORING (120m) OF VESSELS OF THE PORT AU PRINCE CLASS

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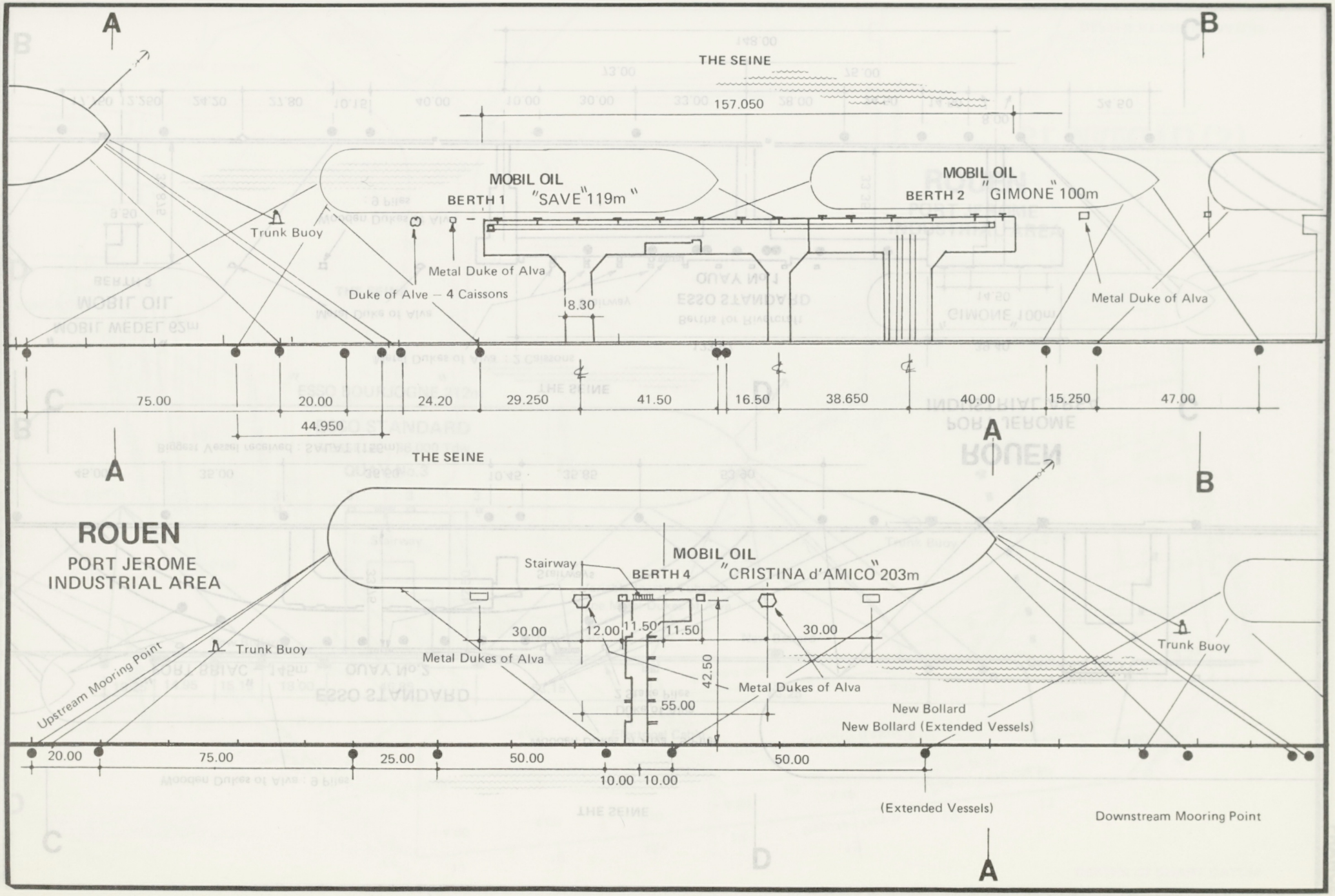
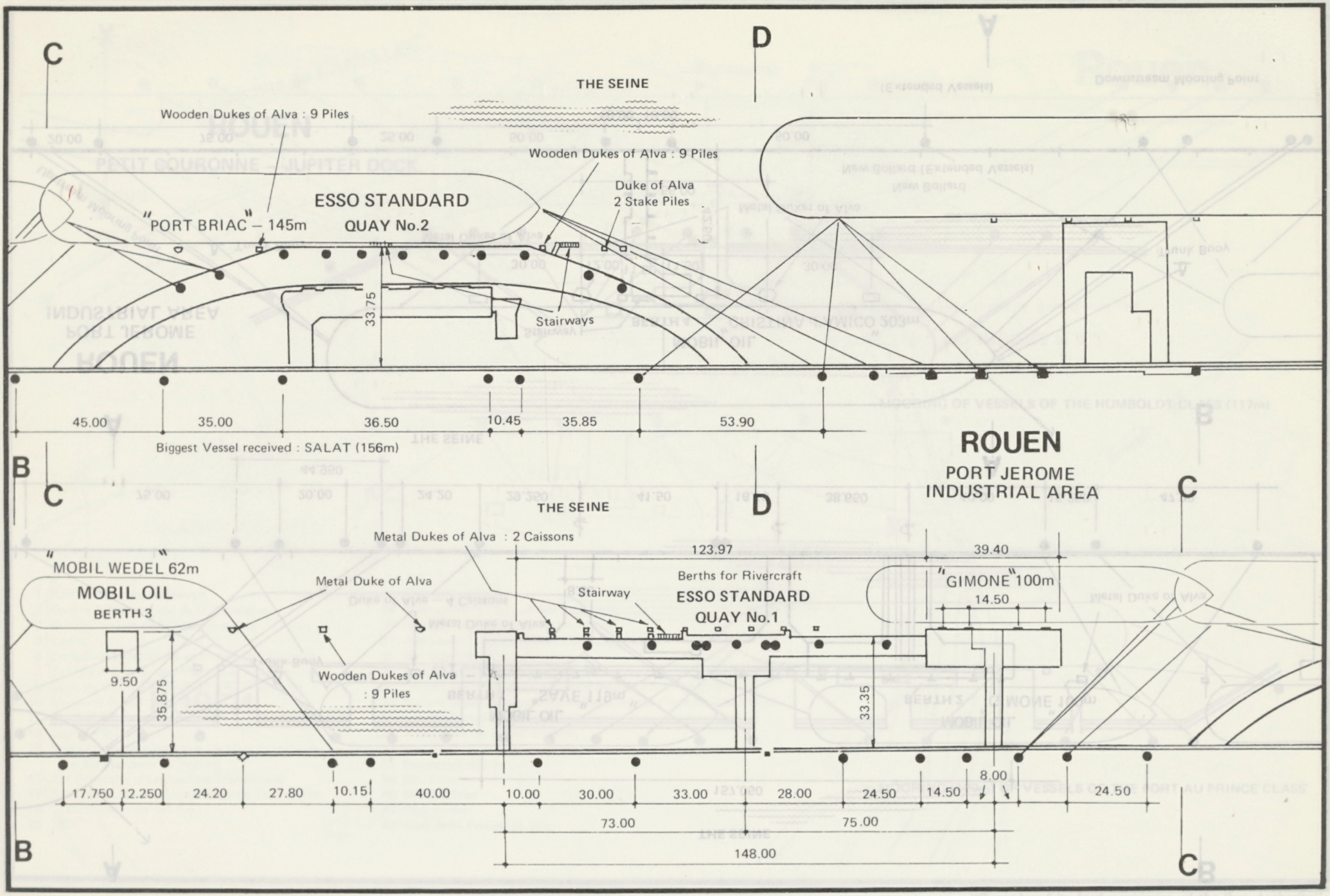


FRANCE



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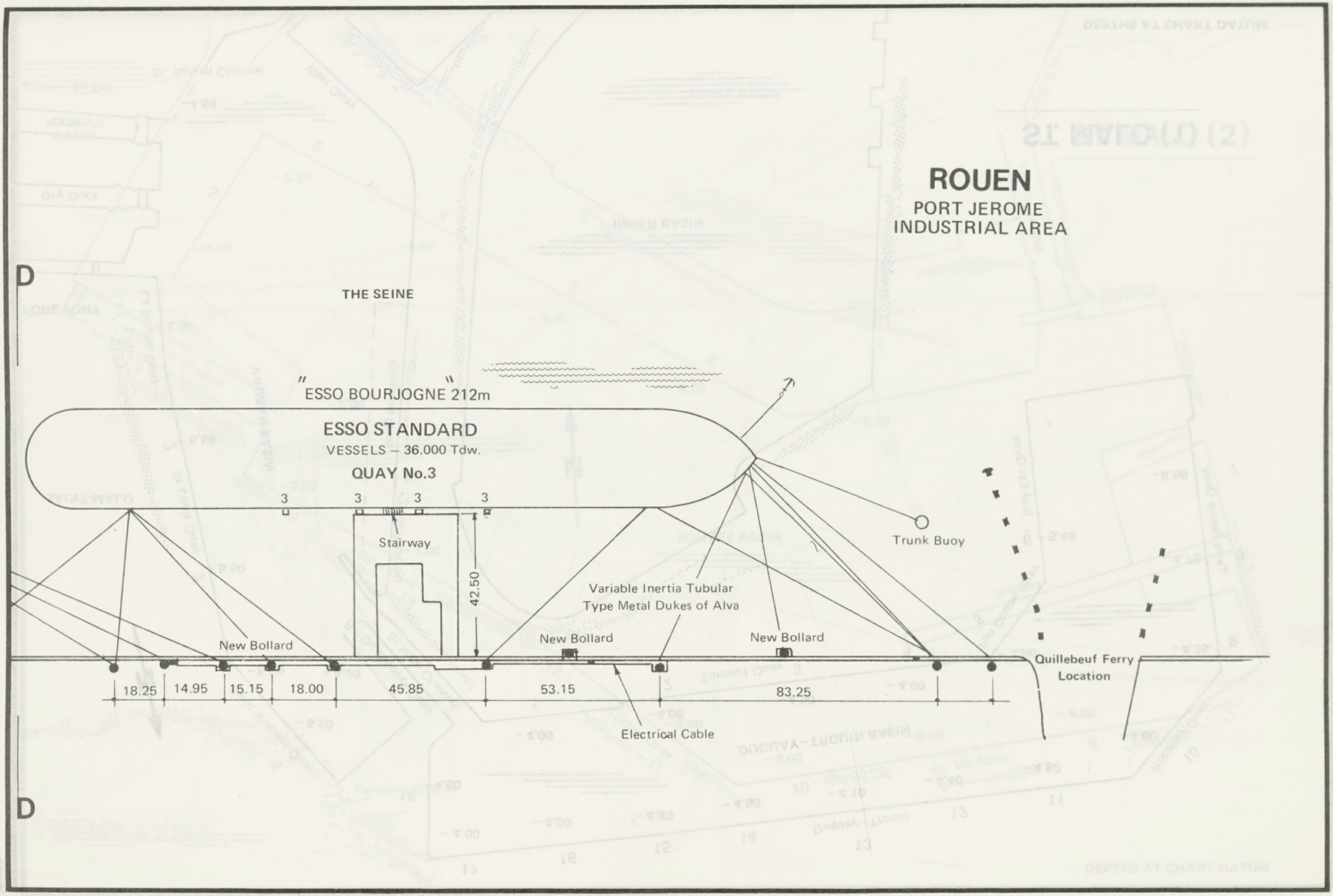

P329

FRANCE

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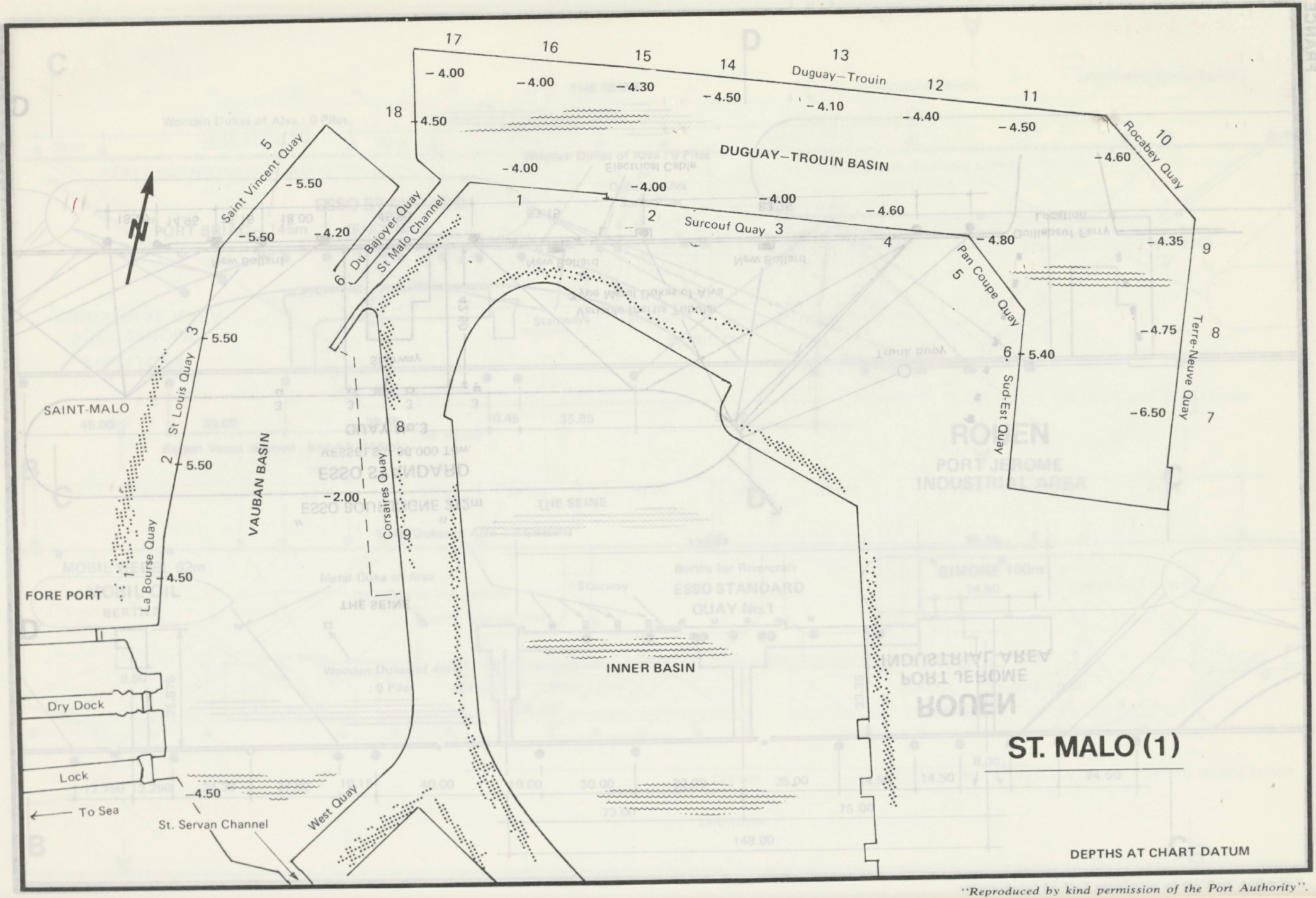

ST. MALO (1)

FRANCE

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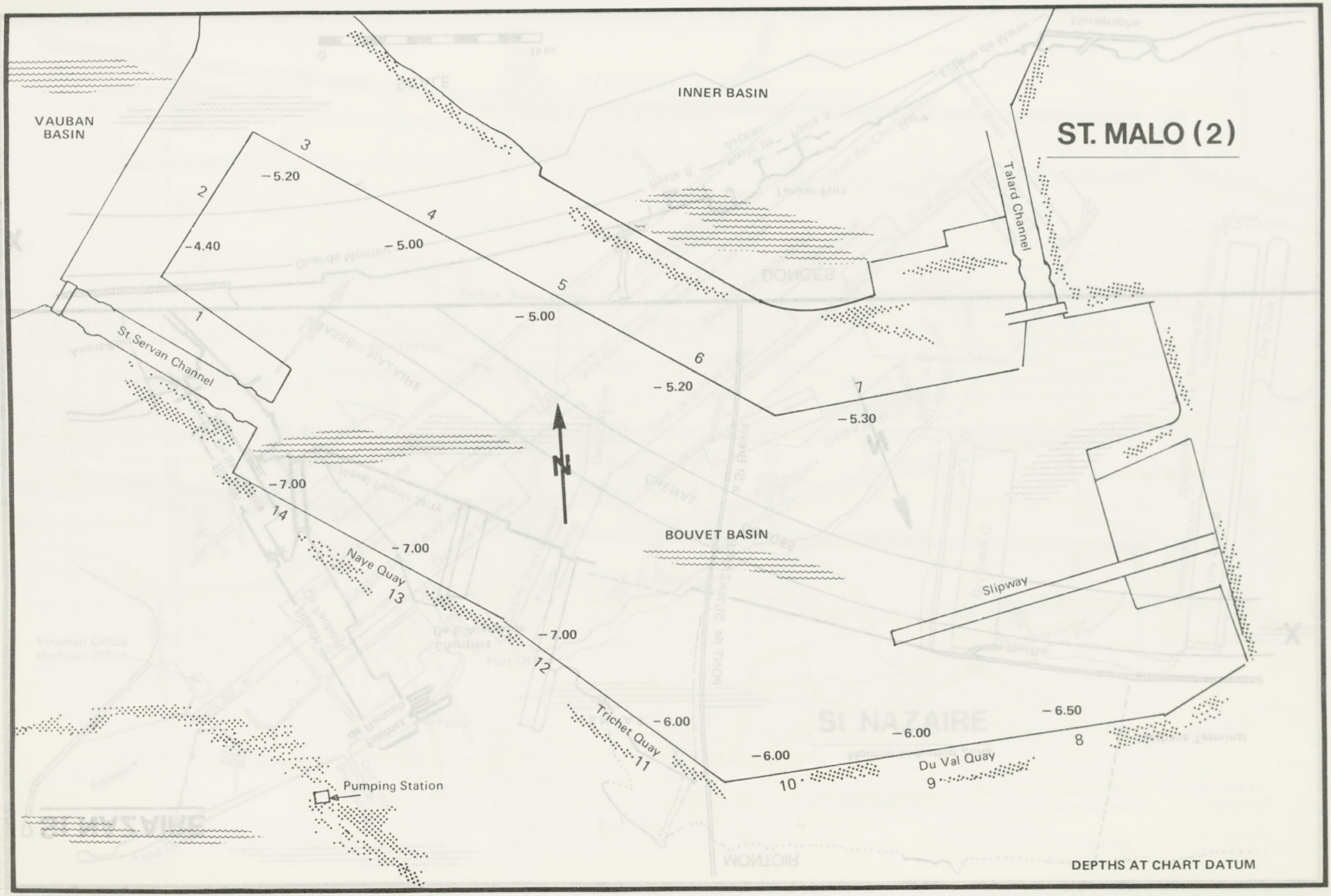

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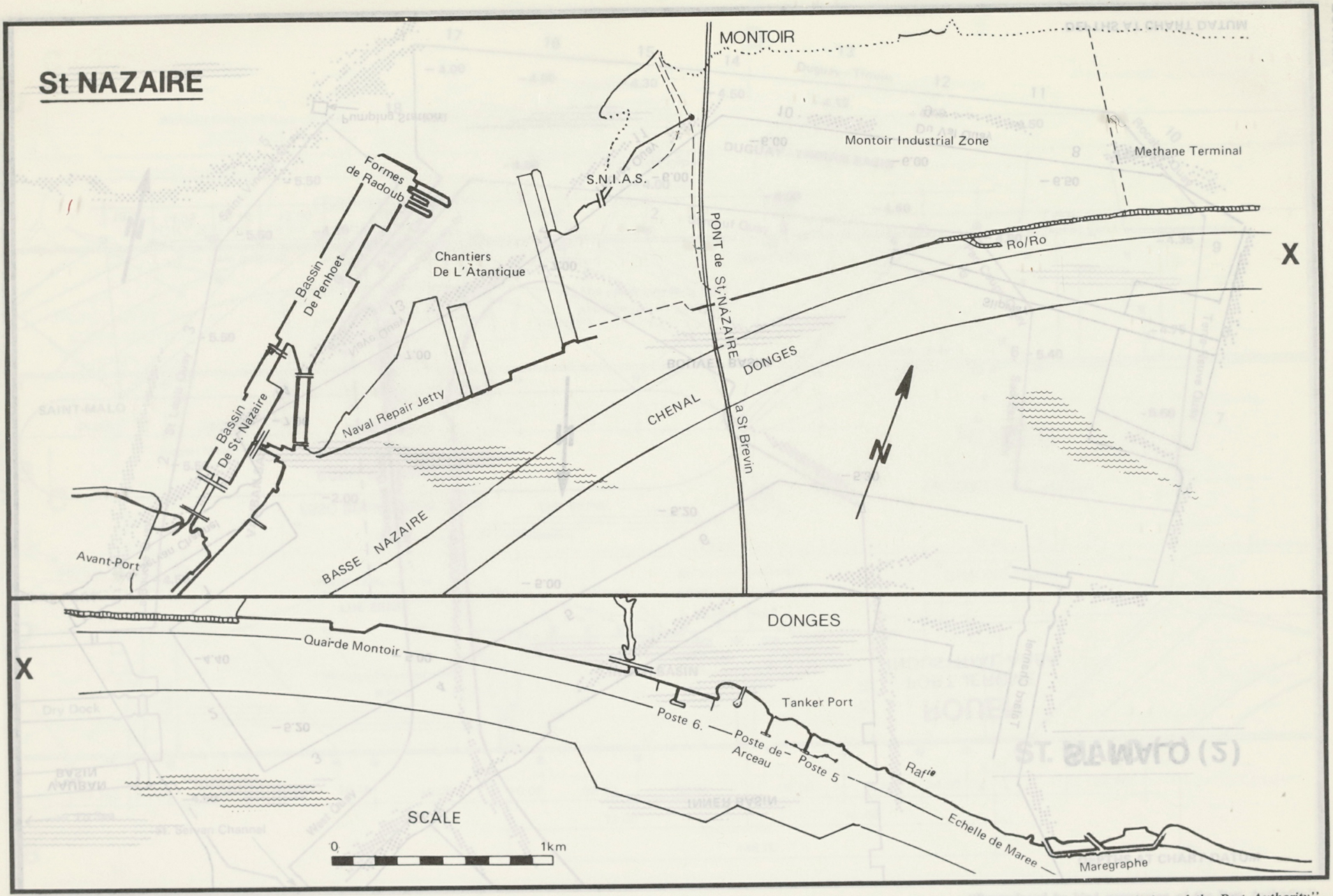
St NAZAIRE



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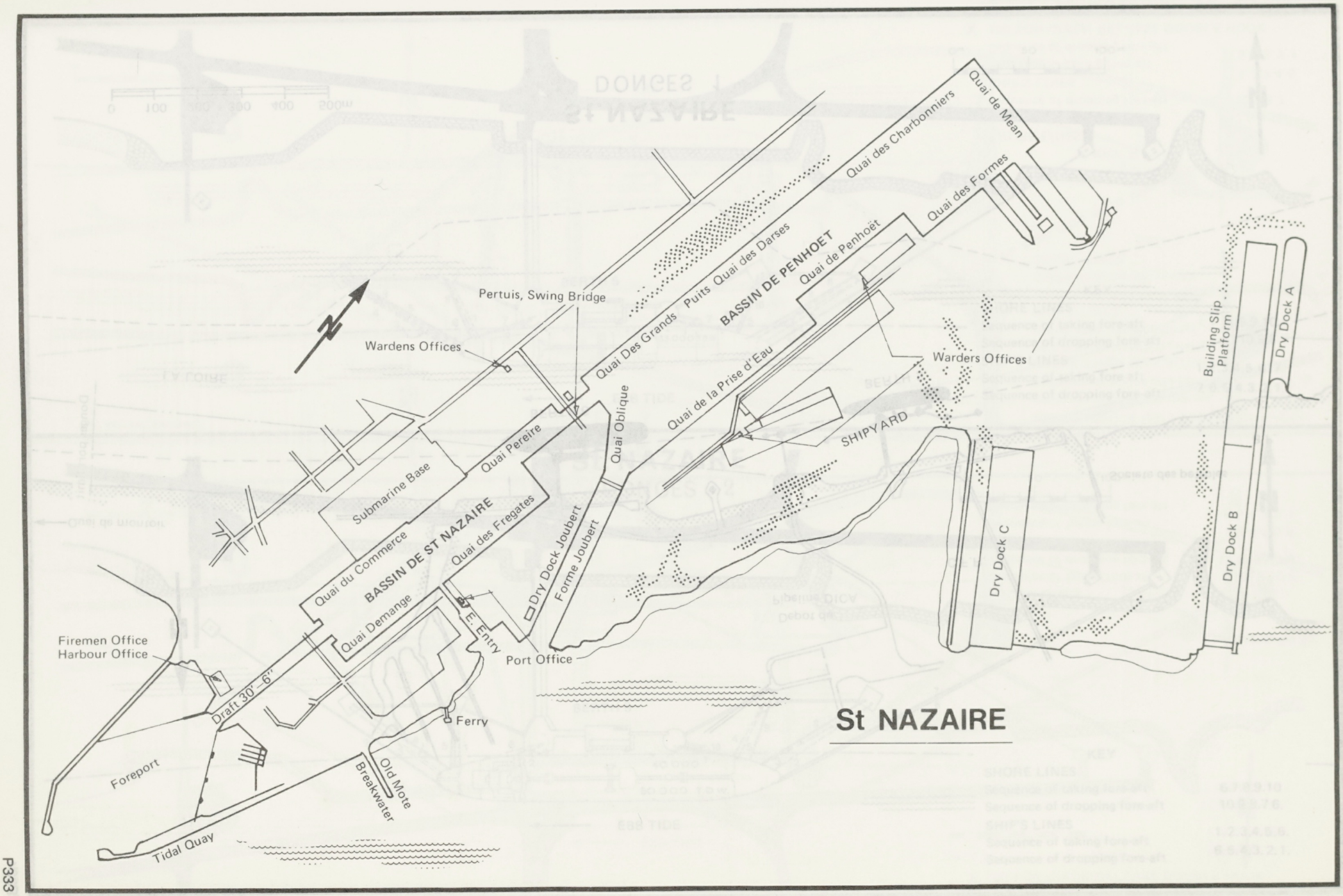

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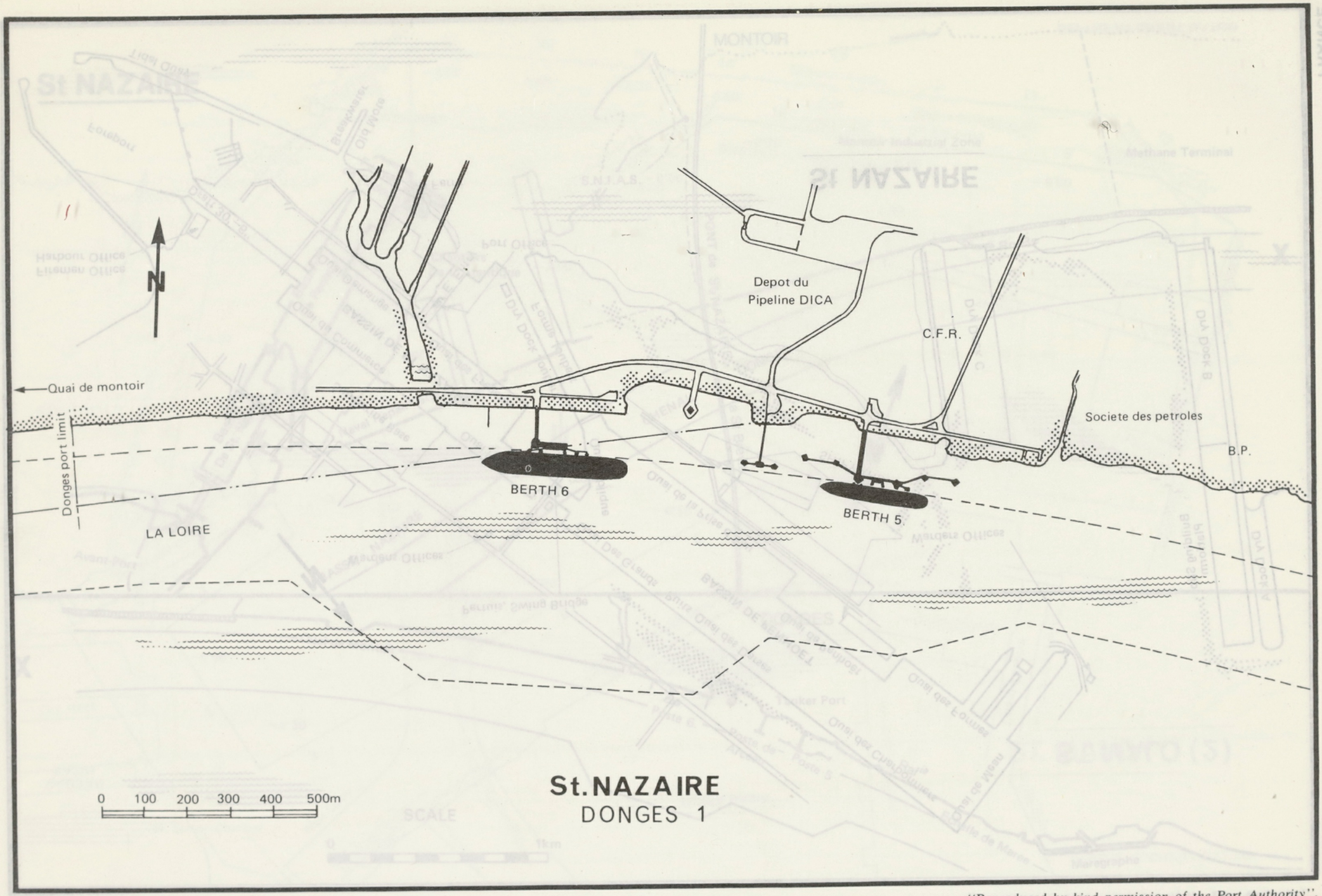

St. NAZAIRE
DONGES 1

FRANCE

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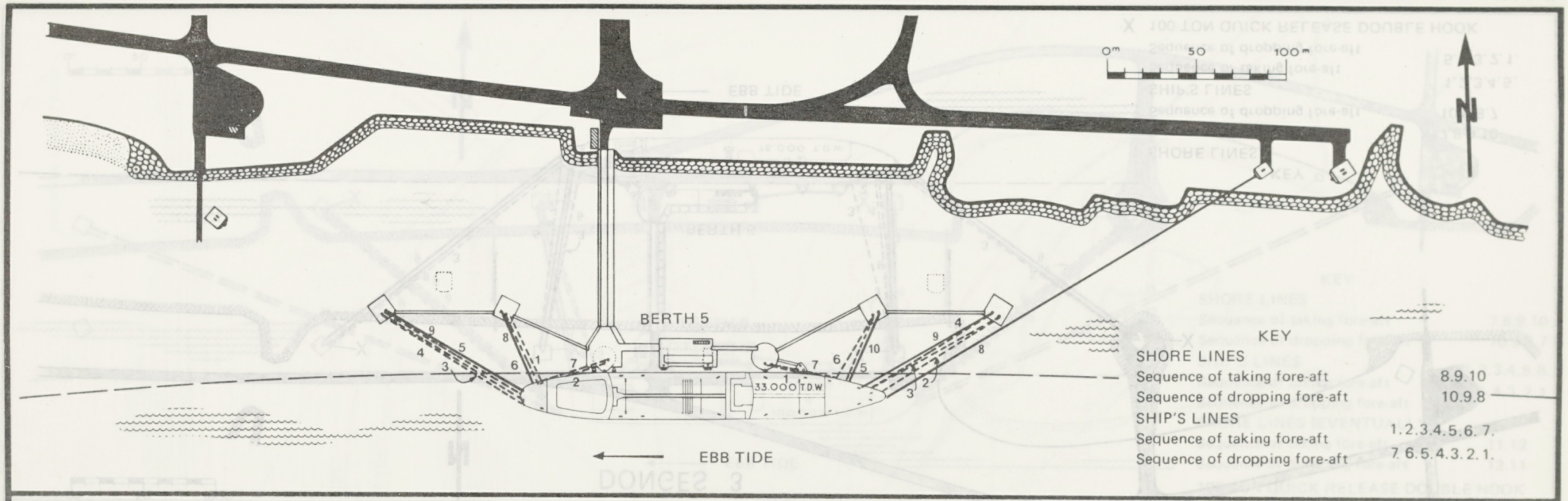

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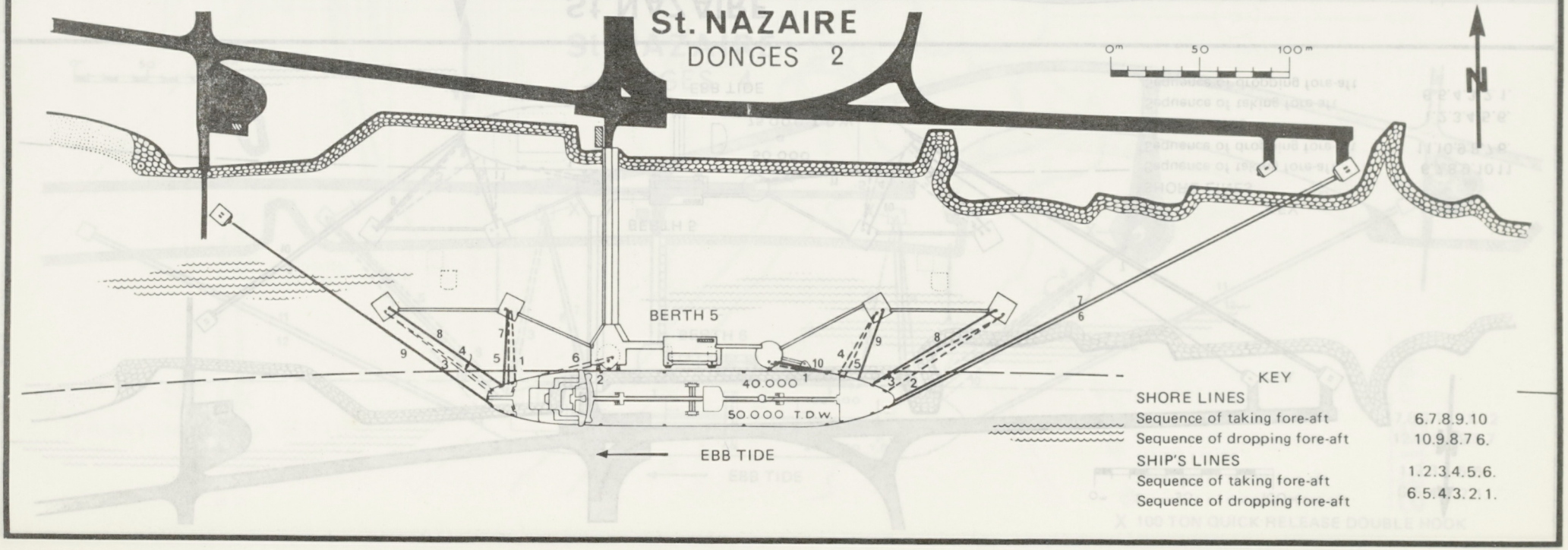
DONGES 2



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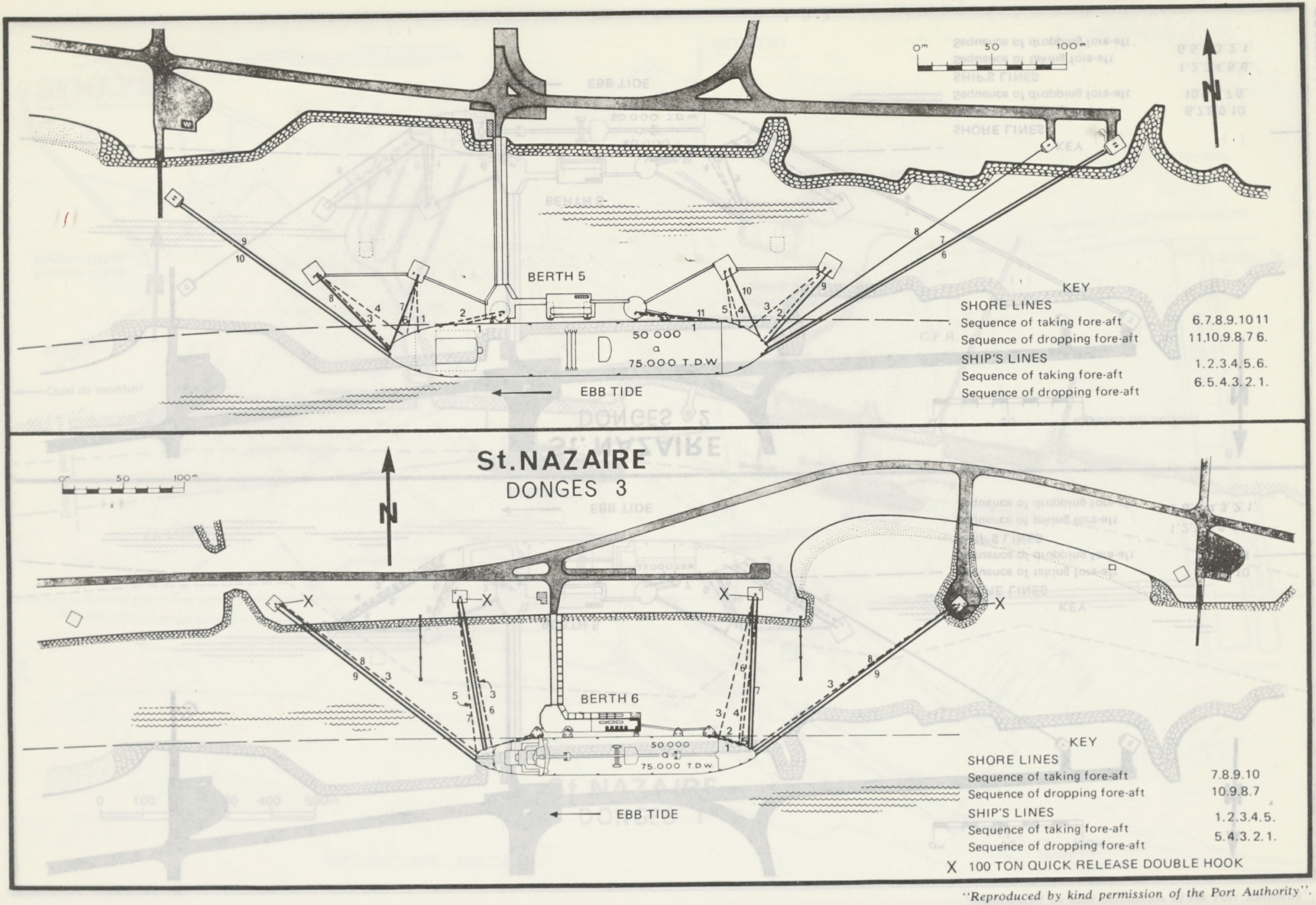

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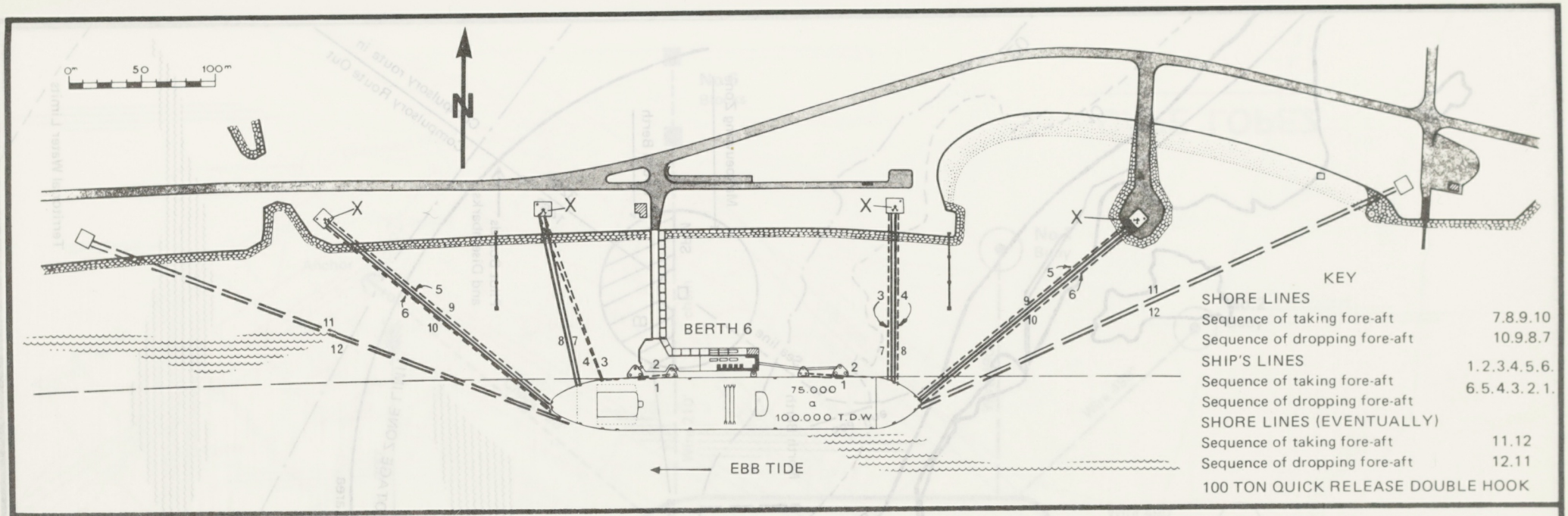
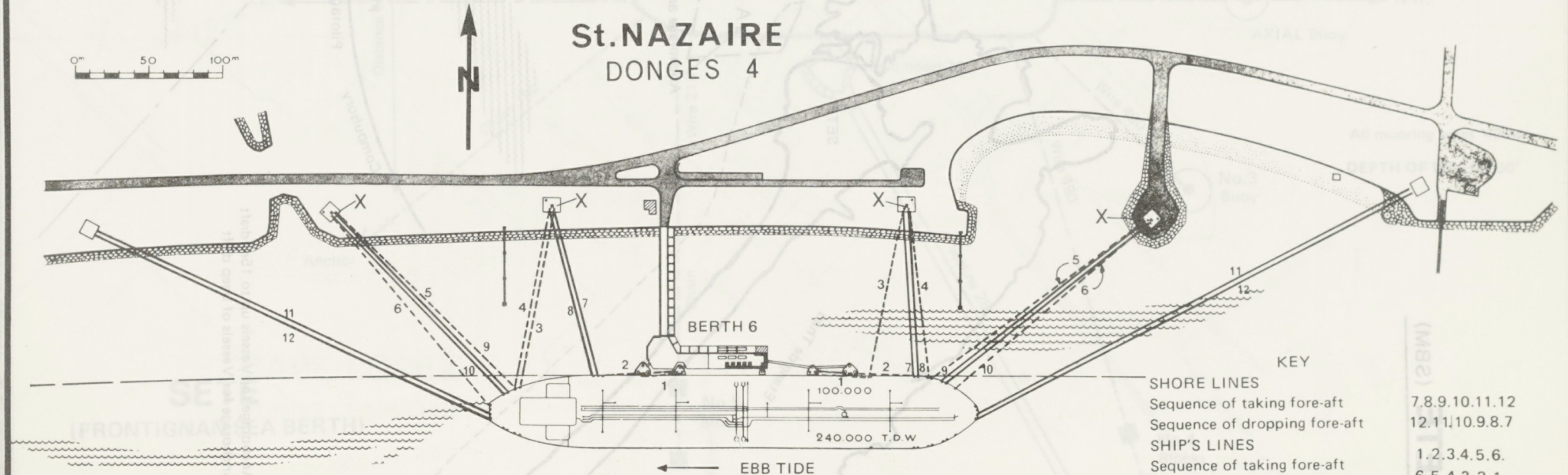


St.NAZAIRE
DONGES 4



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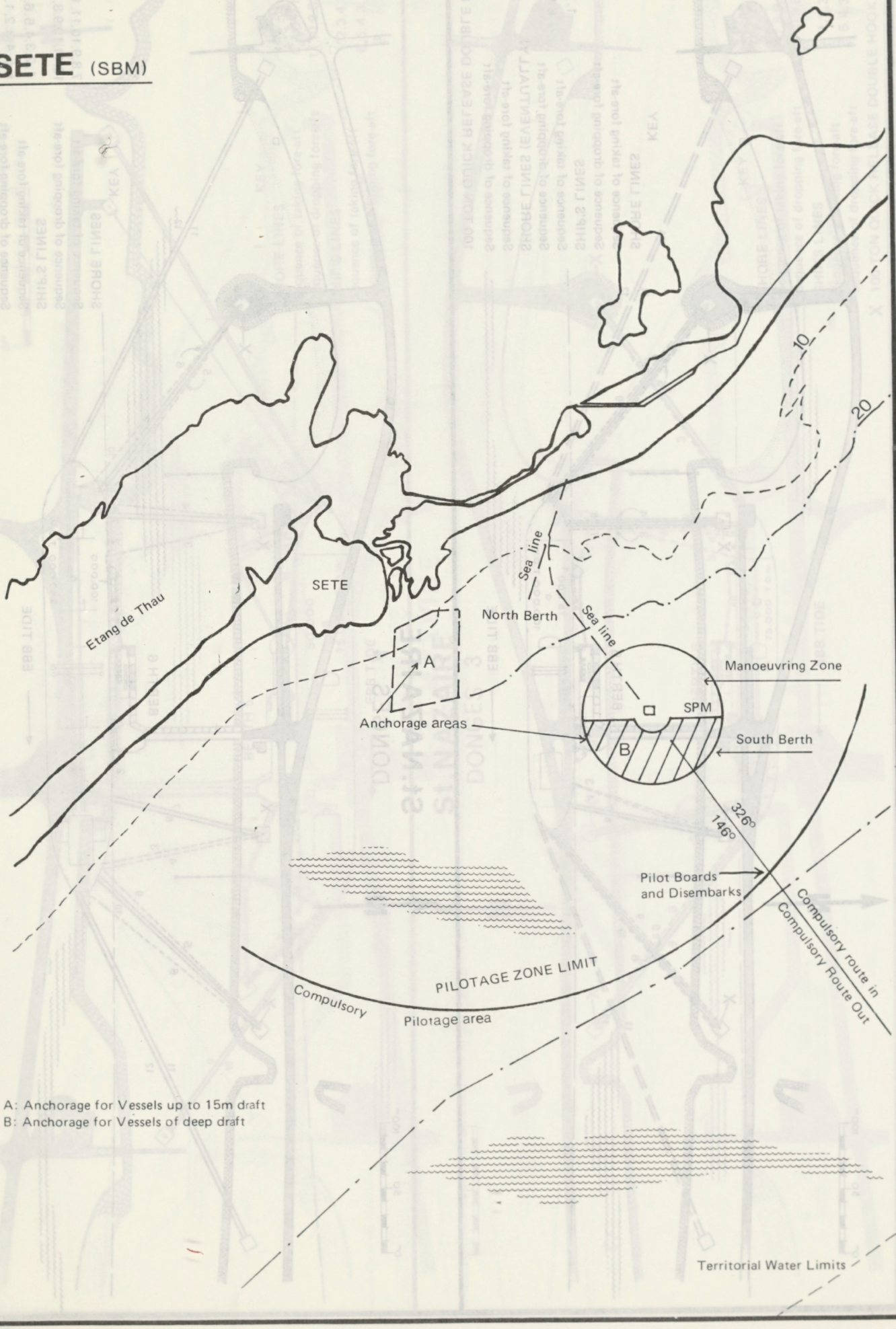

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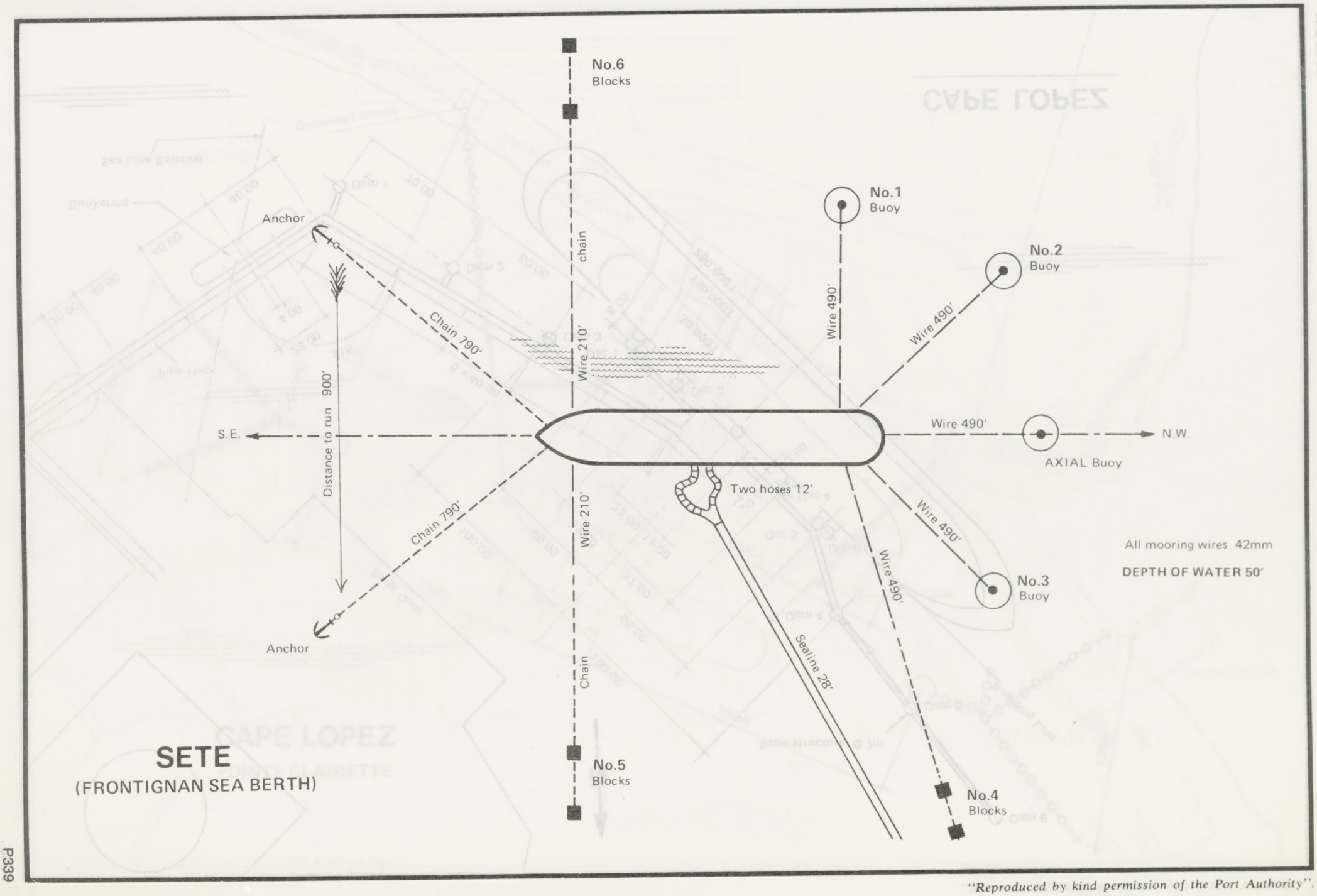

SETE
(FRONTIGNAN SEA BERTH)

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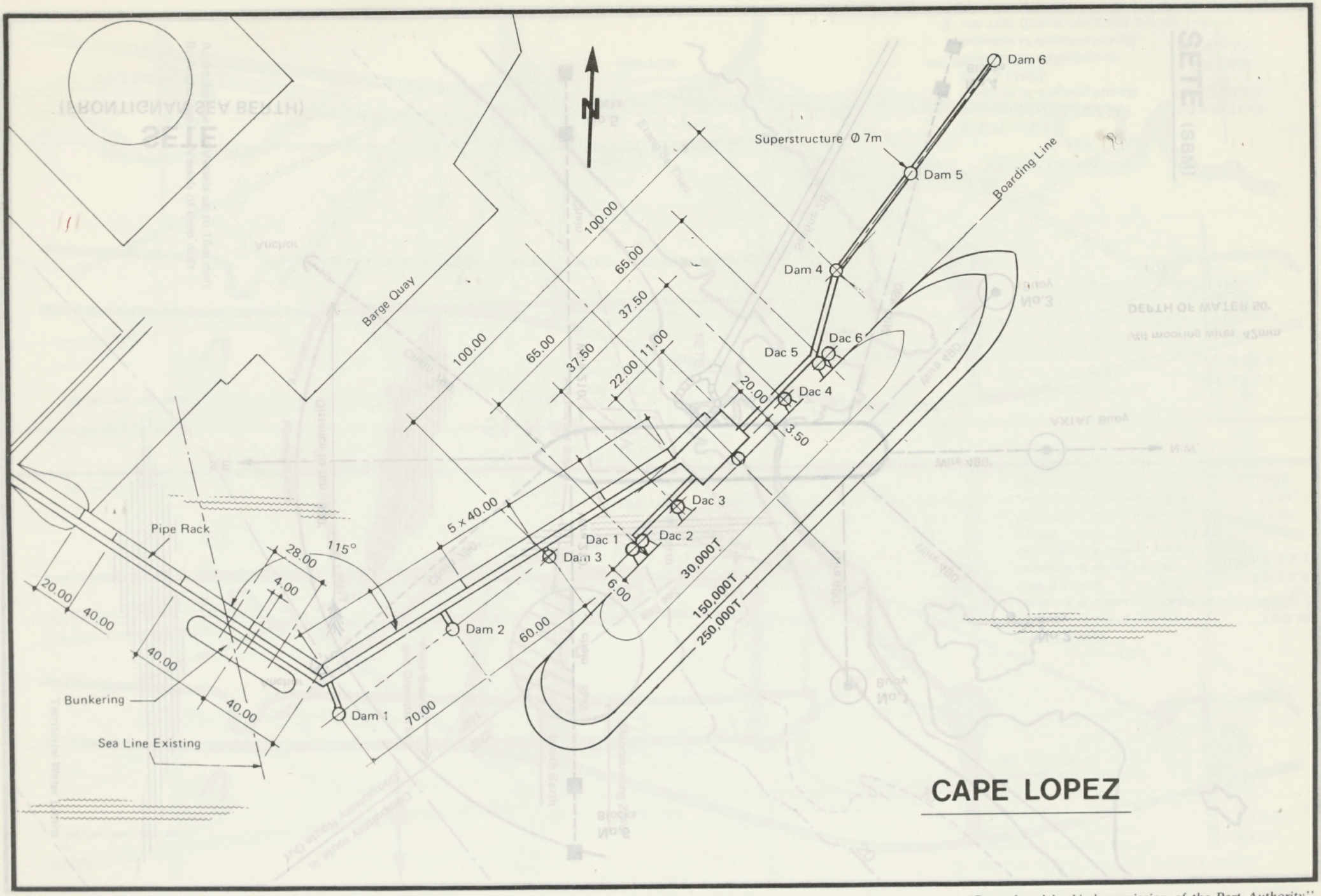

CAPE LOPEZ

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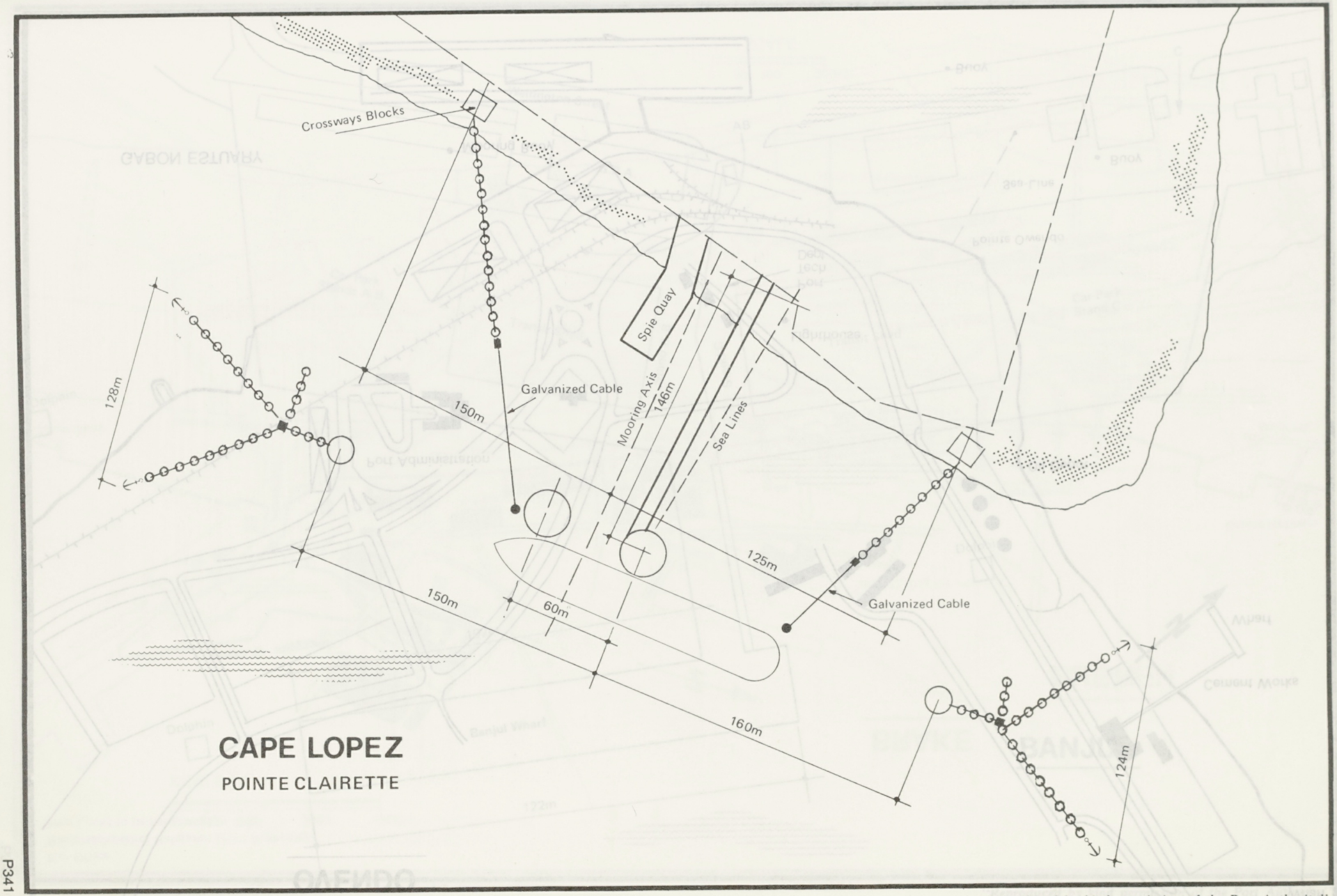

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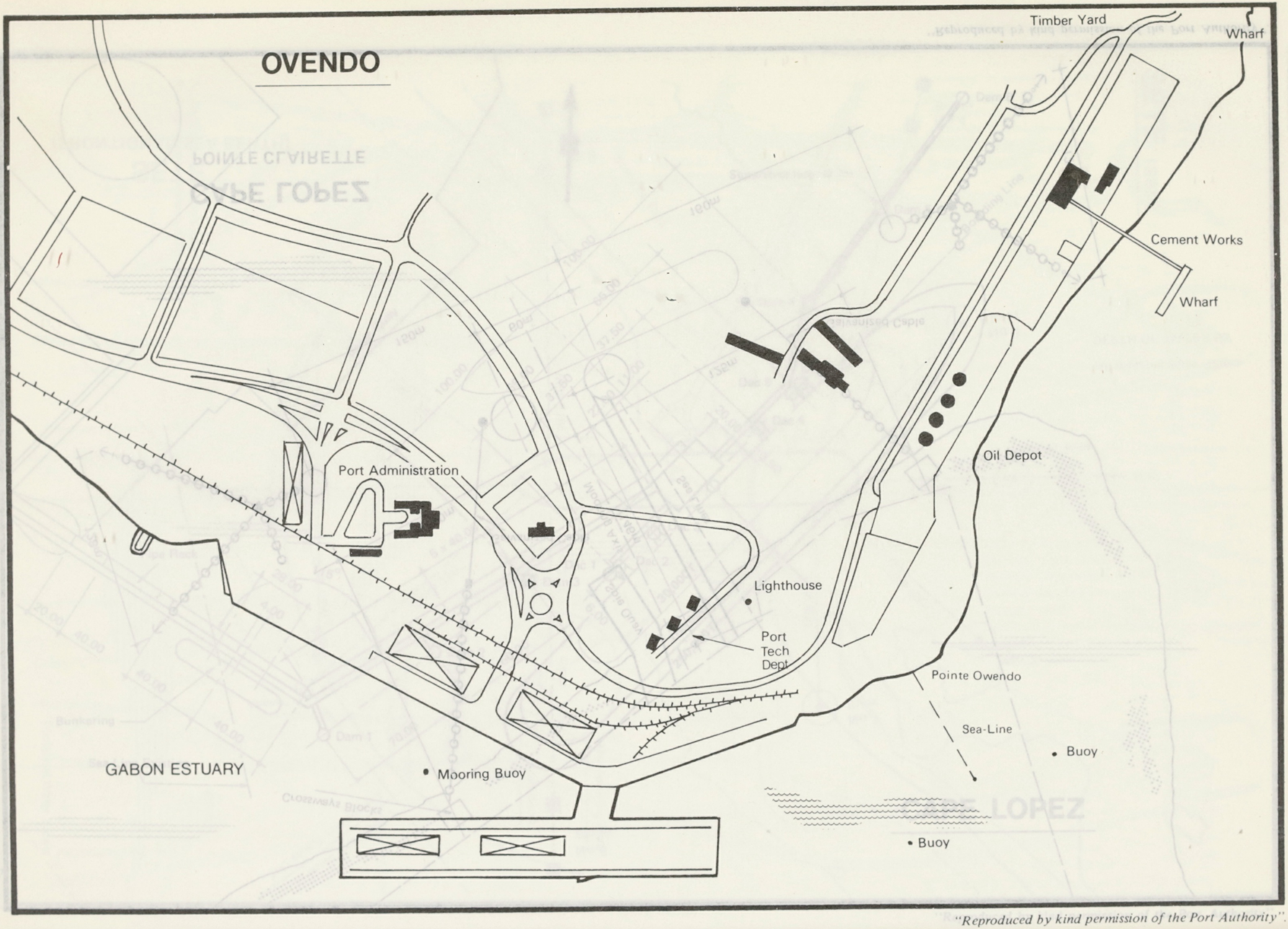
OVENDO



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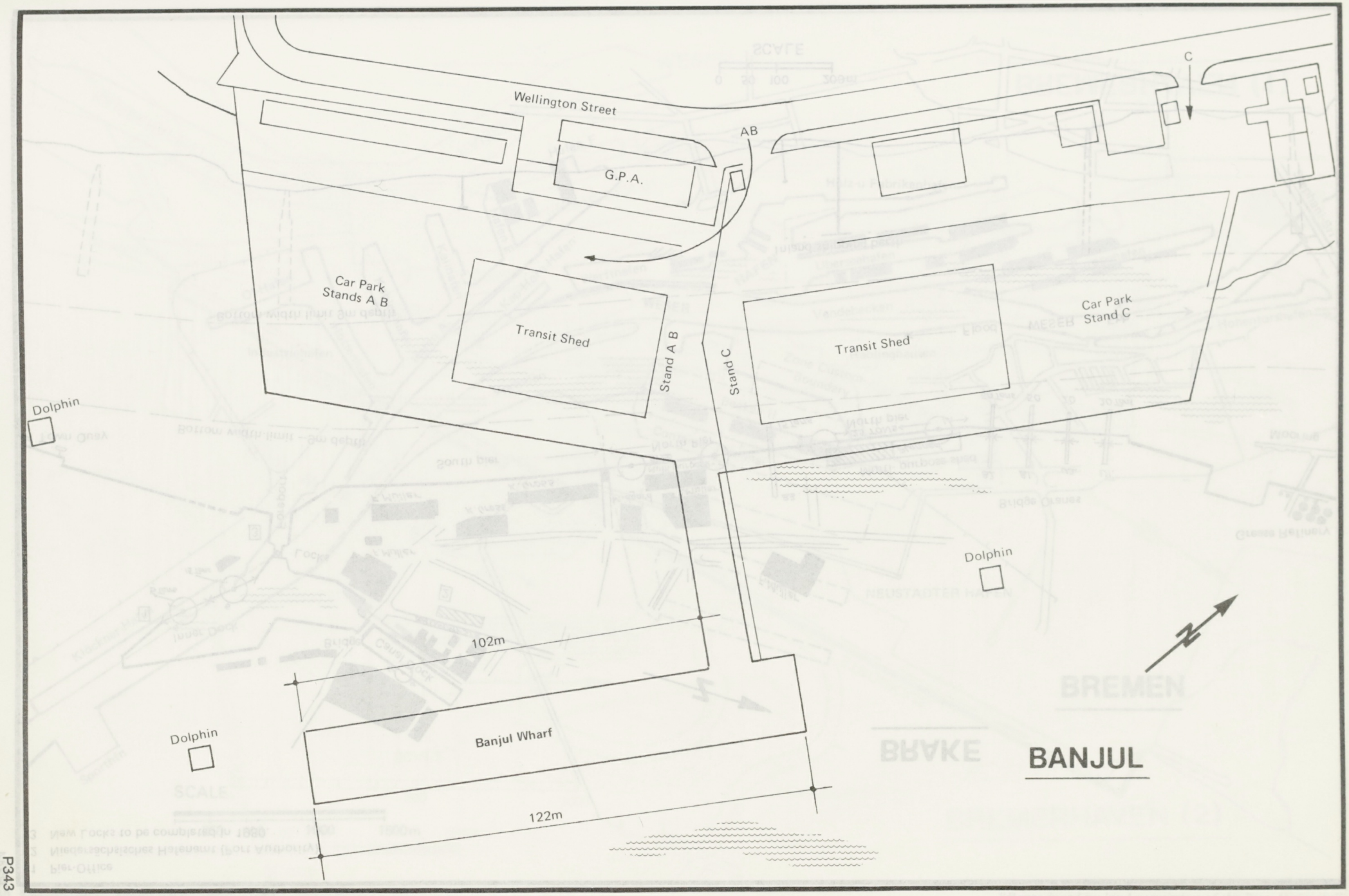

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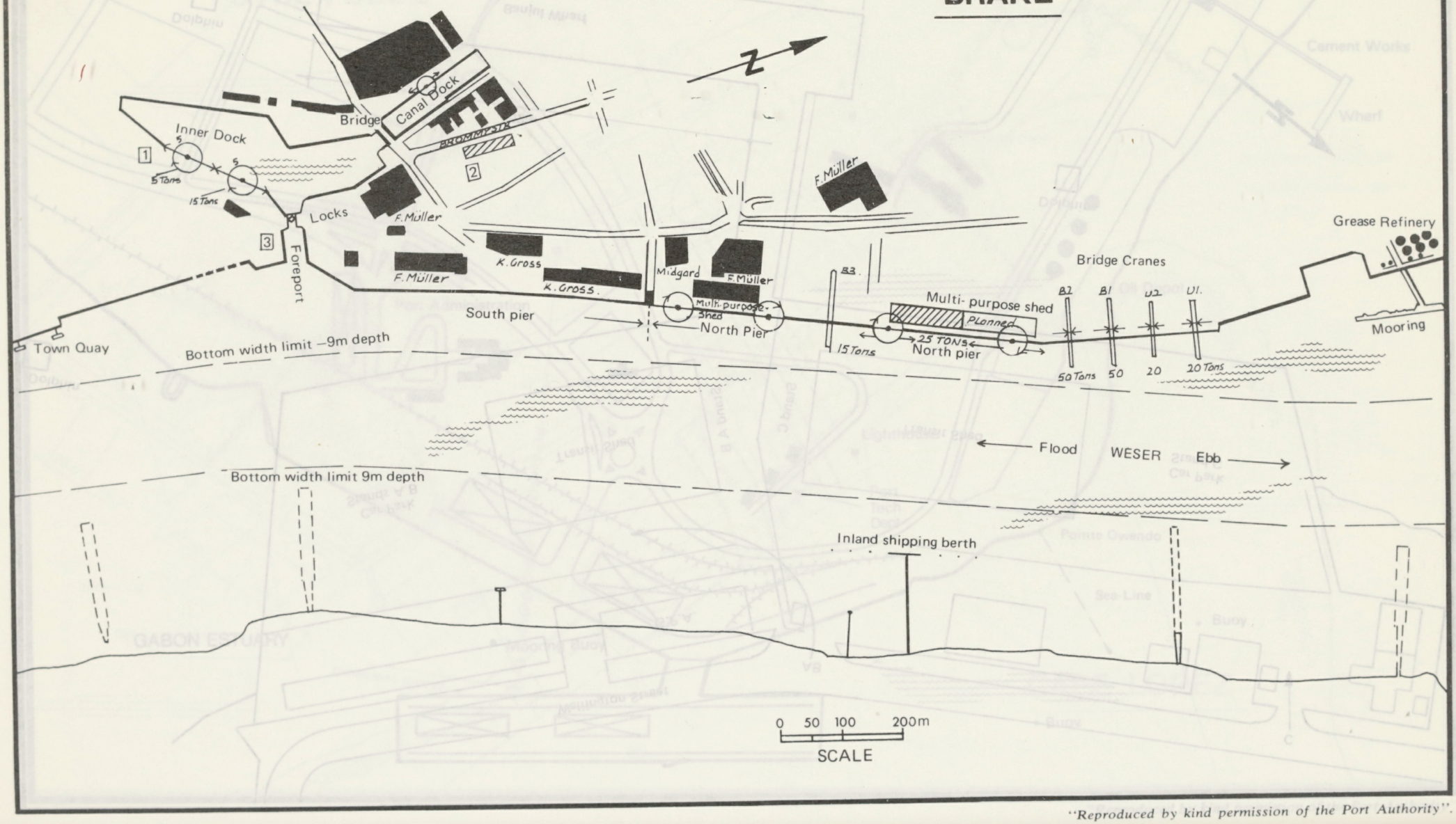
1 Pier-Office
2 Niedersächsisches Hafenamt (Port Authority)
3 New Locks to be completed in 1980.

BRAKE



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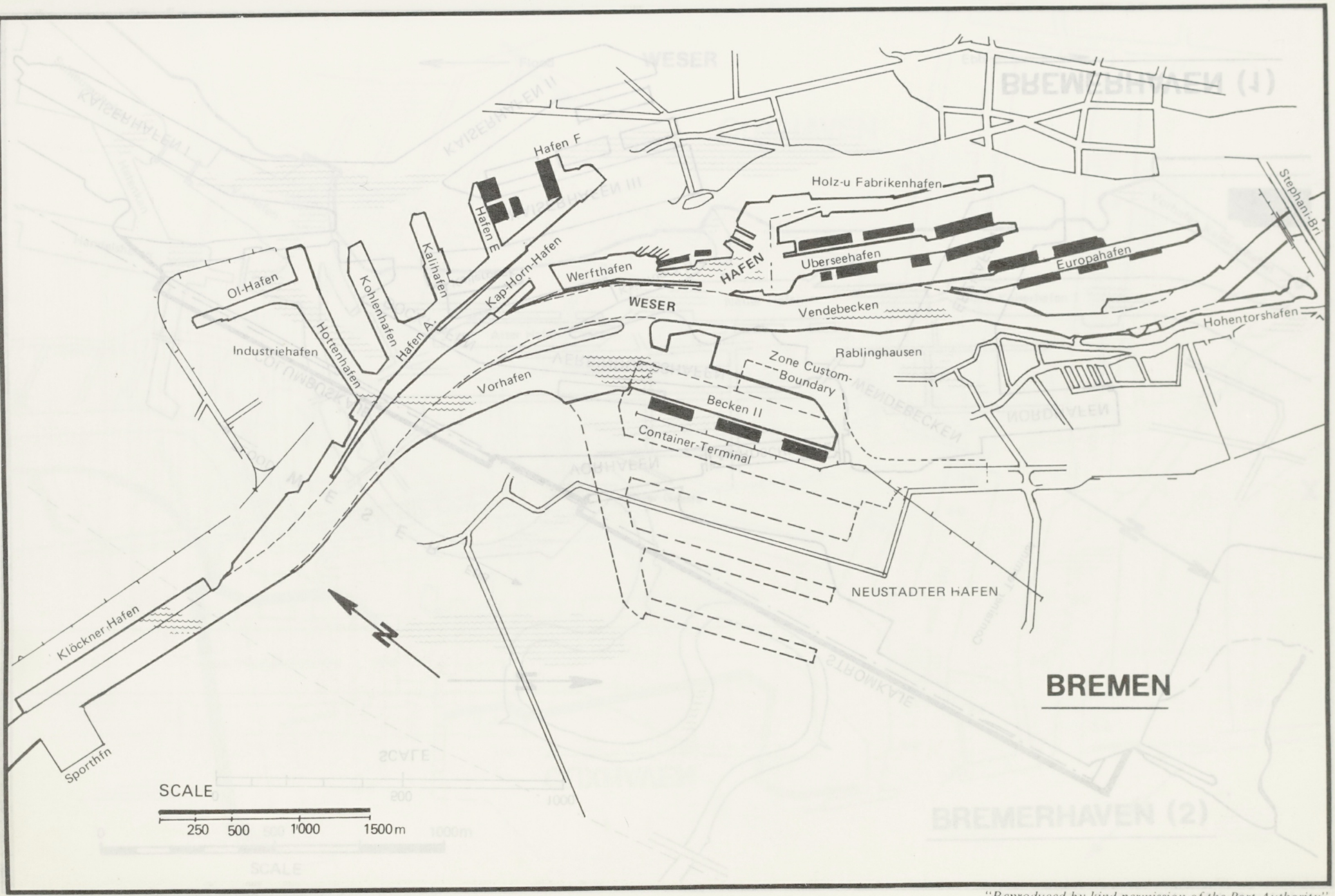

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GERMANY (Federal Republic)

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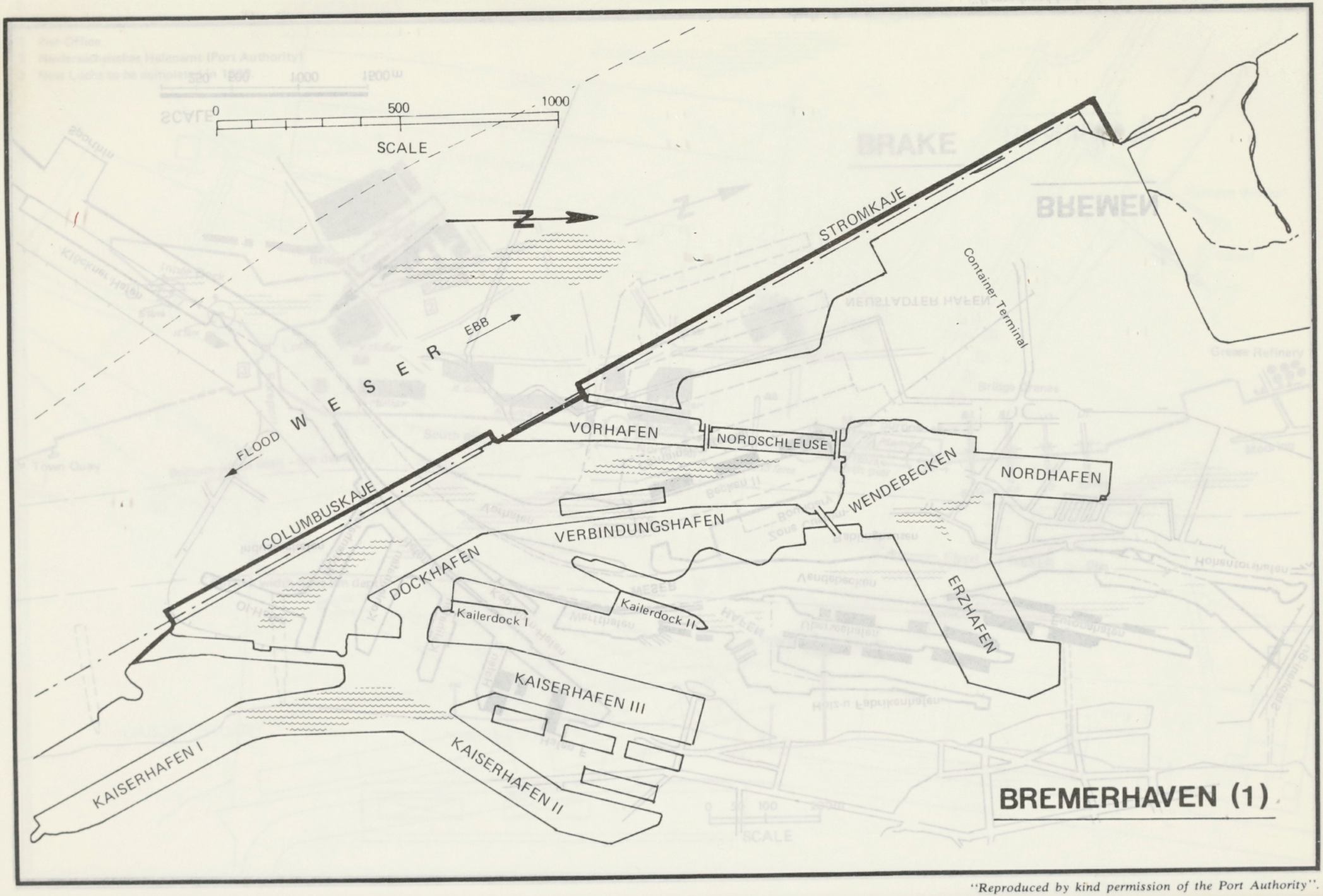

BREMERHAVEN (1)

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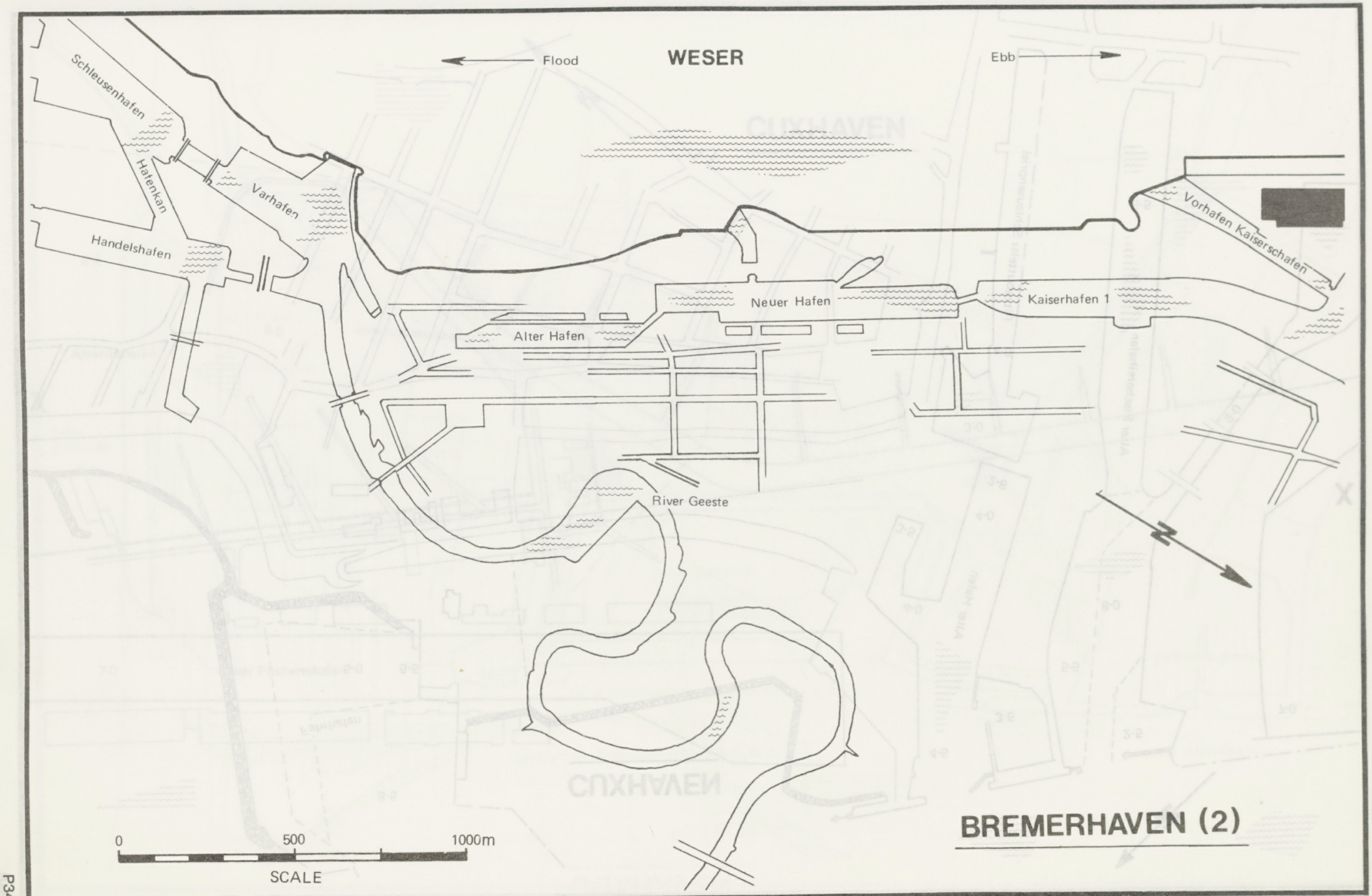

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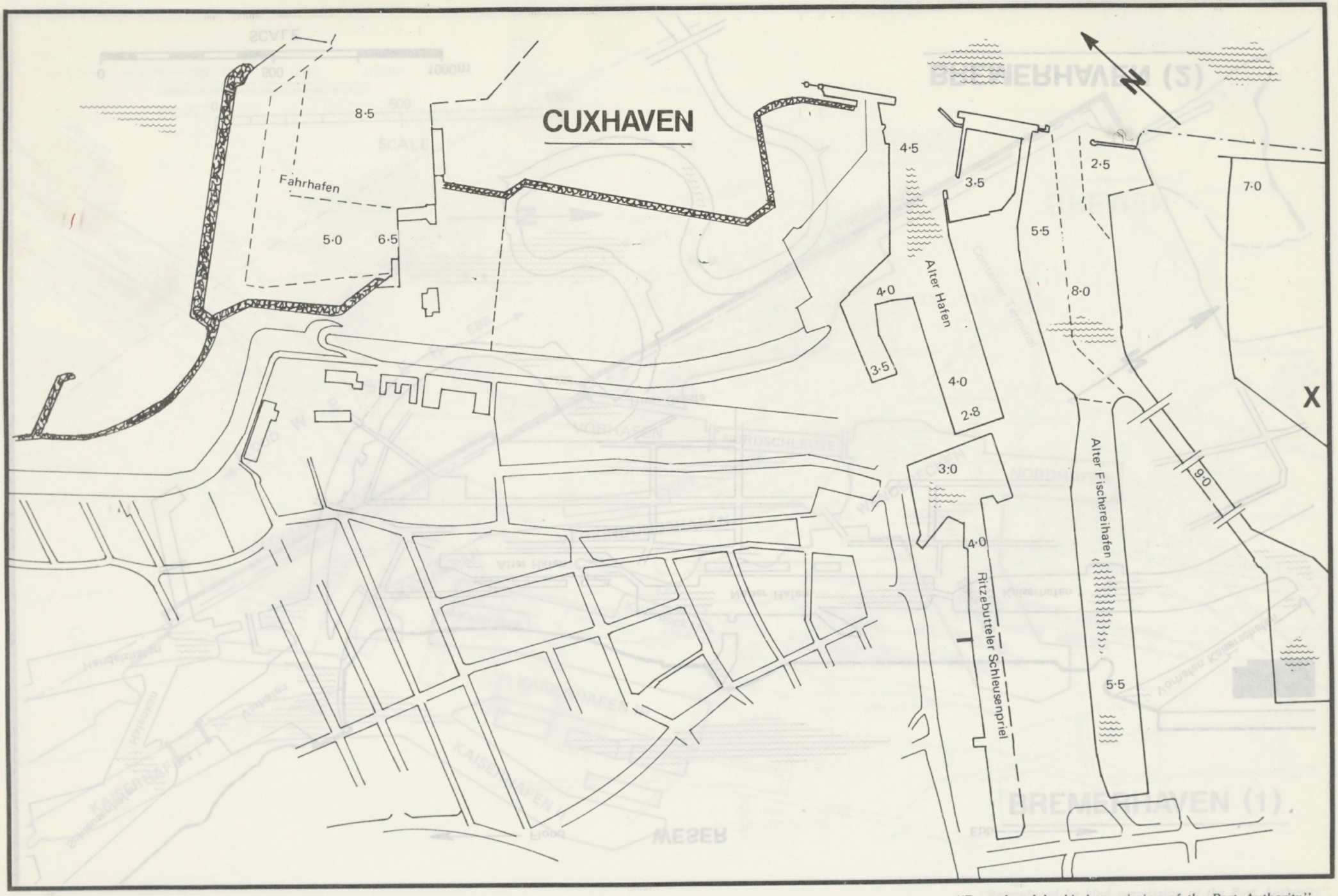

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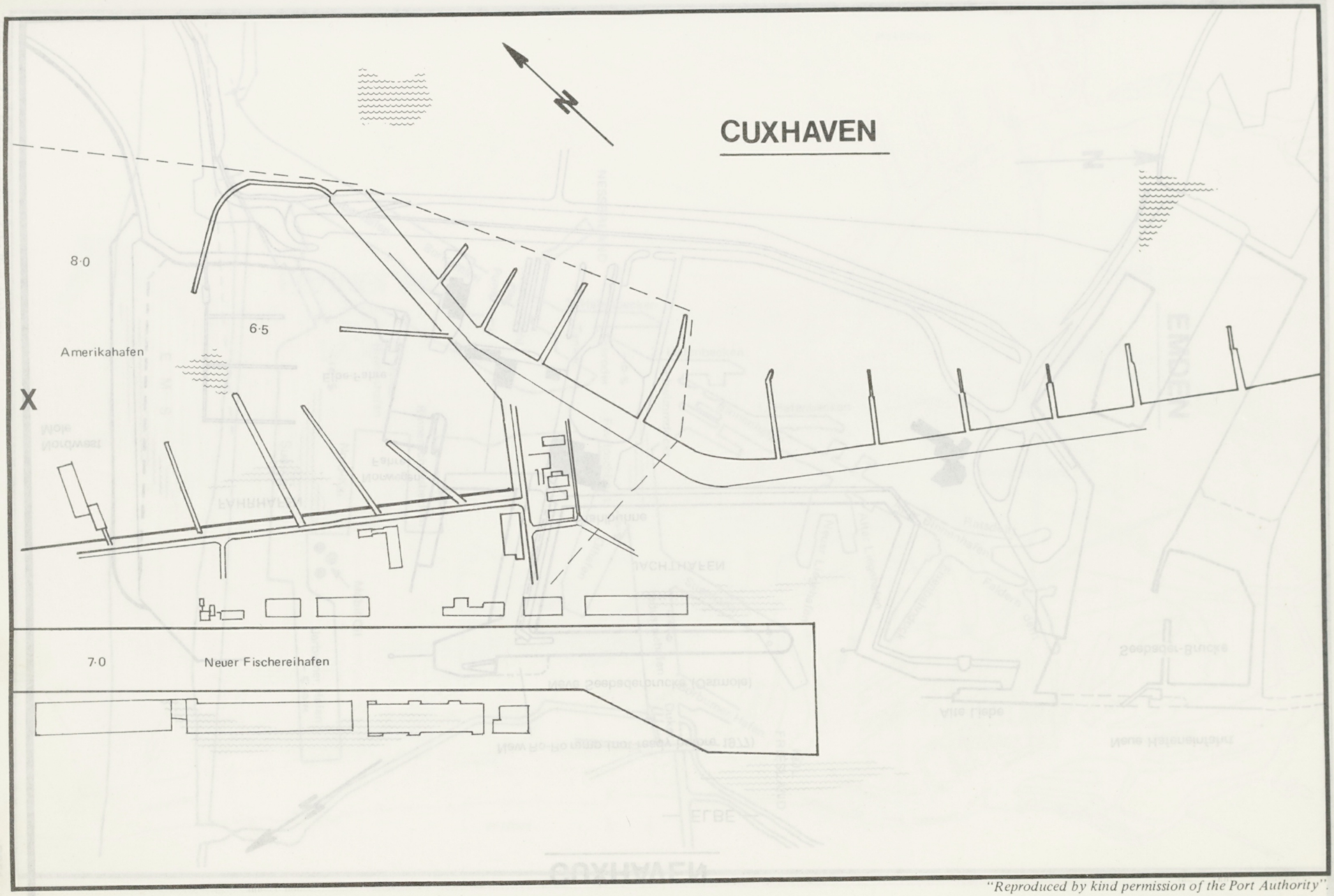

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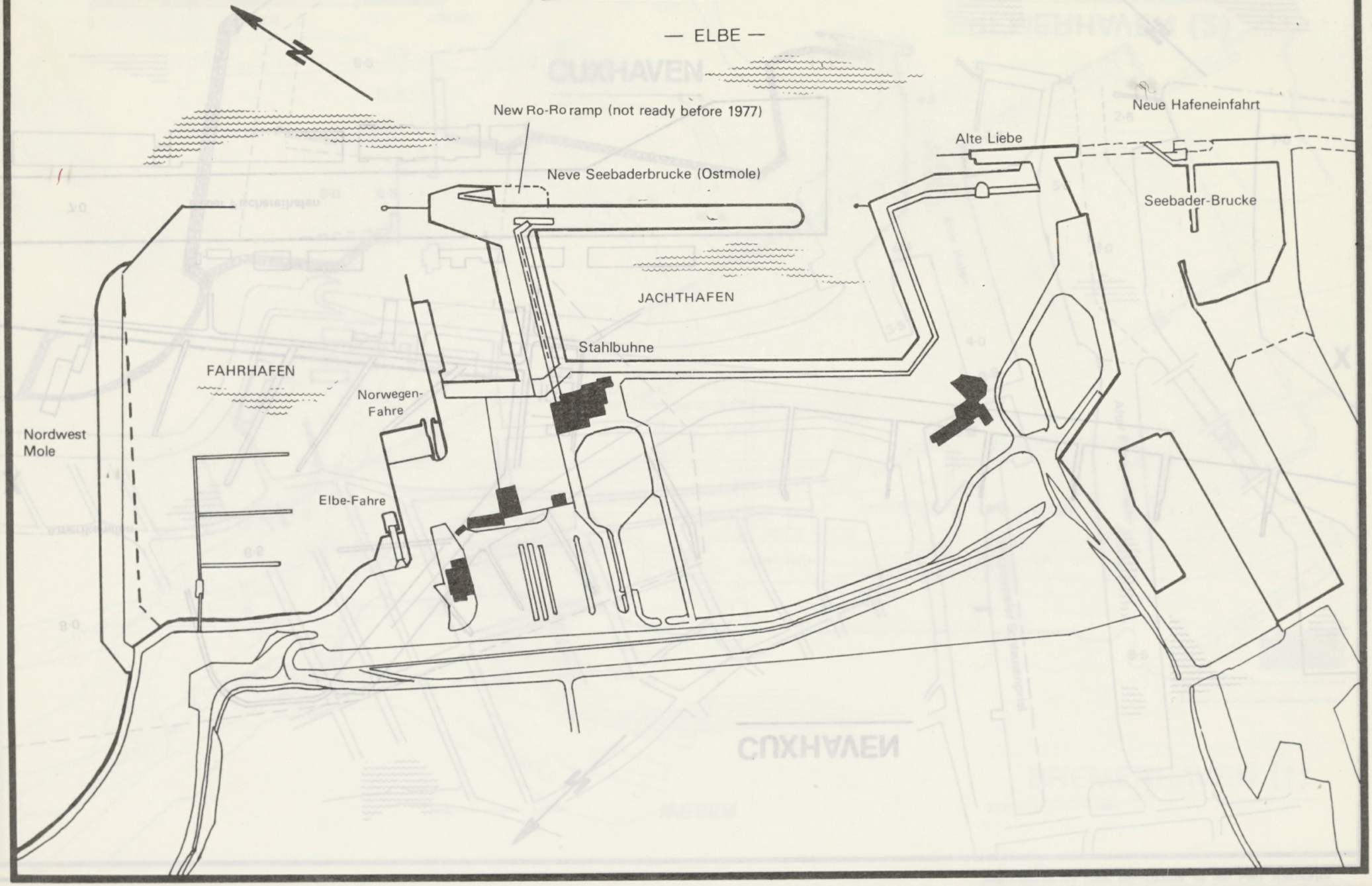
CUXHAVEN



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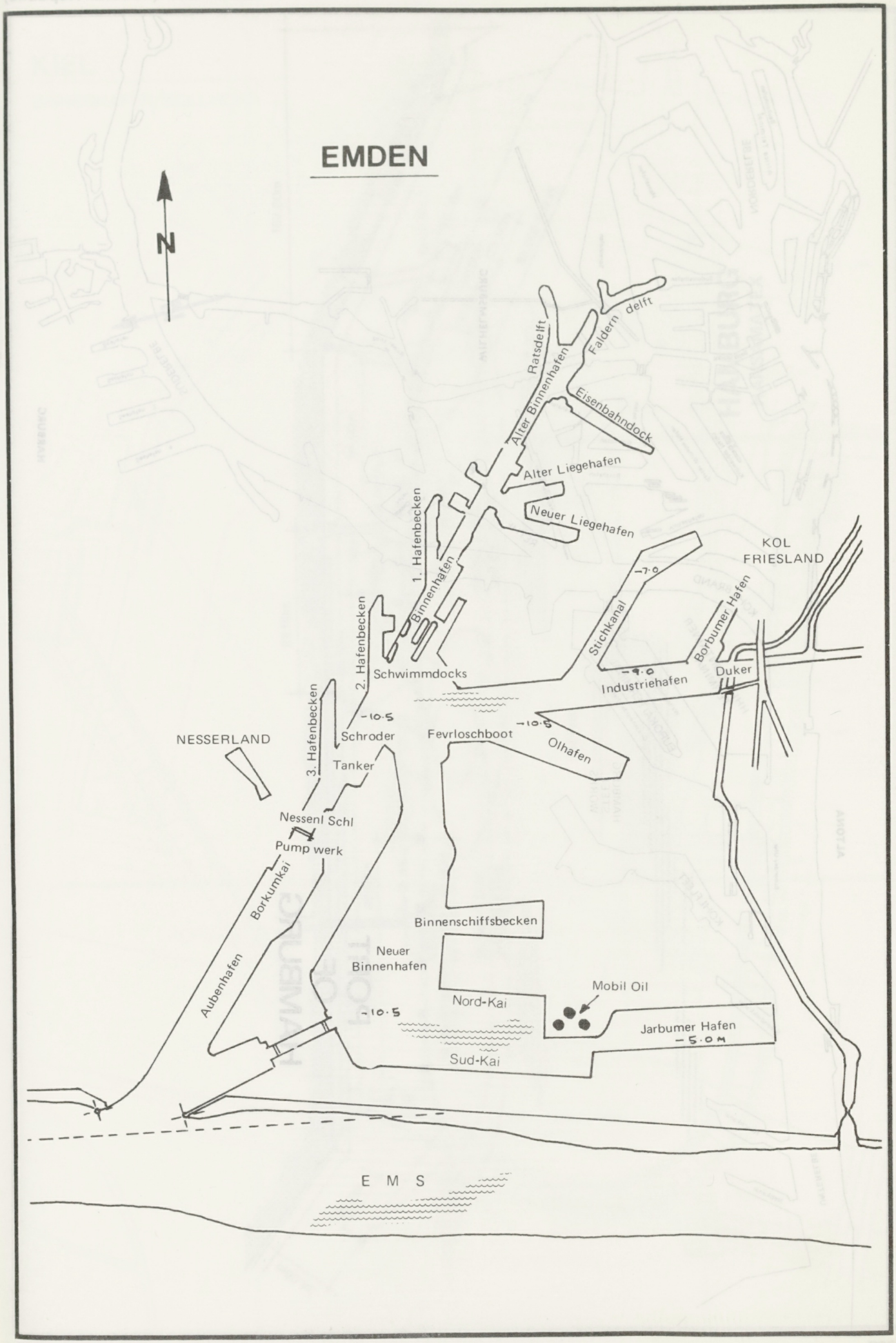

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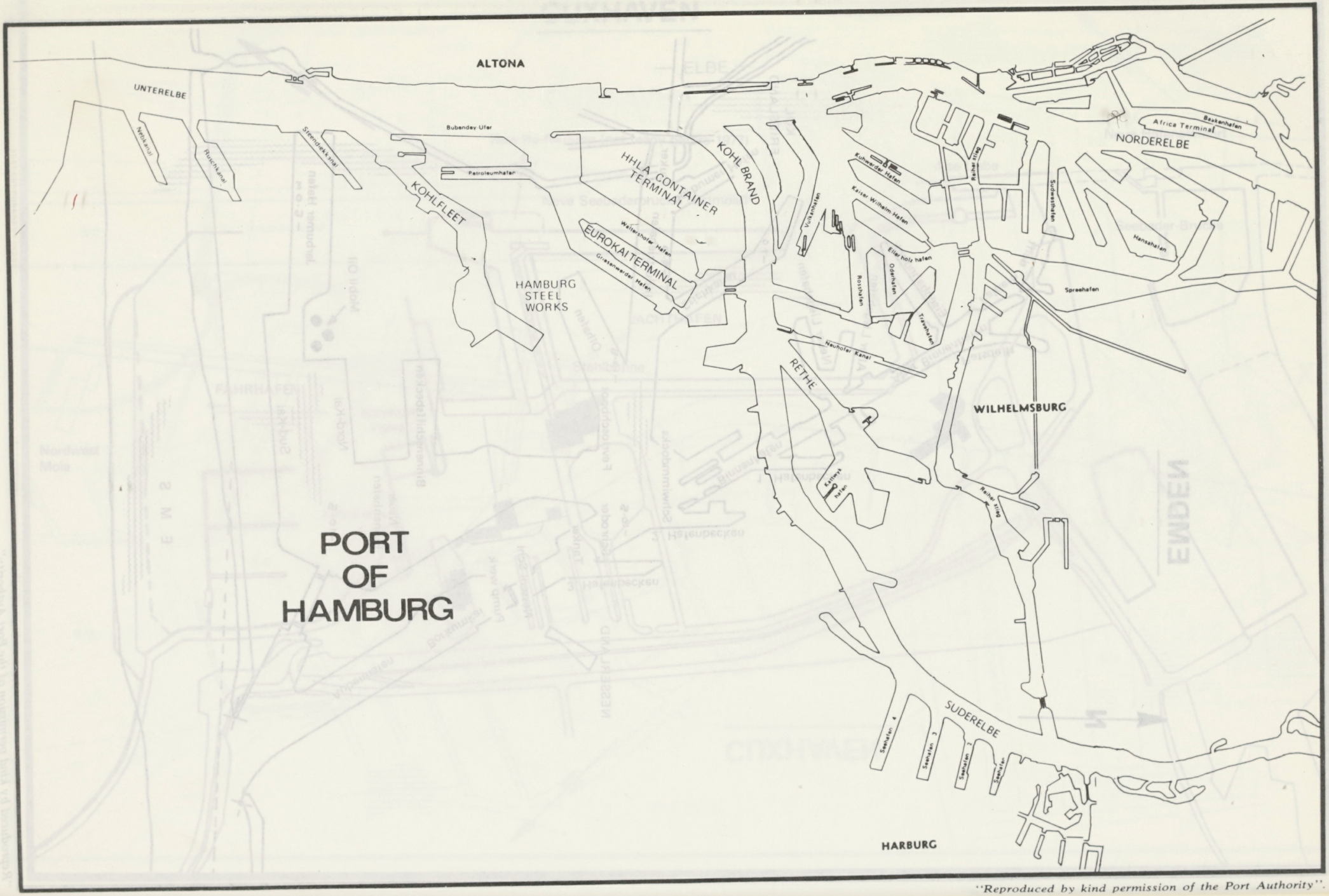

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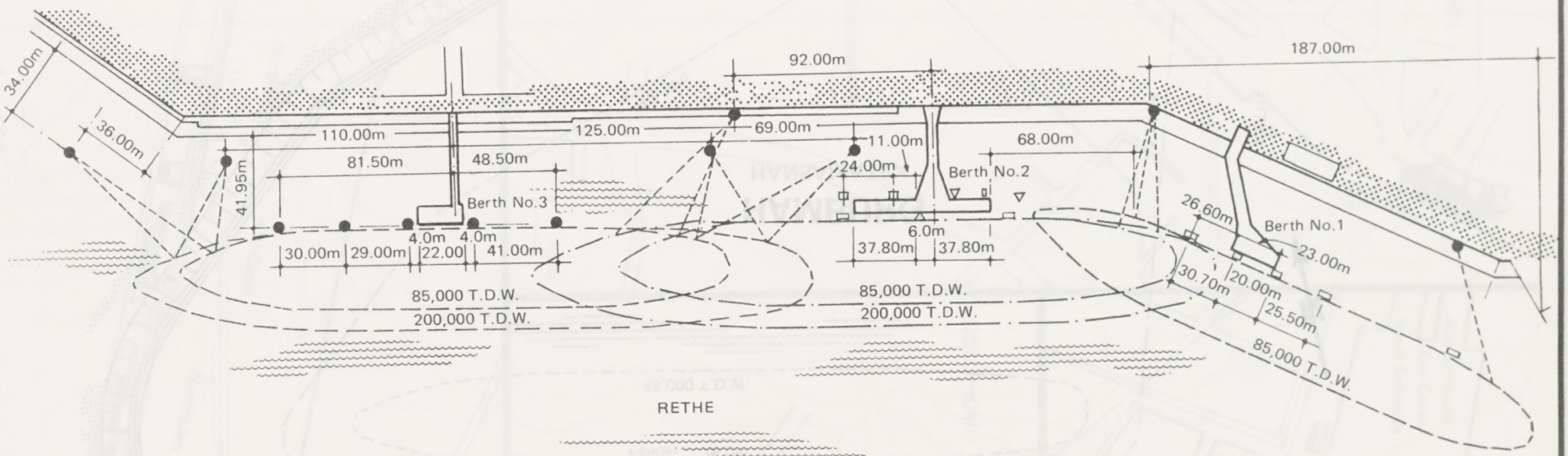

HAMBURG

HANSAMATEX

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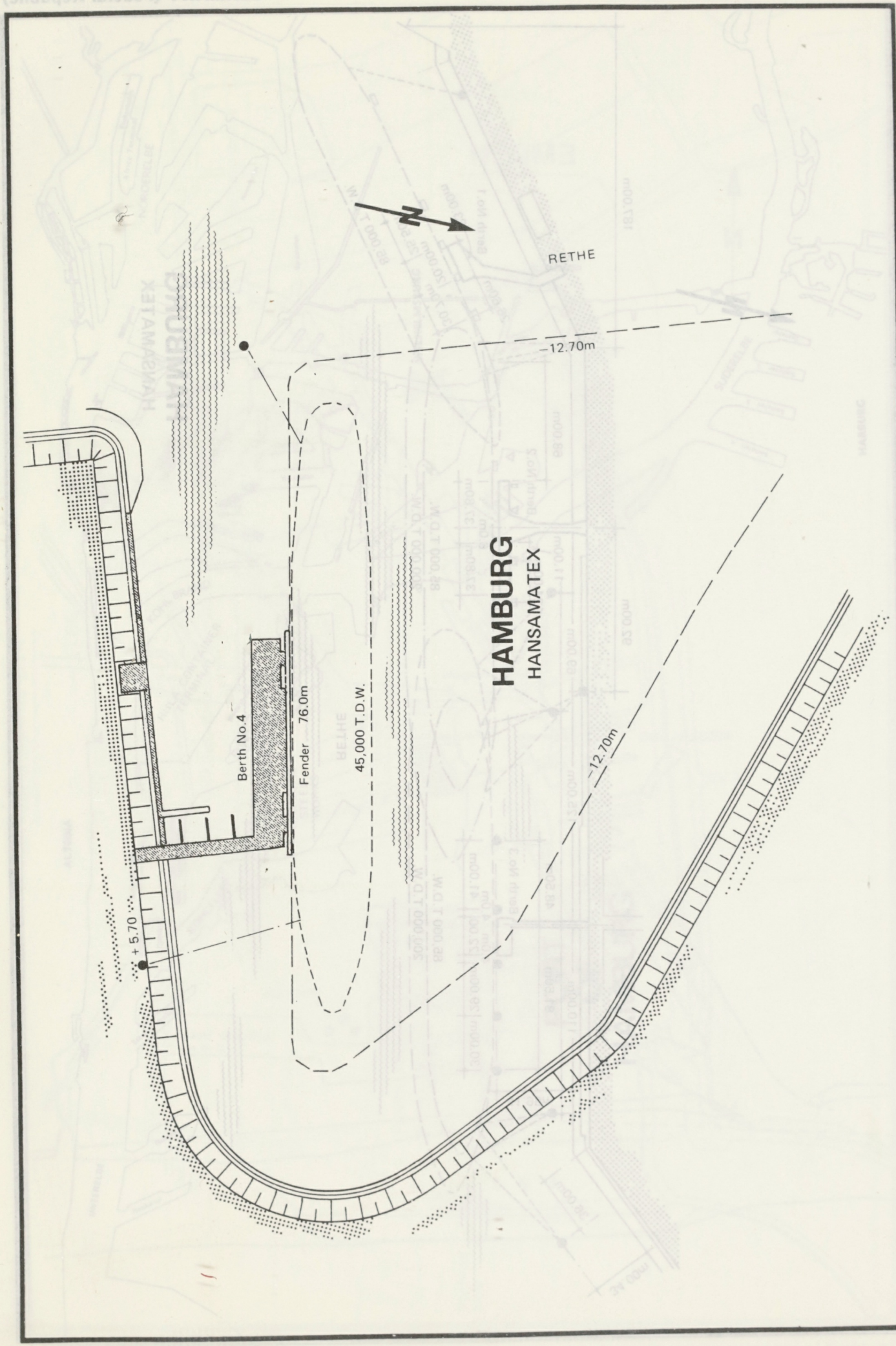

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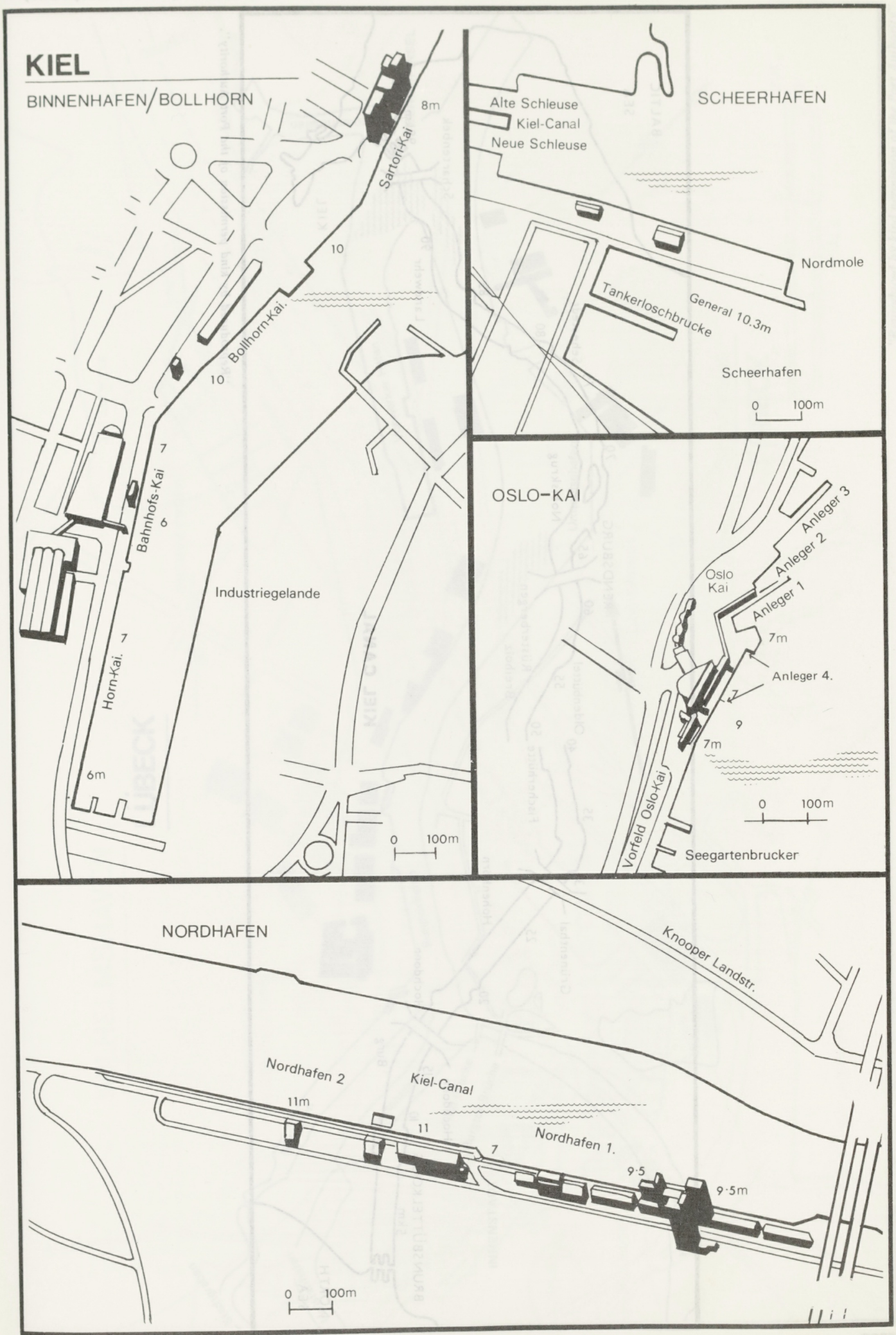

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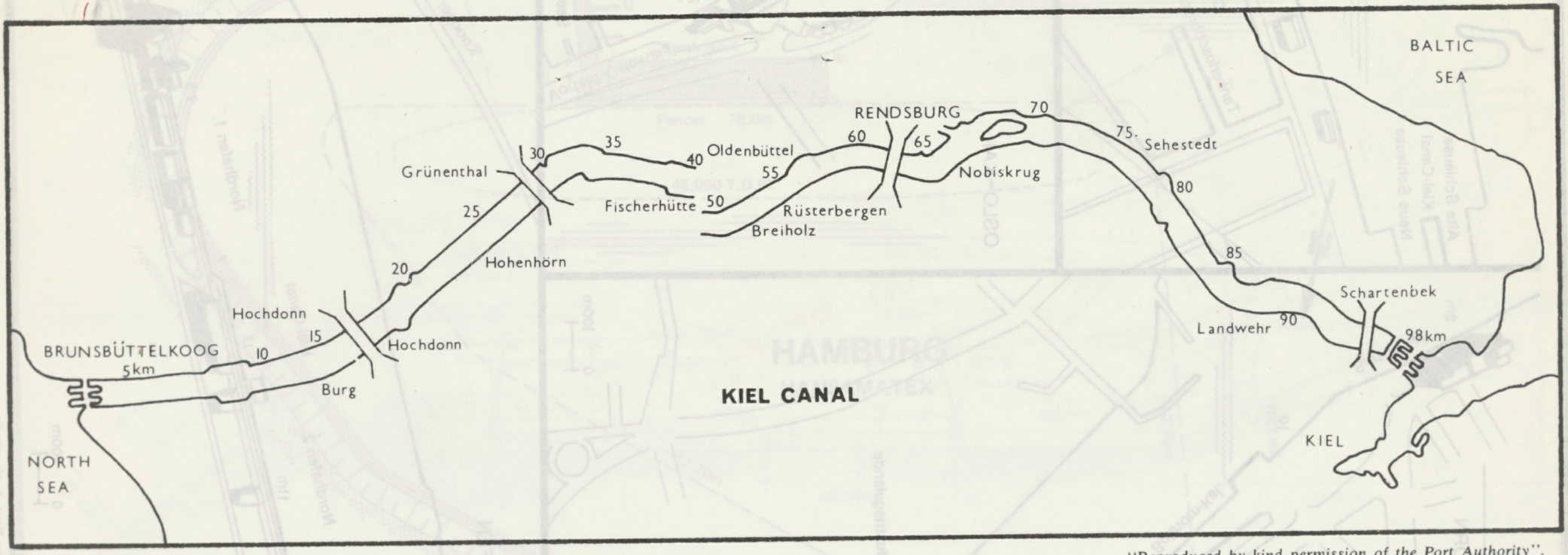

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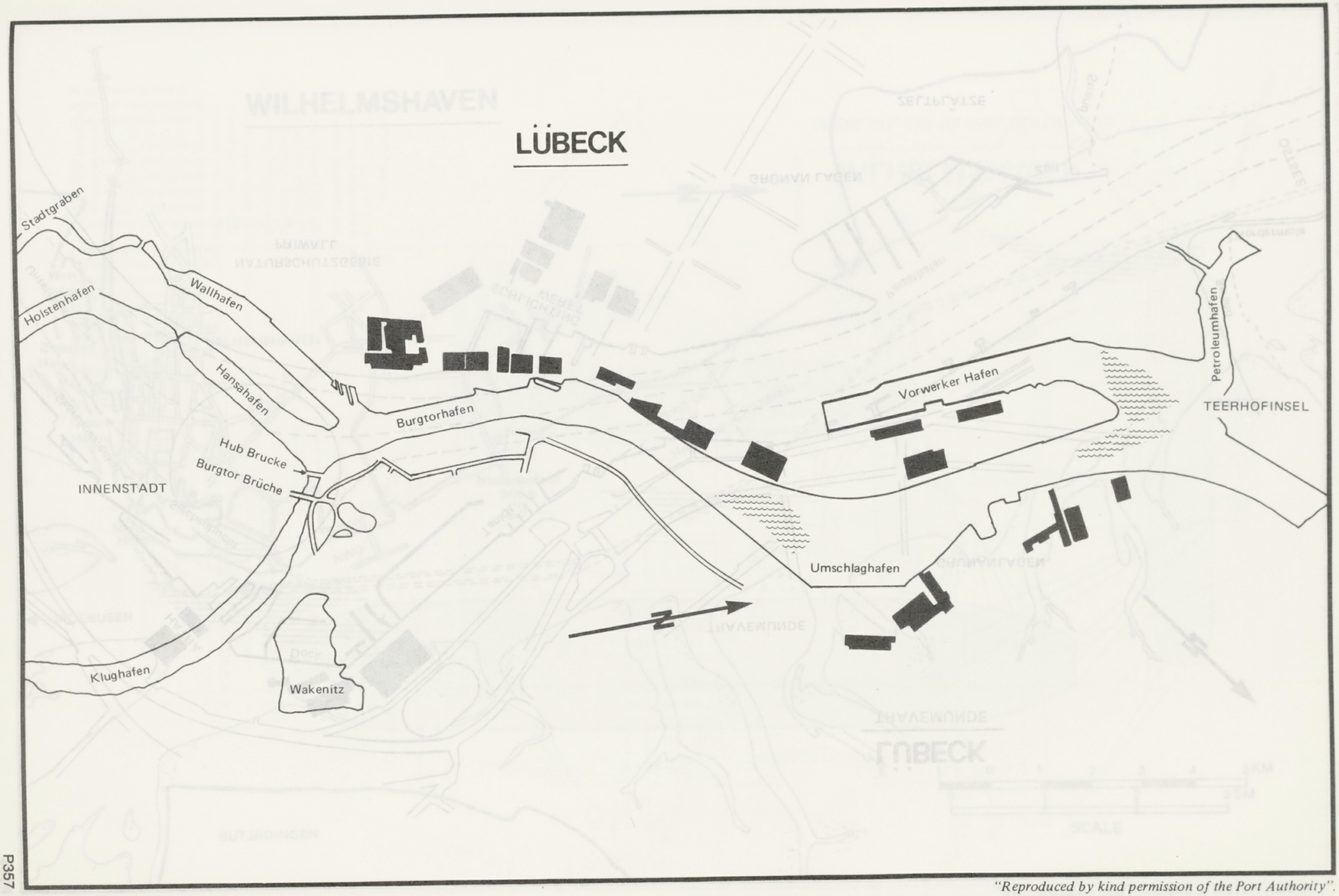

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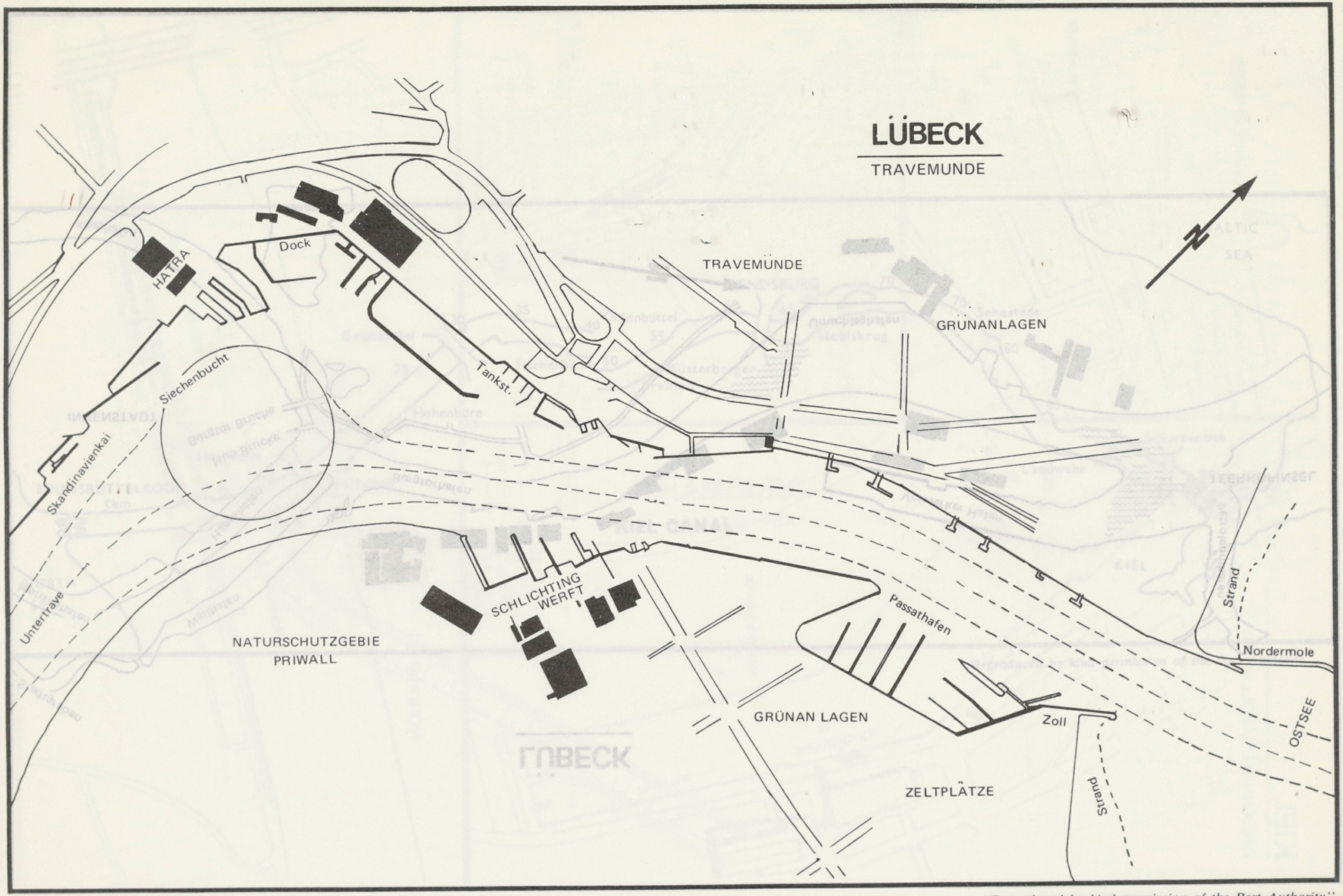

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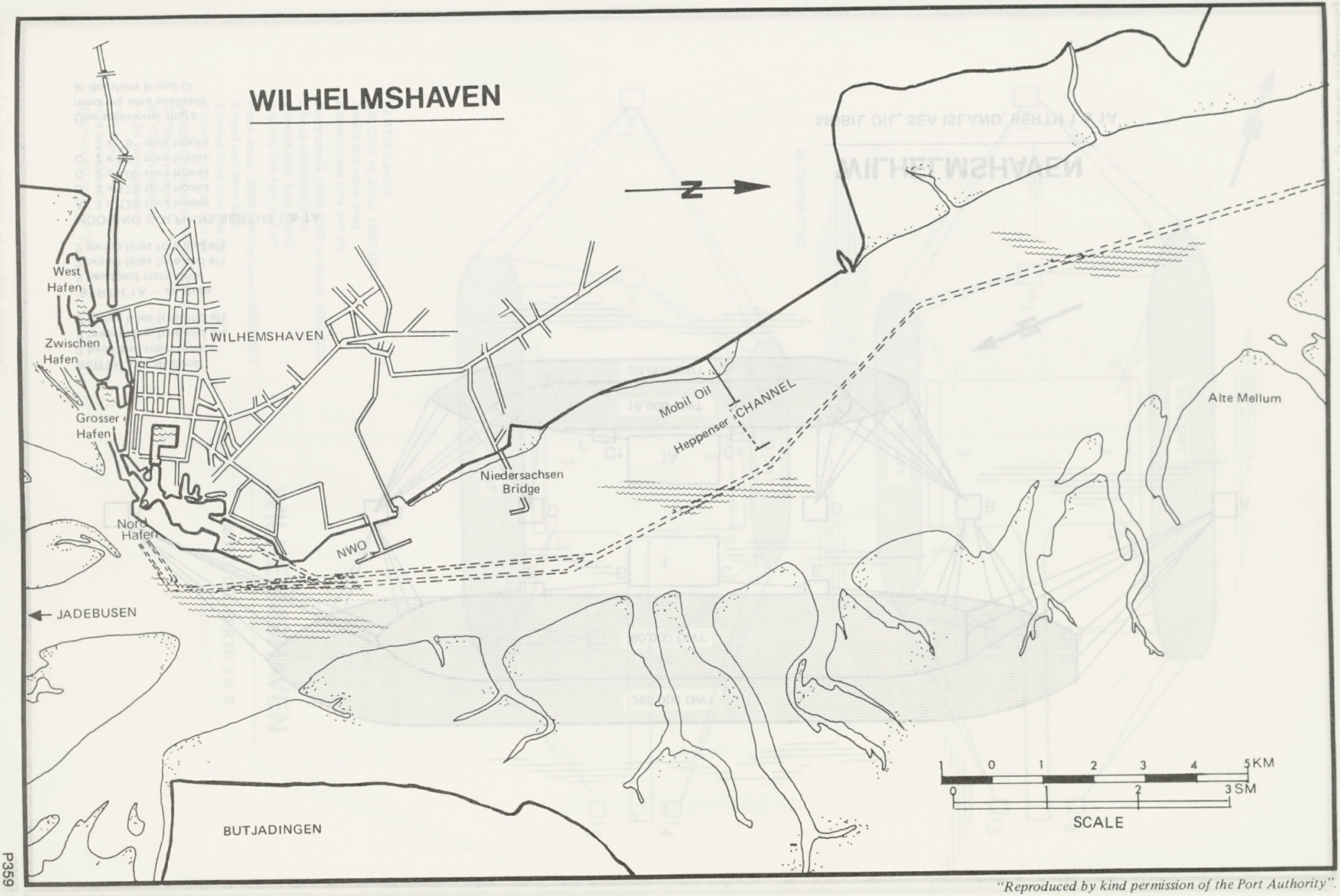

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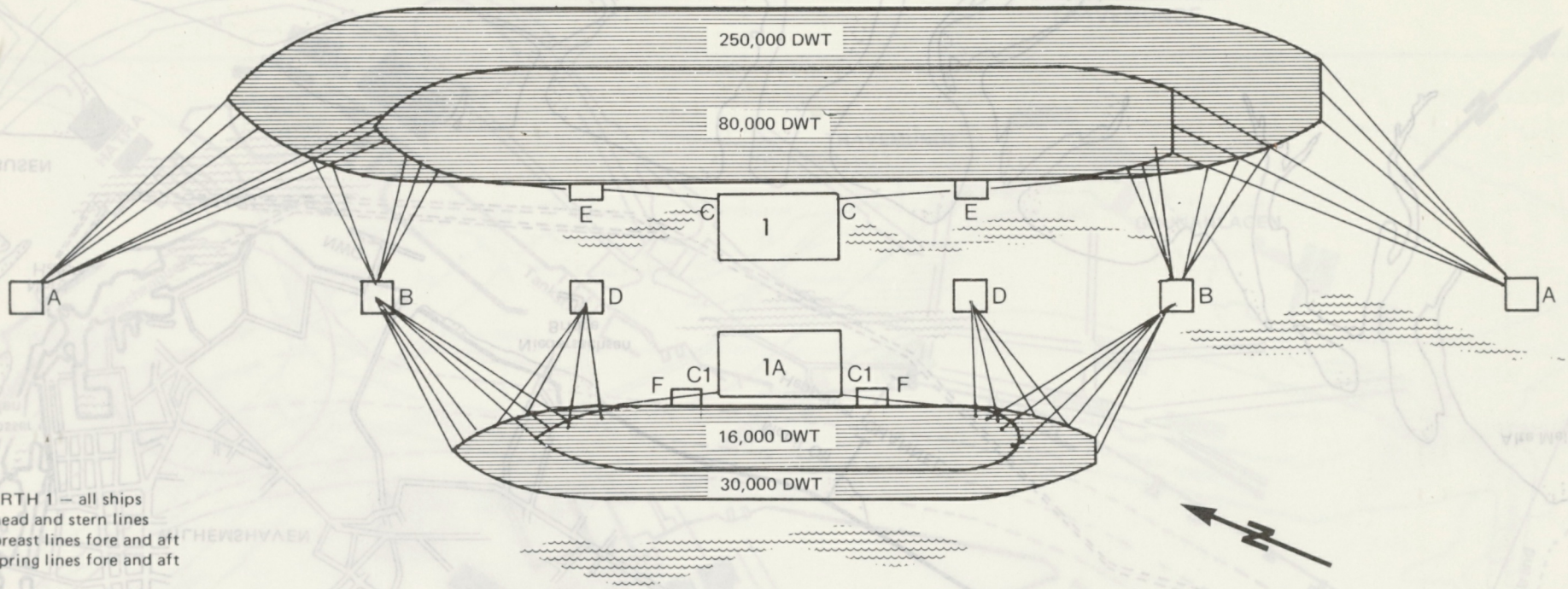
GERMANY (Federal Republic)



BERTH 1 – all ships
3 head and stern lines
3 breast lines fore and aft
2 spring lines fore and aft

BERTH 1A – all ships
3 head and stern lines
2 breast lines fore and aft
2 spring lines fore and aft

MOORING DOLPHINS BERTHS 1 & 1A
A 3 x 125 tons hooks
B 3 x 125 tons hooks
C 2 x 100 tons hooks
D 2 x 50 tons hooks
2 x 75 tons hooks

One additional shore mooring wire available at dolphins B and D

WILHELMSHAVEN

MOBIL OIL, SEA ISLAND, BERTH 1 & 1A

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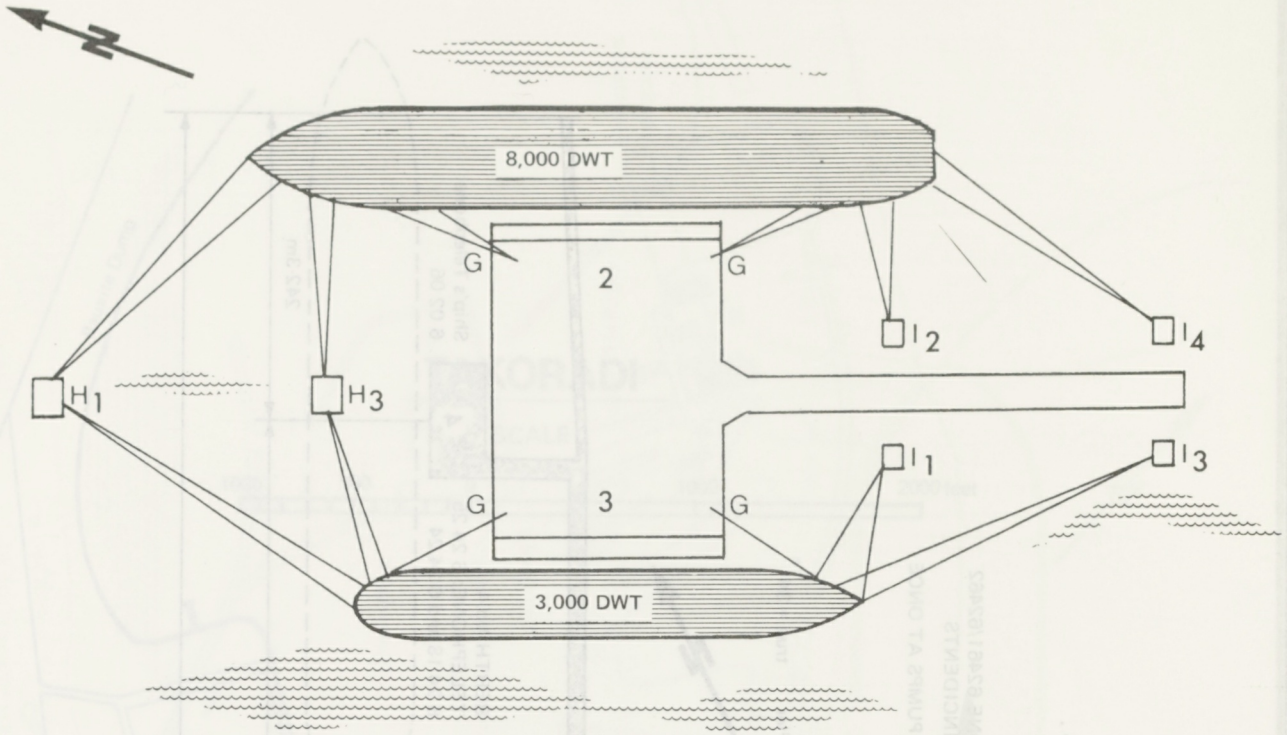
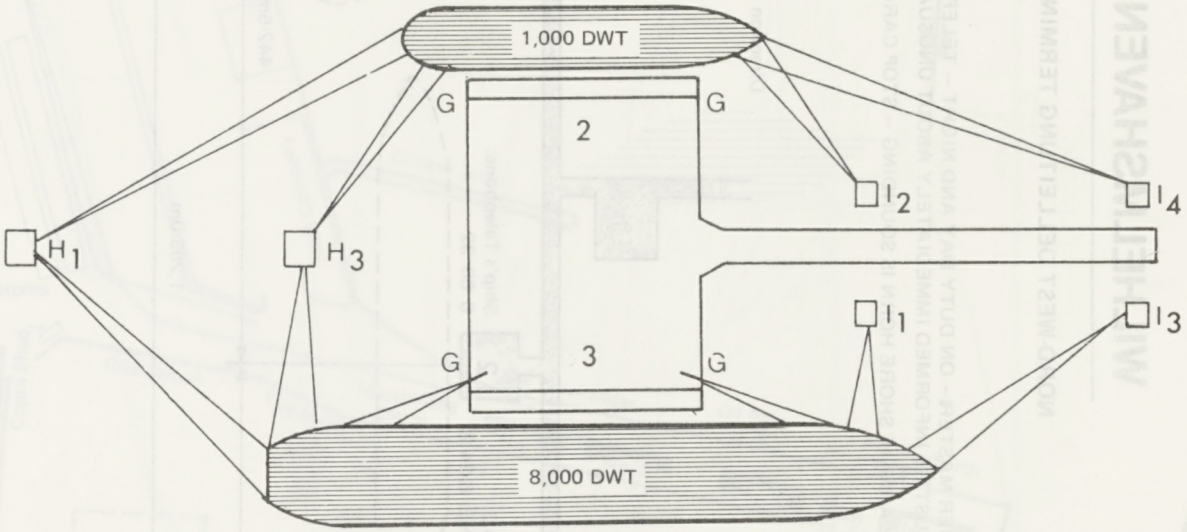


ALTERNATIVE



BERTH 2 and 3
300 DWT to about 1000 DWT
2 head and stern lines
2 breast lines fore and aft

From about 1000 DWT to about 3000 DWT
2 head and stern lines
2 breast lines fore and aft
1 spring line fore and aft

From about 3000 DWT to about 8000 DWT
2 head and stern lines
2 breast lines fore and aft
2 spring lines fore and aft

MOORING DOLPHINS BERTH 2 and 3
G 50 tons capacity
H 75 tons capacity
I 50 tons capacity

One additional shore mooring wire available at dolphins H3 and I1 + 2

WILHELMSHAVEN

MOBIL OIL BERTH 2 & 3

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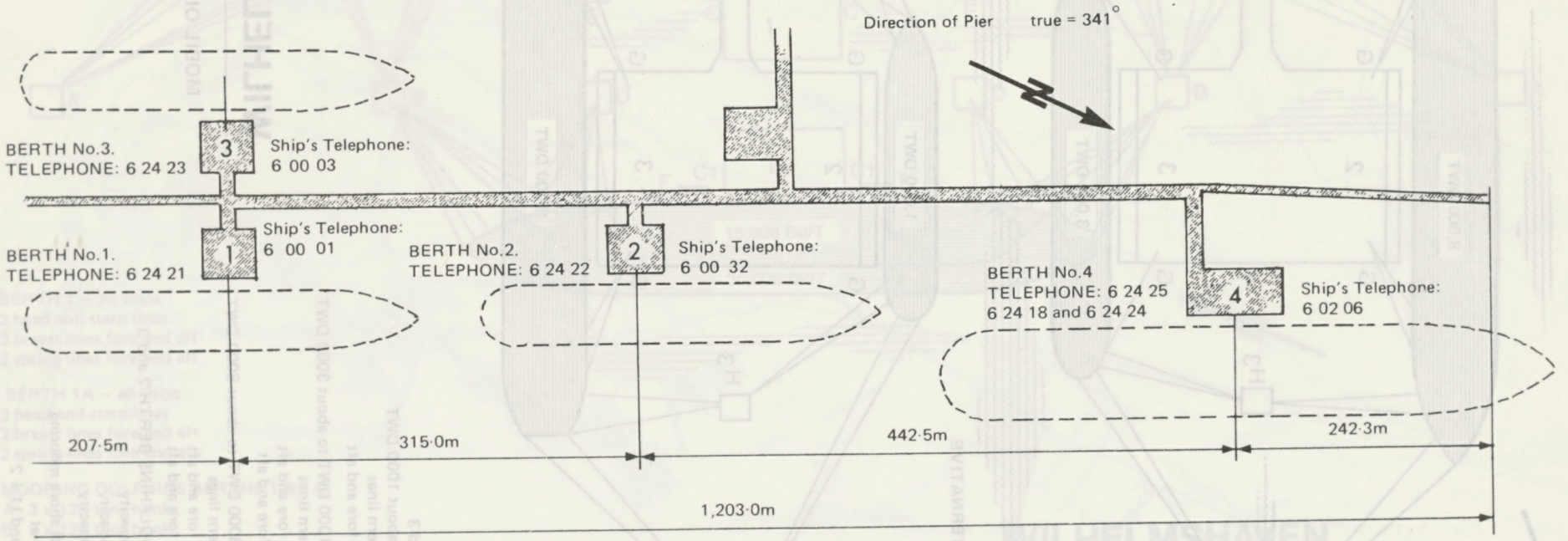
WILHELMSHAVEN

NORD-WEST OELLEITUNG TERMINAL

PIER MASTER – ON DUTY DAY AND NIGHT – TELEPHONE 62461/62462
MUST BE INFORMED IMMEDIATELY ABOUT UNUSUAL INCIDENTS

ALARM: IF SHORE HORN IS SOUNDING – STOP CARGO PUMPS AT ONCE



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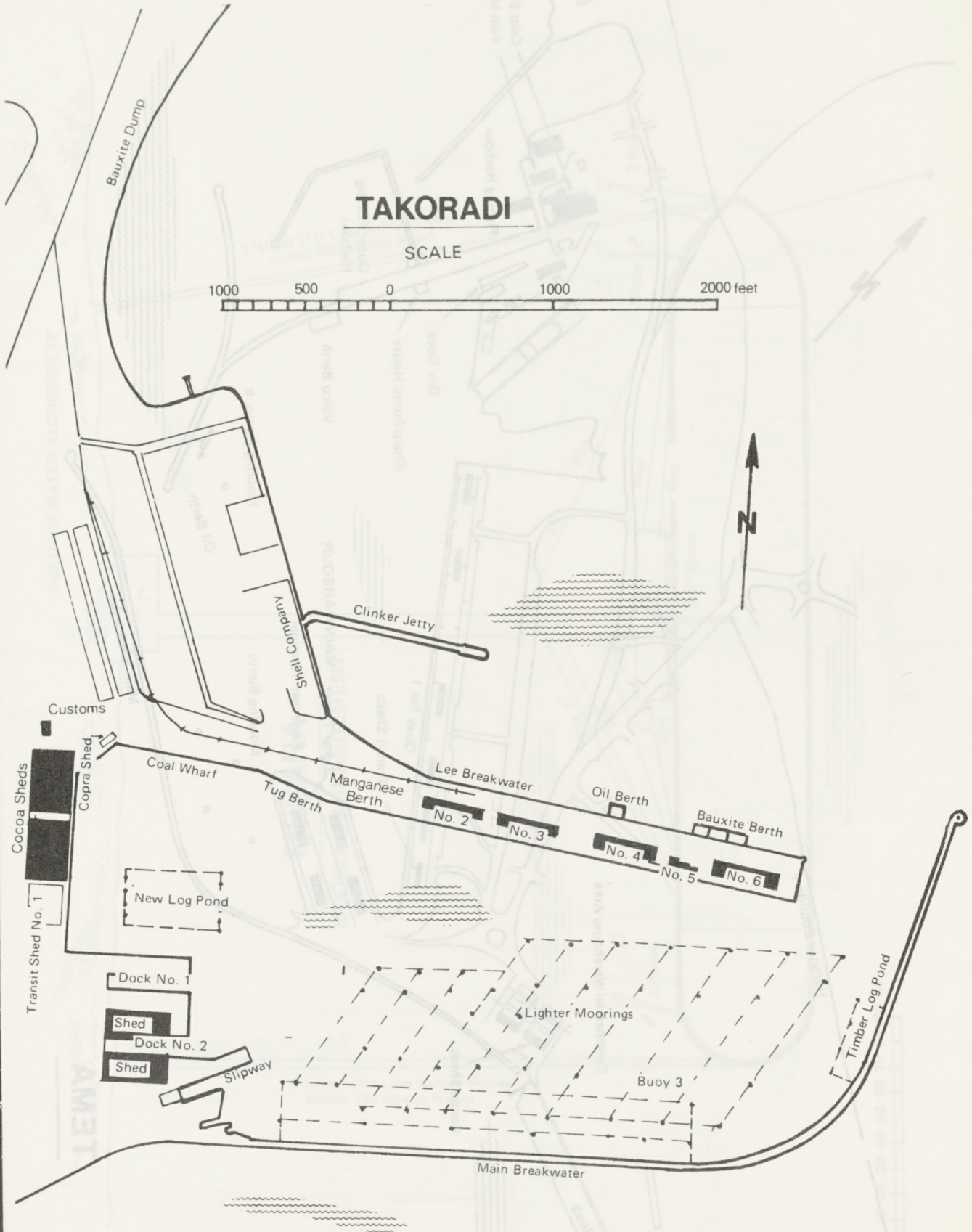

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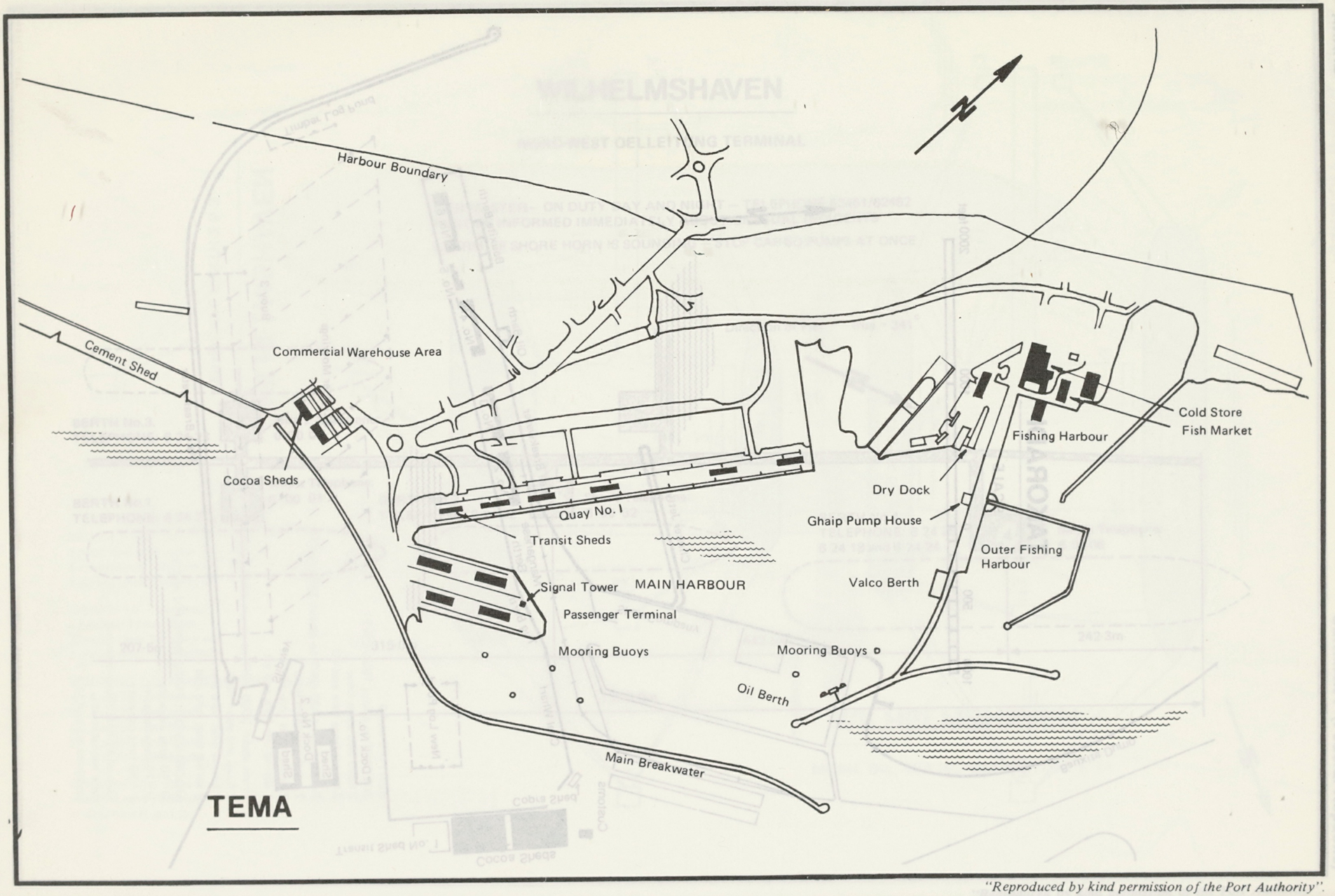

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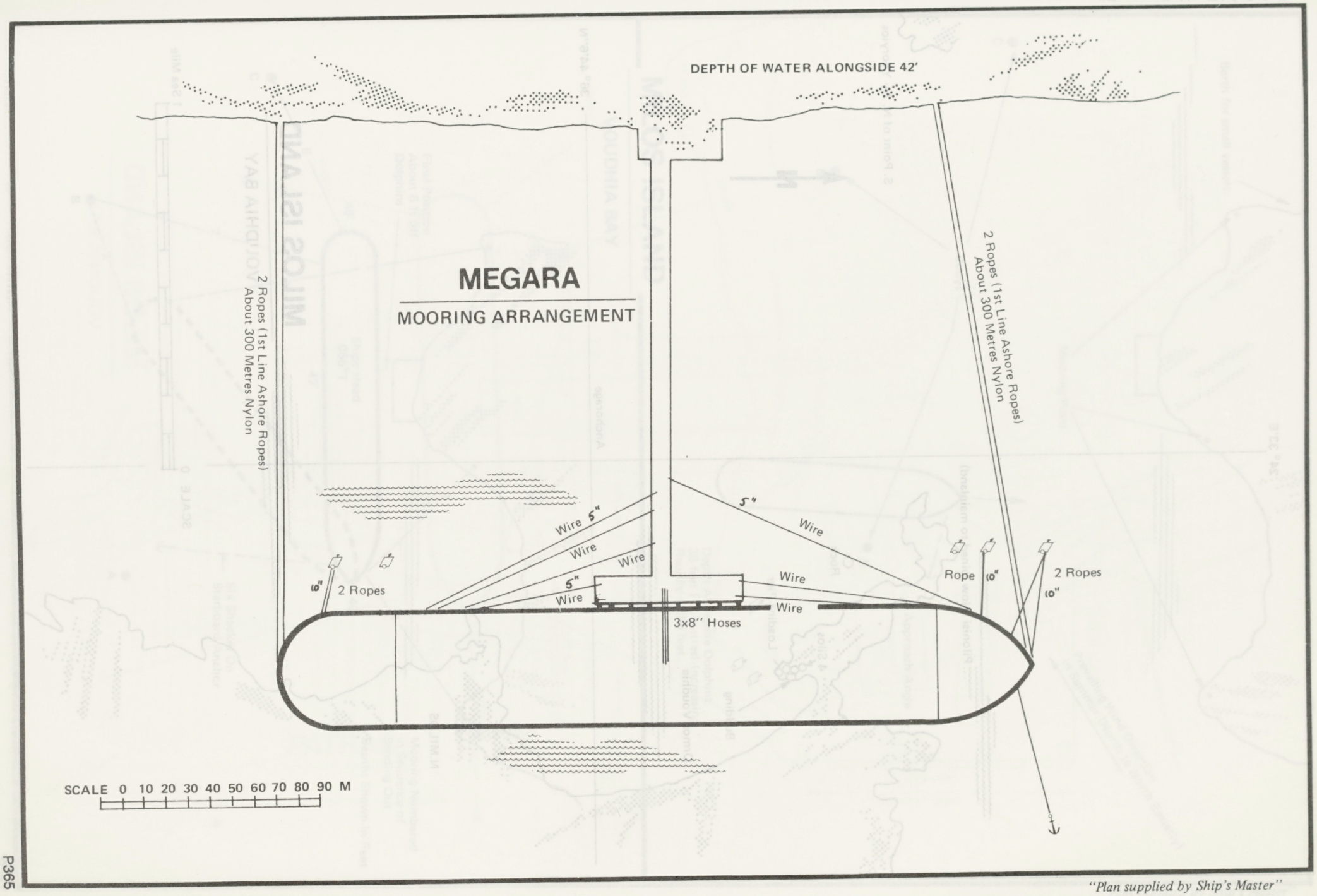

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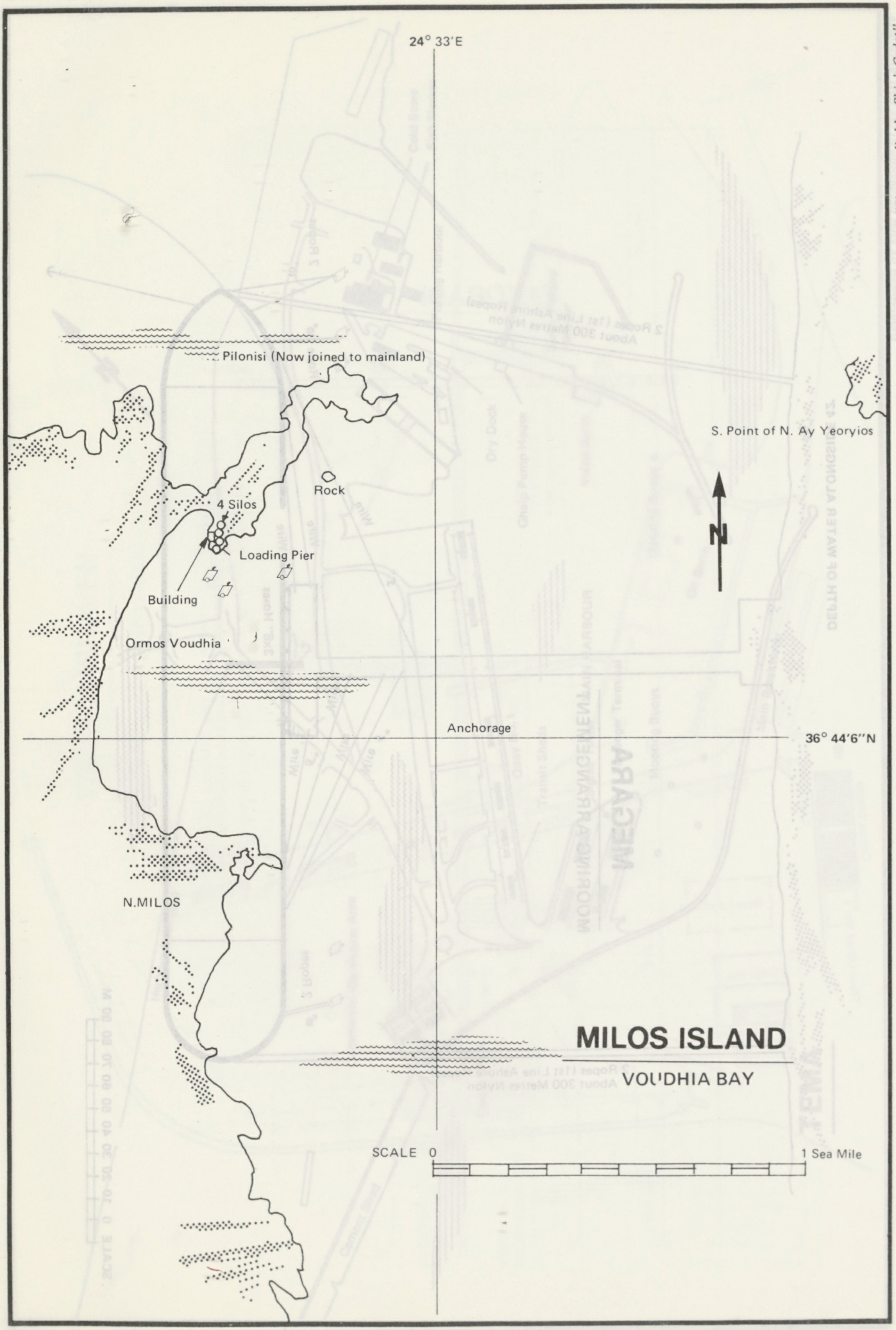

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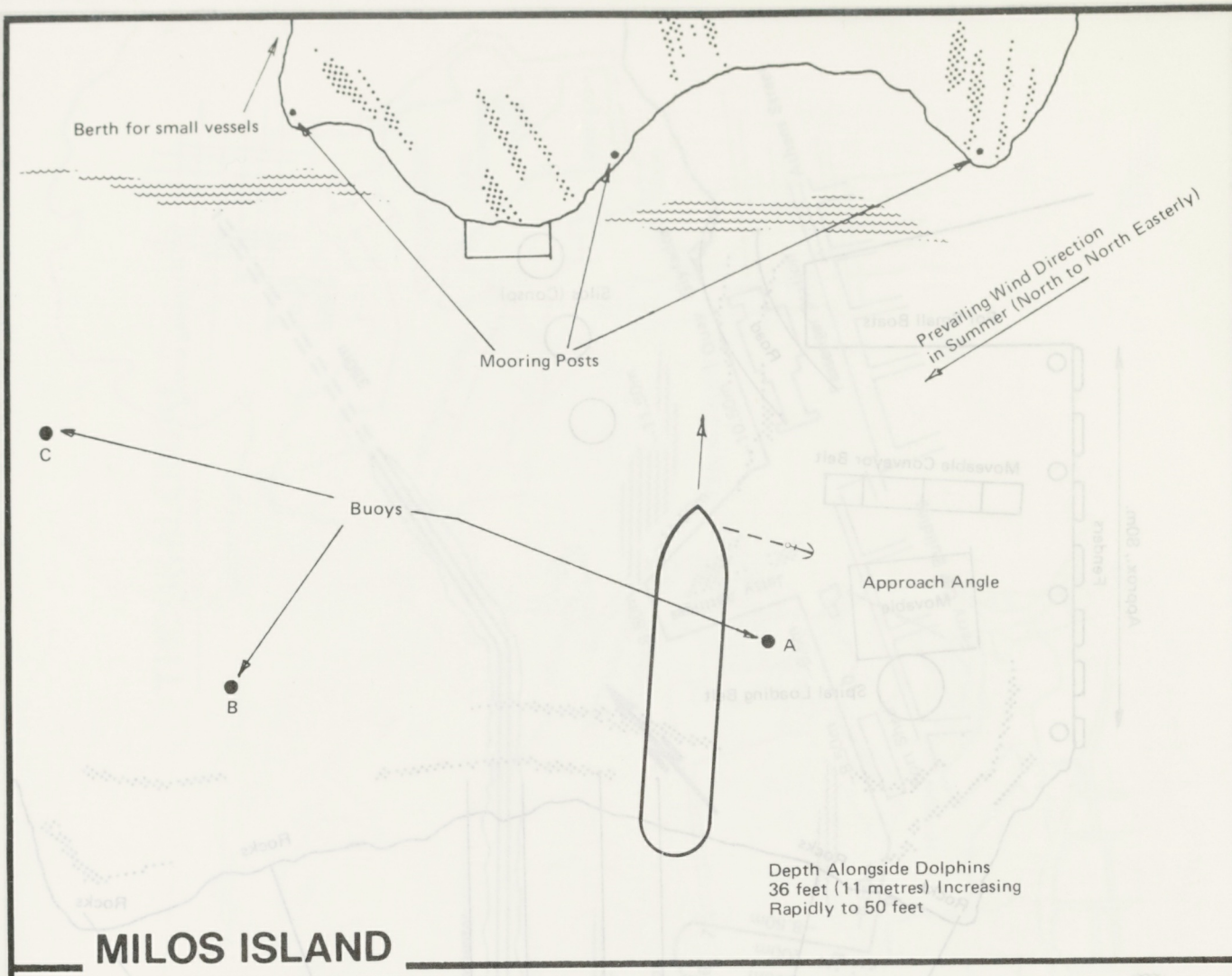
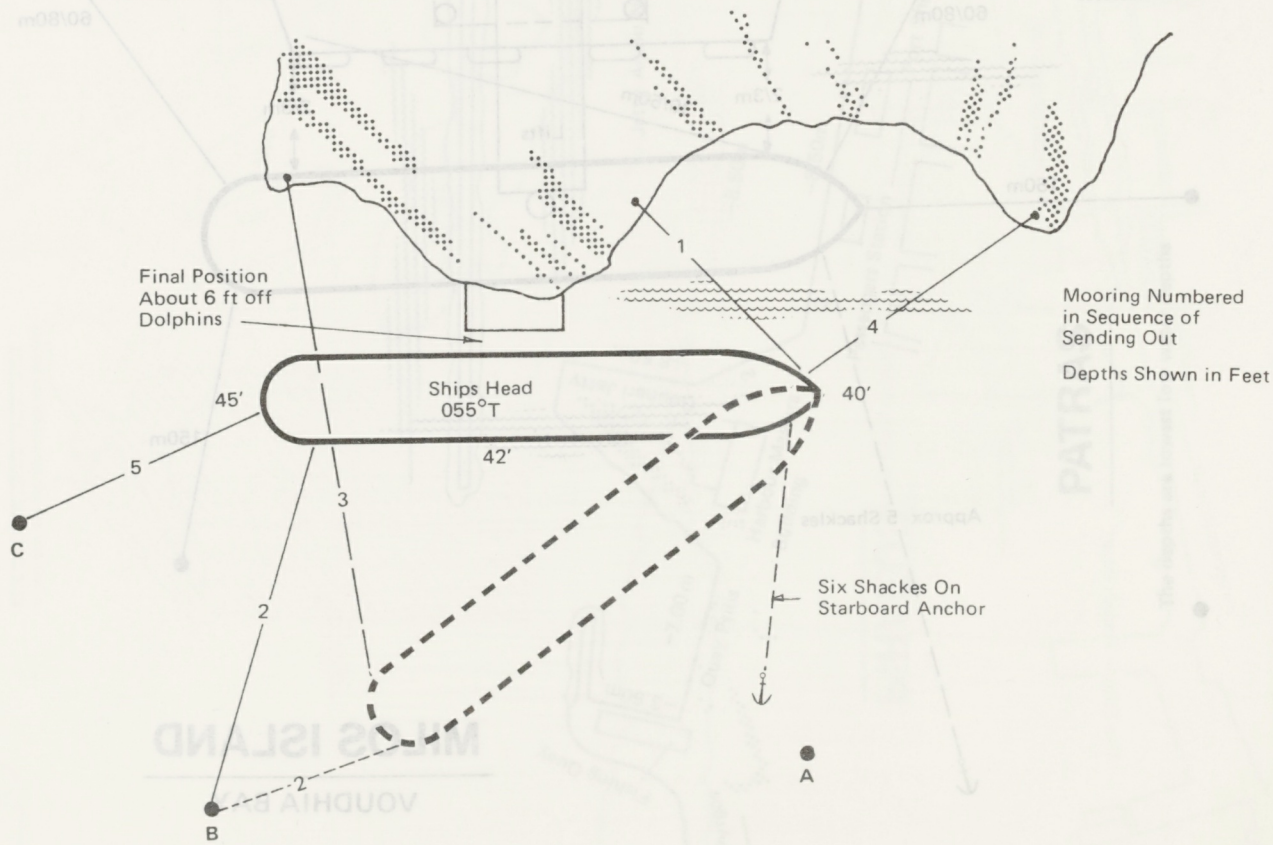
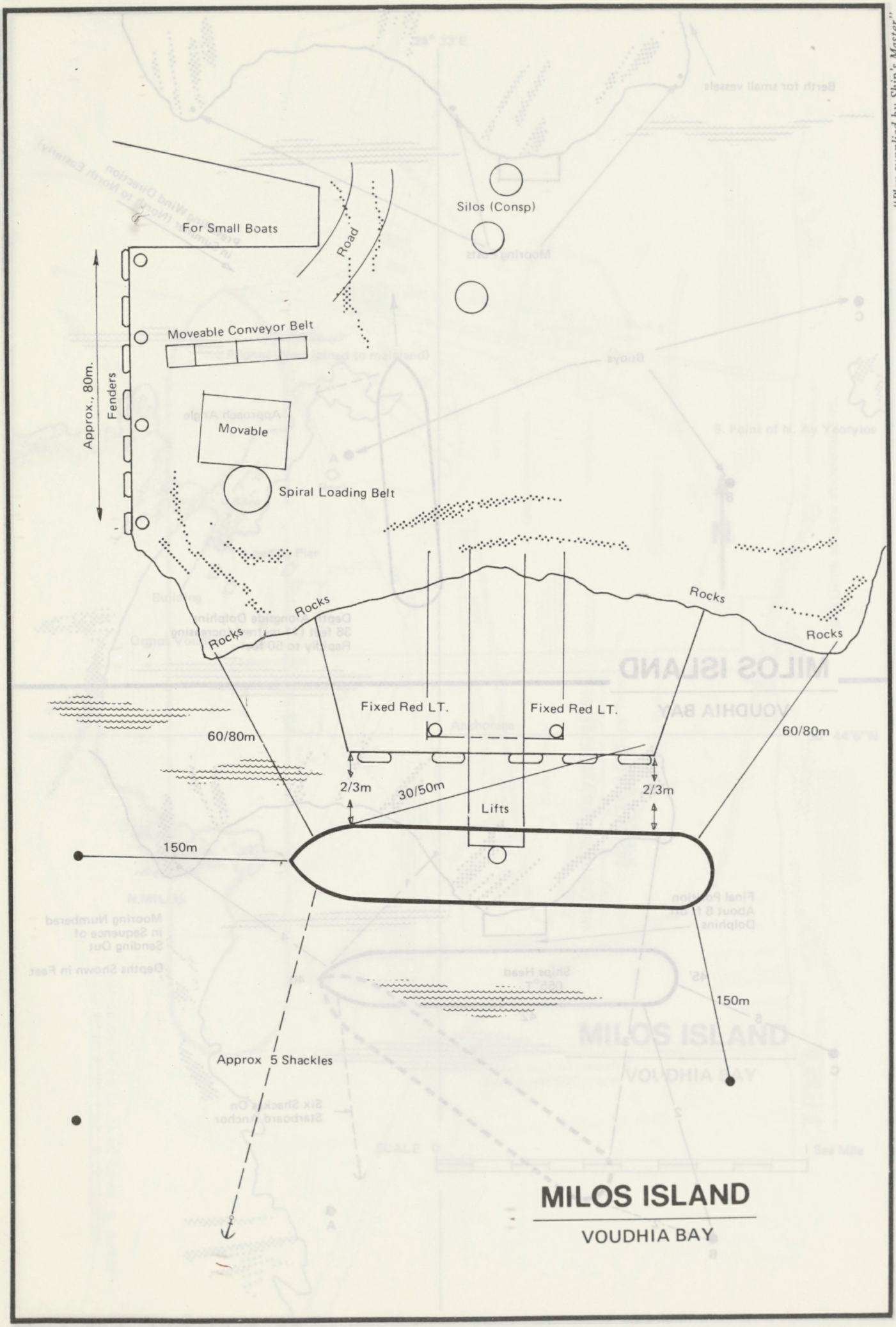


"Plan supplied by Ship's Master"

MILOS ISLAND

VOUDHIA BAY





MILOS ISLAND

VOUDHIA BAY

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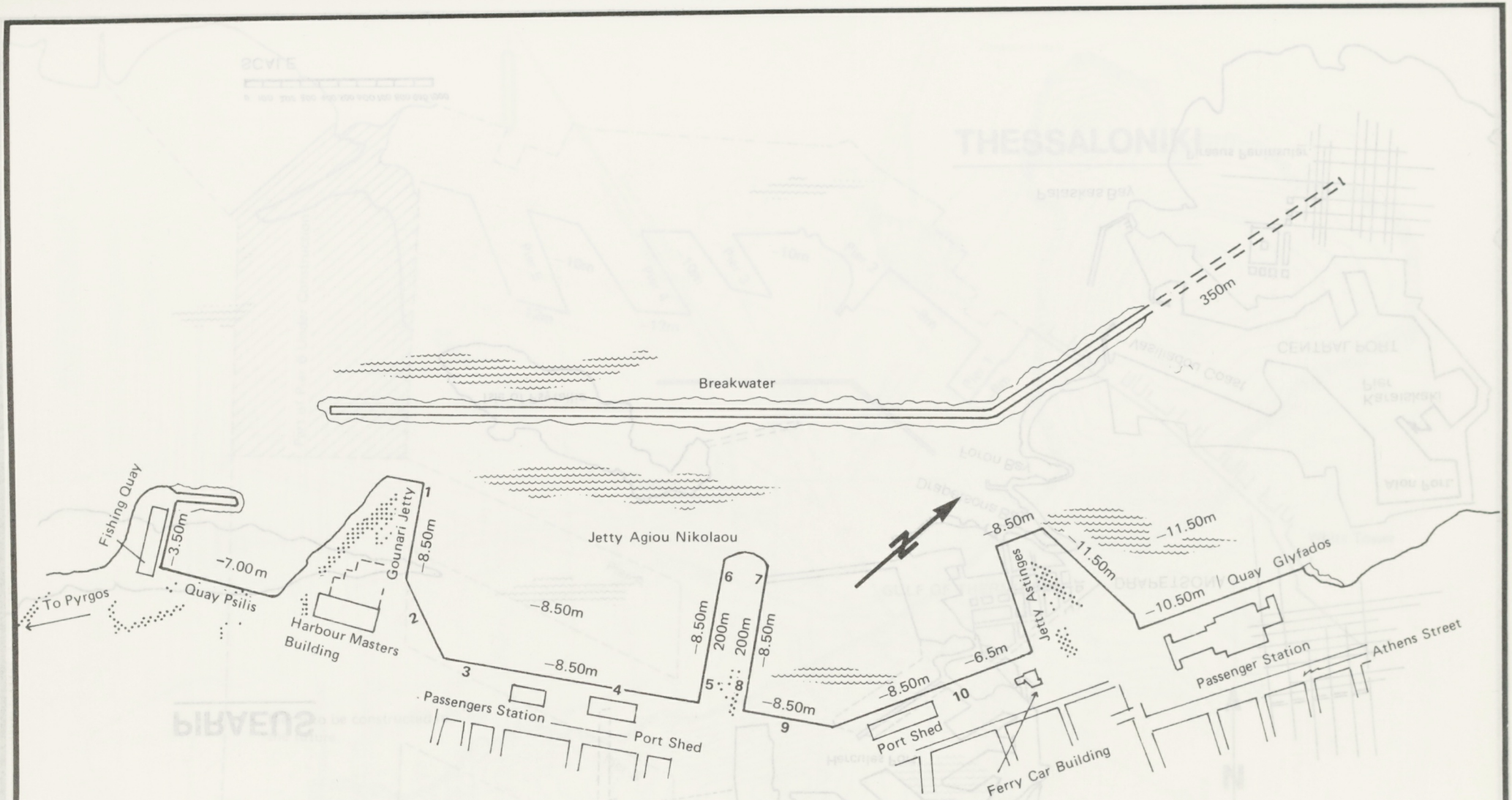

PATRAS

The depths are lowest low water depths

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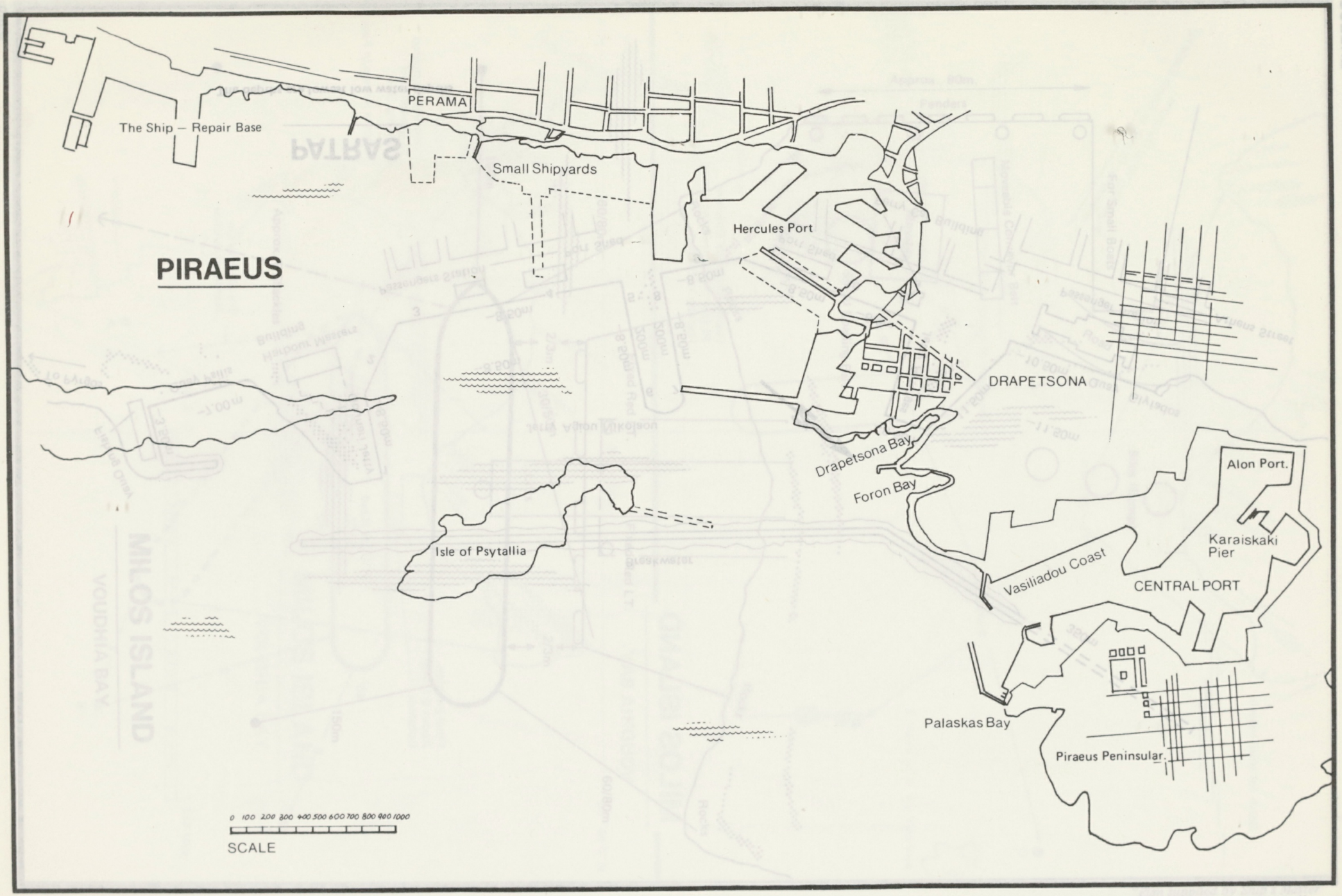

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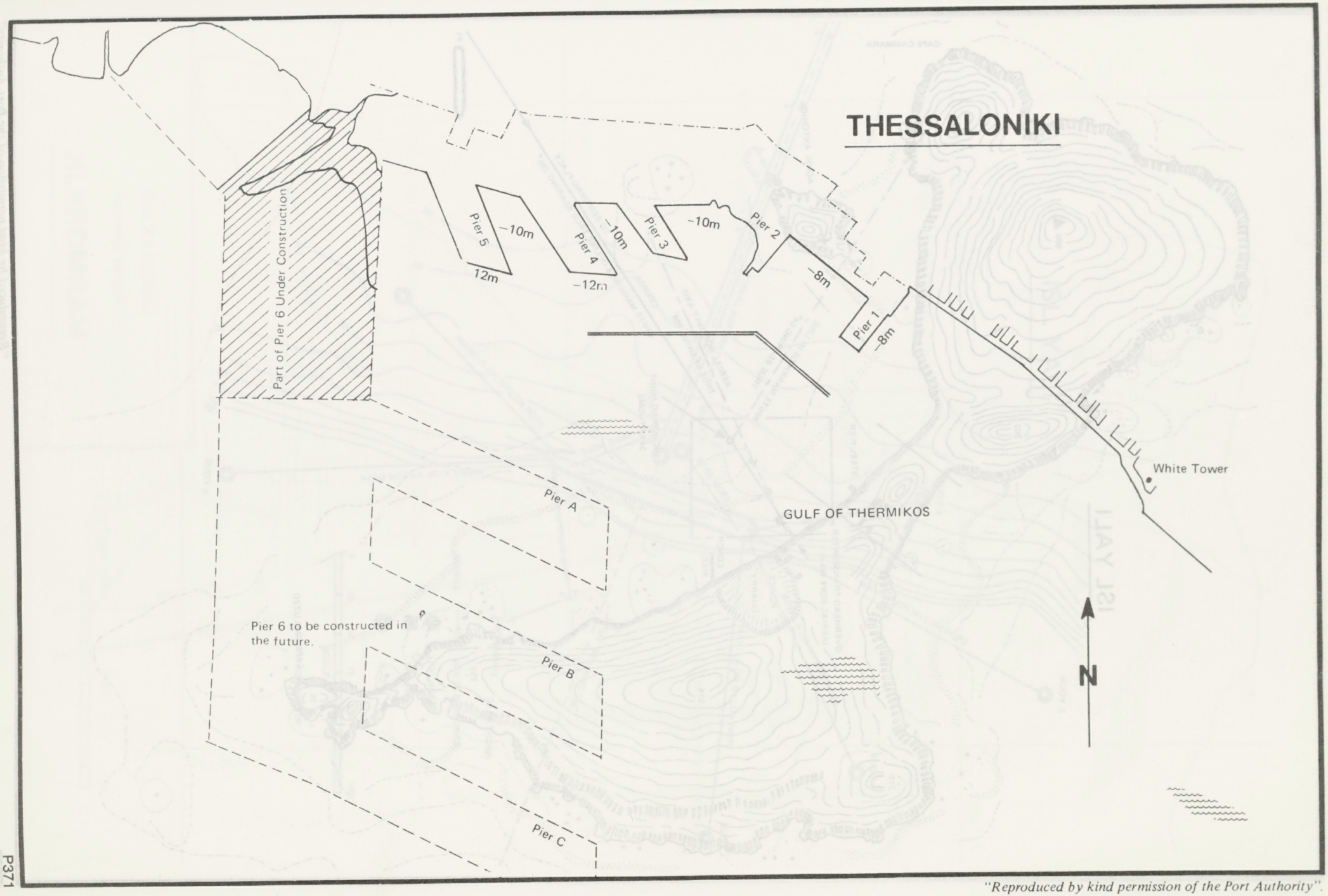

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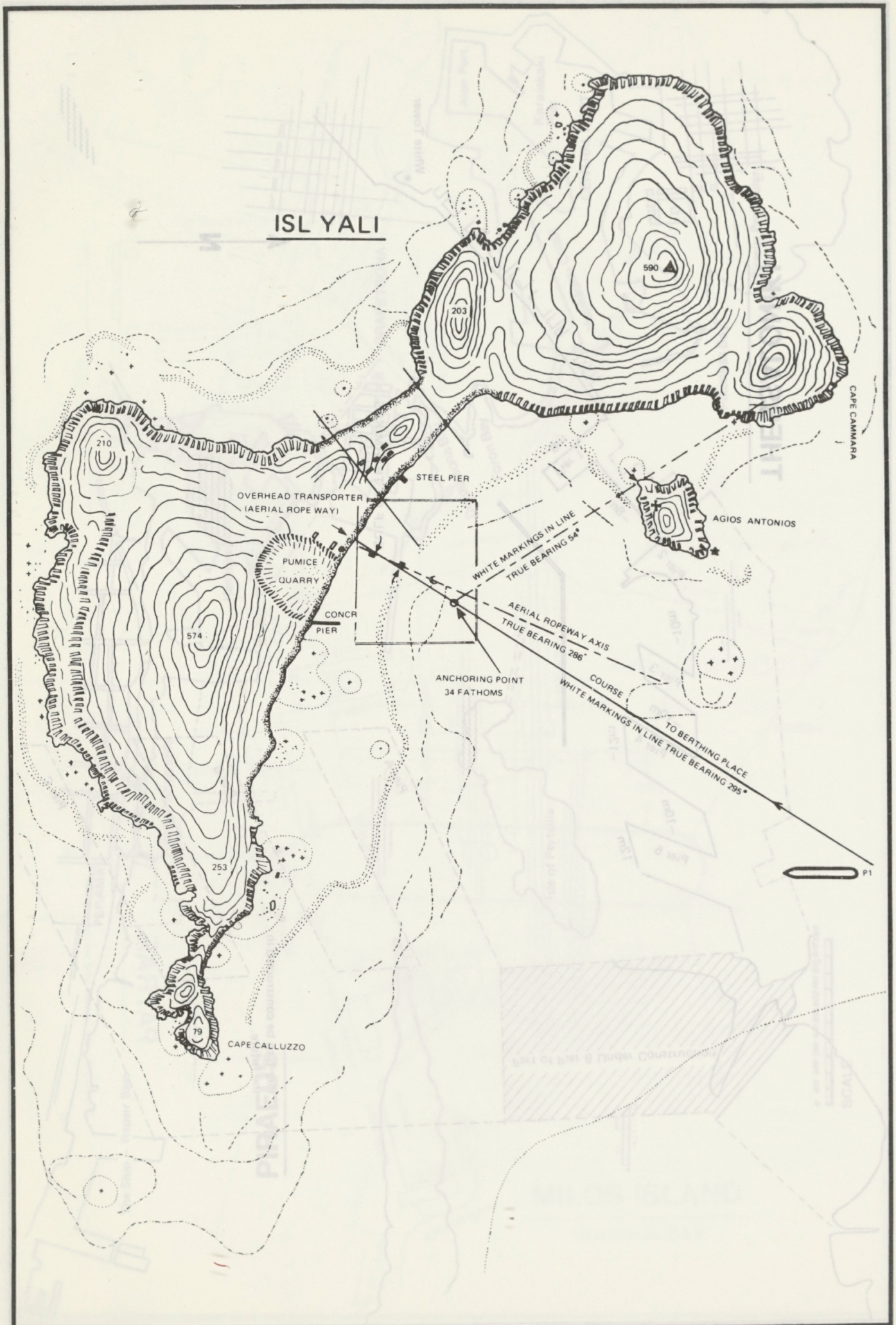

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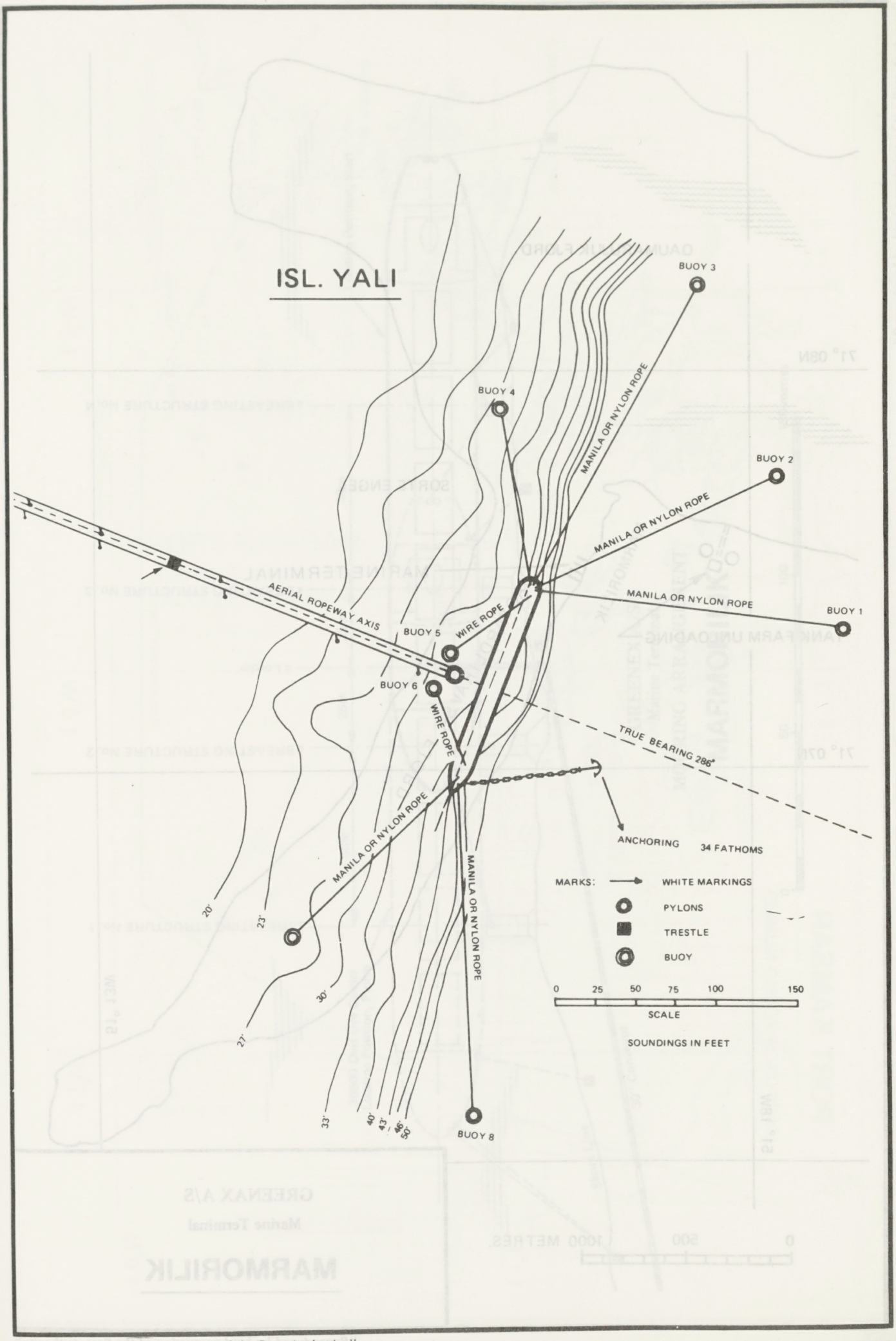

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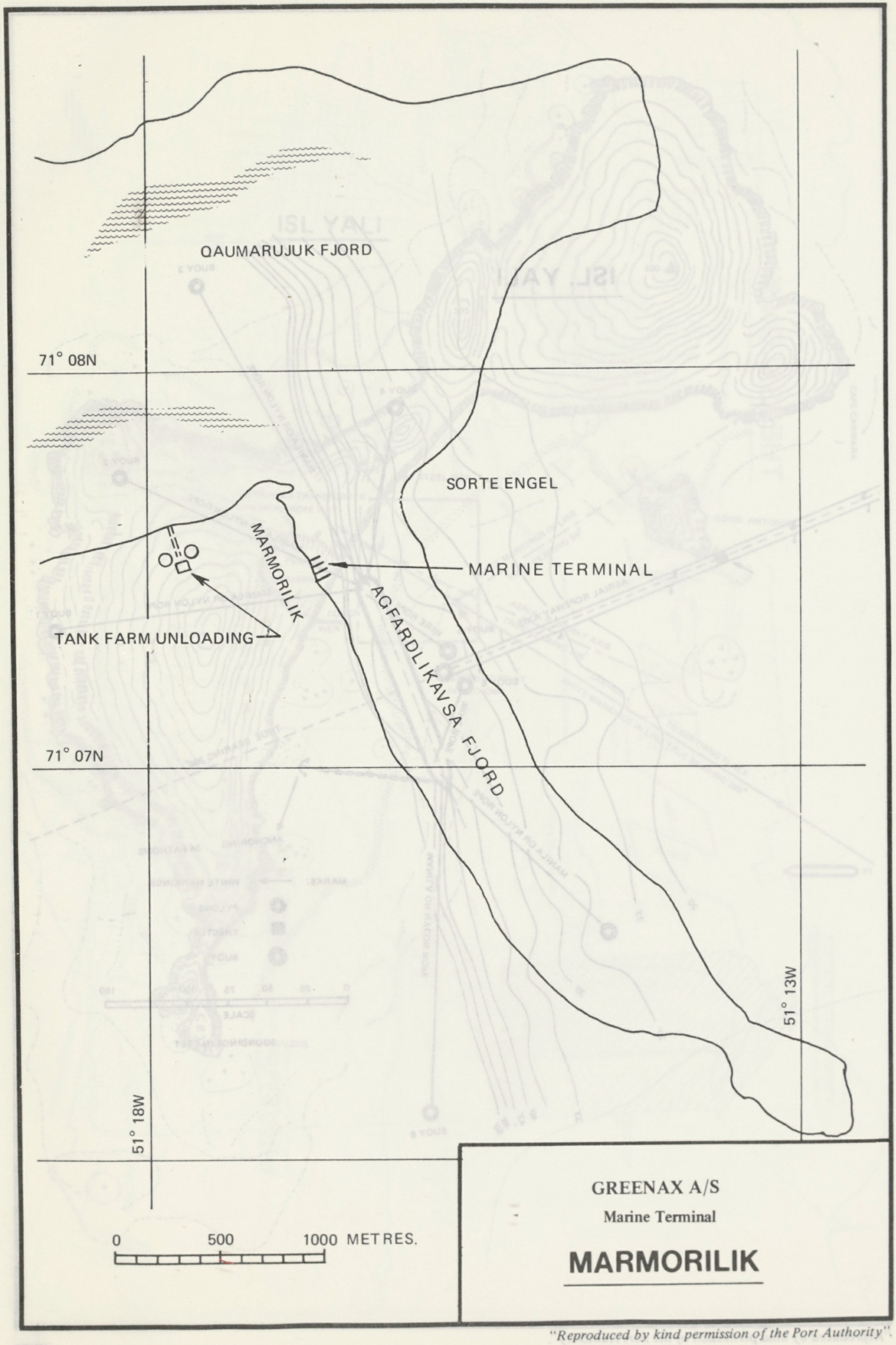

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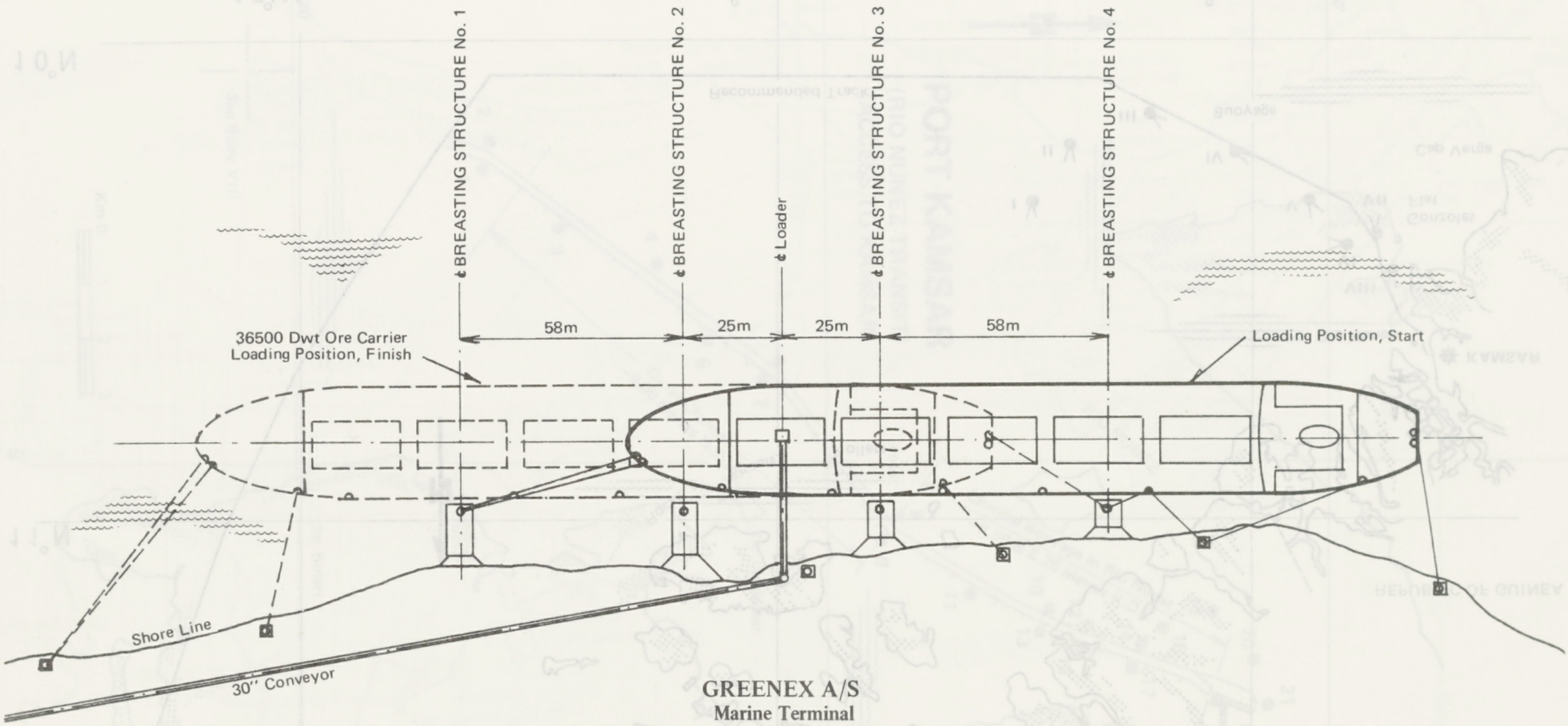

GREENEX A/S

Marine Terminal

MOORING ARRANGEMENT

MARMORILIK

0 50 100 150 metres

P375

GREENLAND

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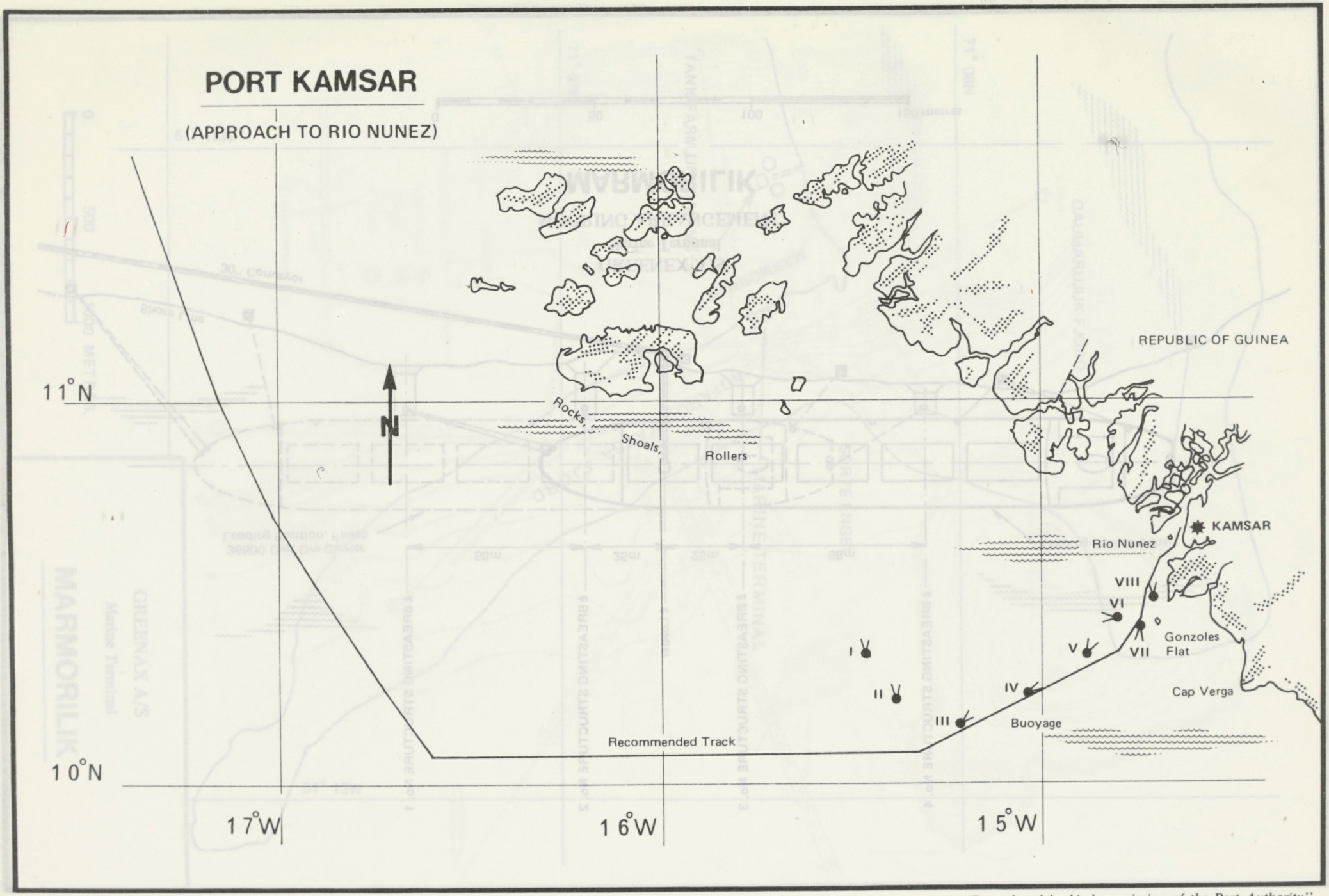

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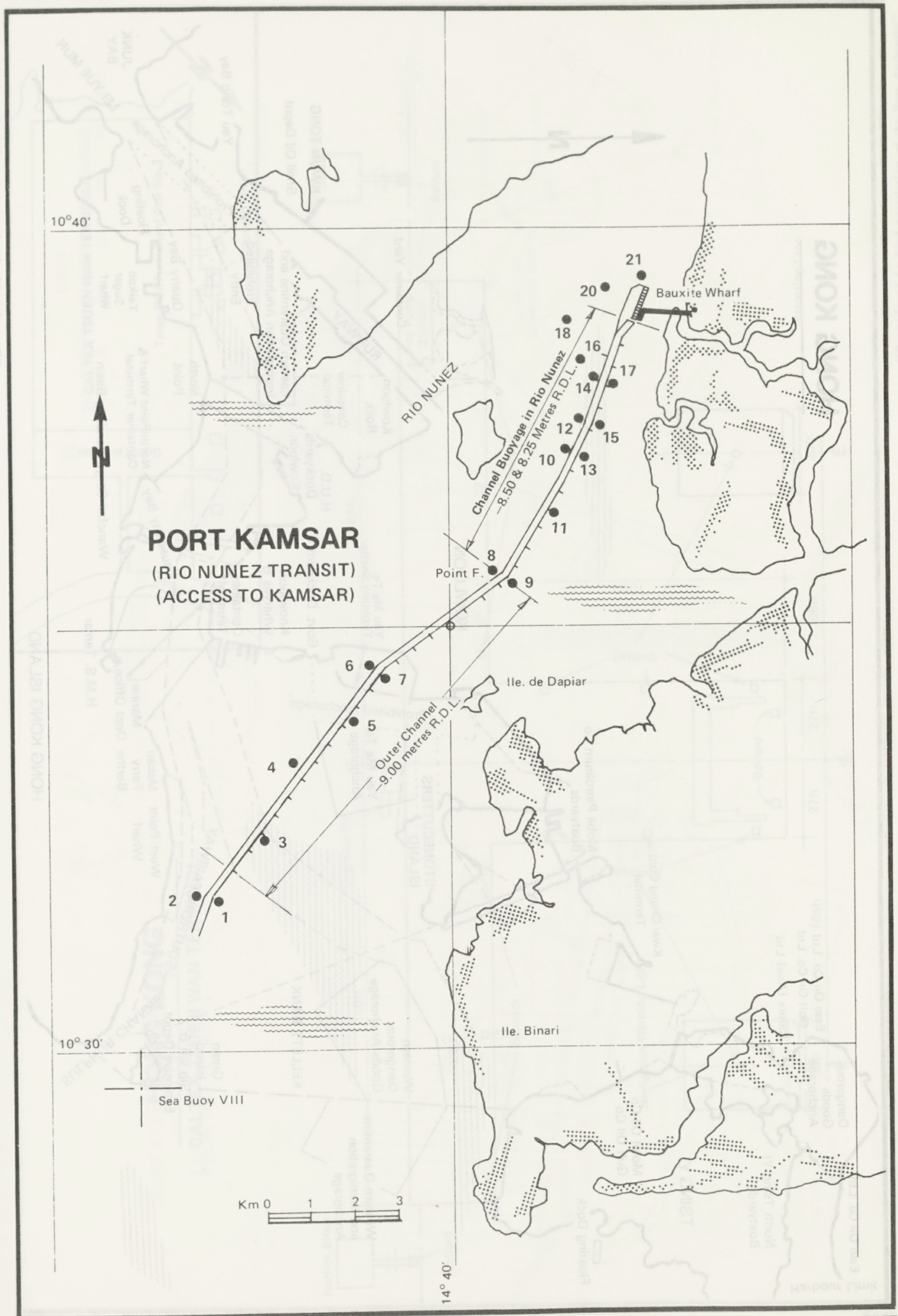

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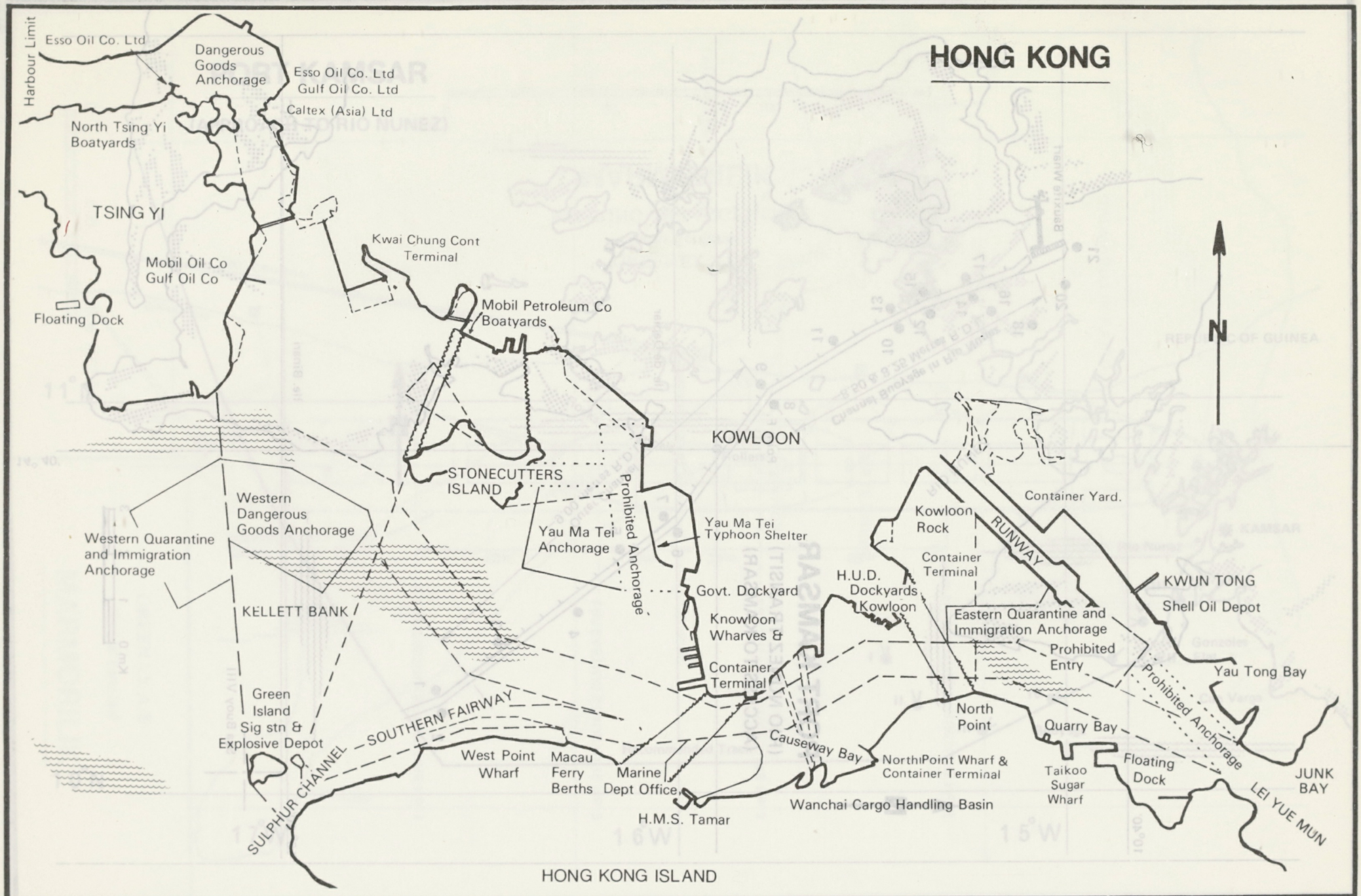

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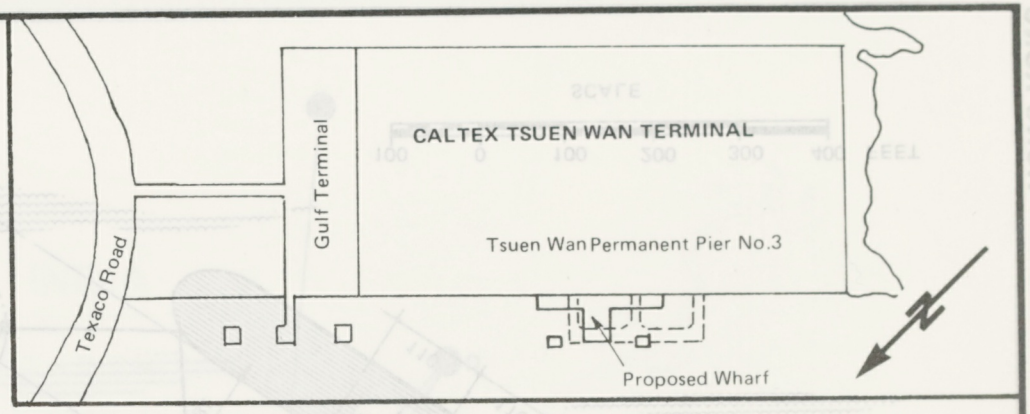
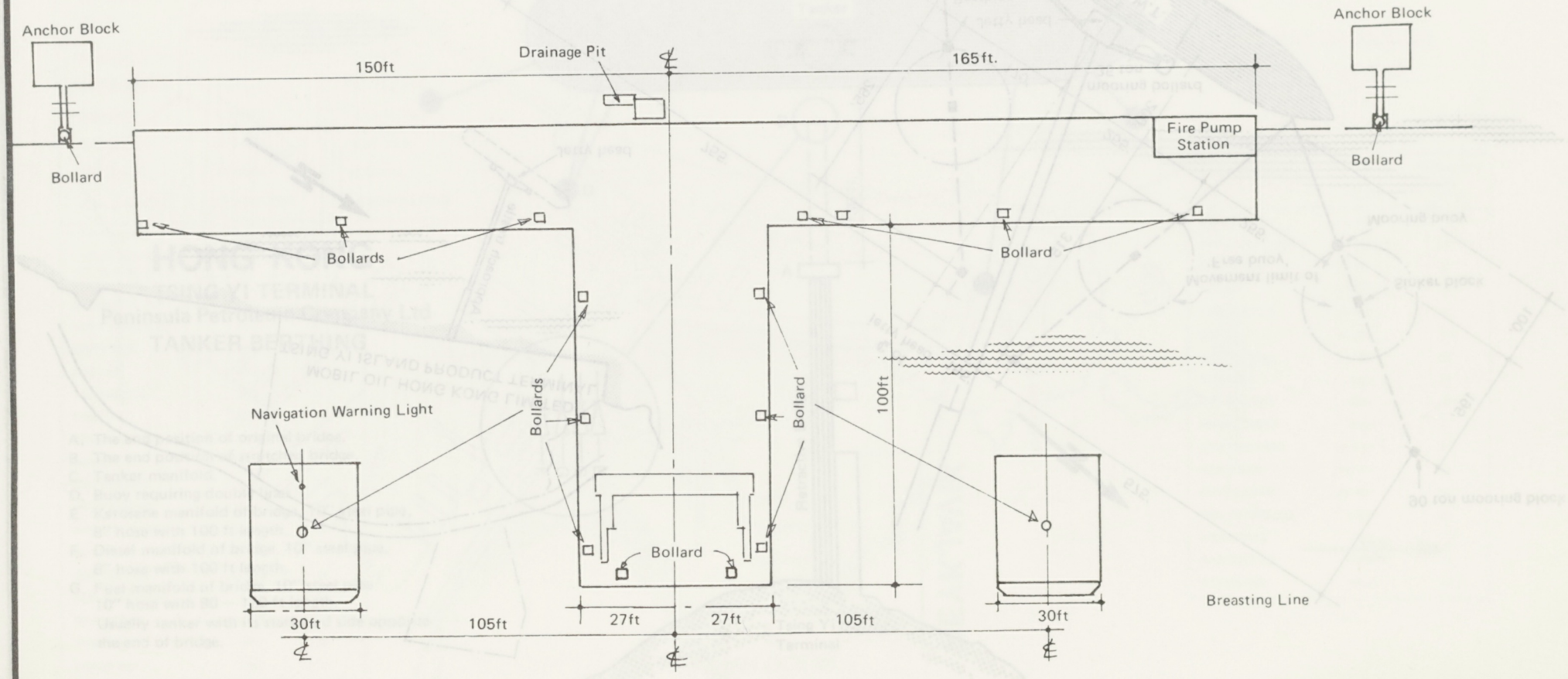
HONG KONG

CALTEX TSUEN WAN TERMINAL





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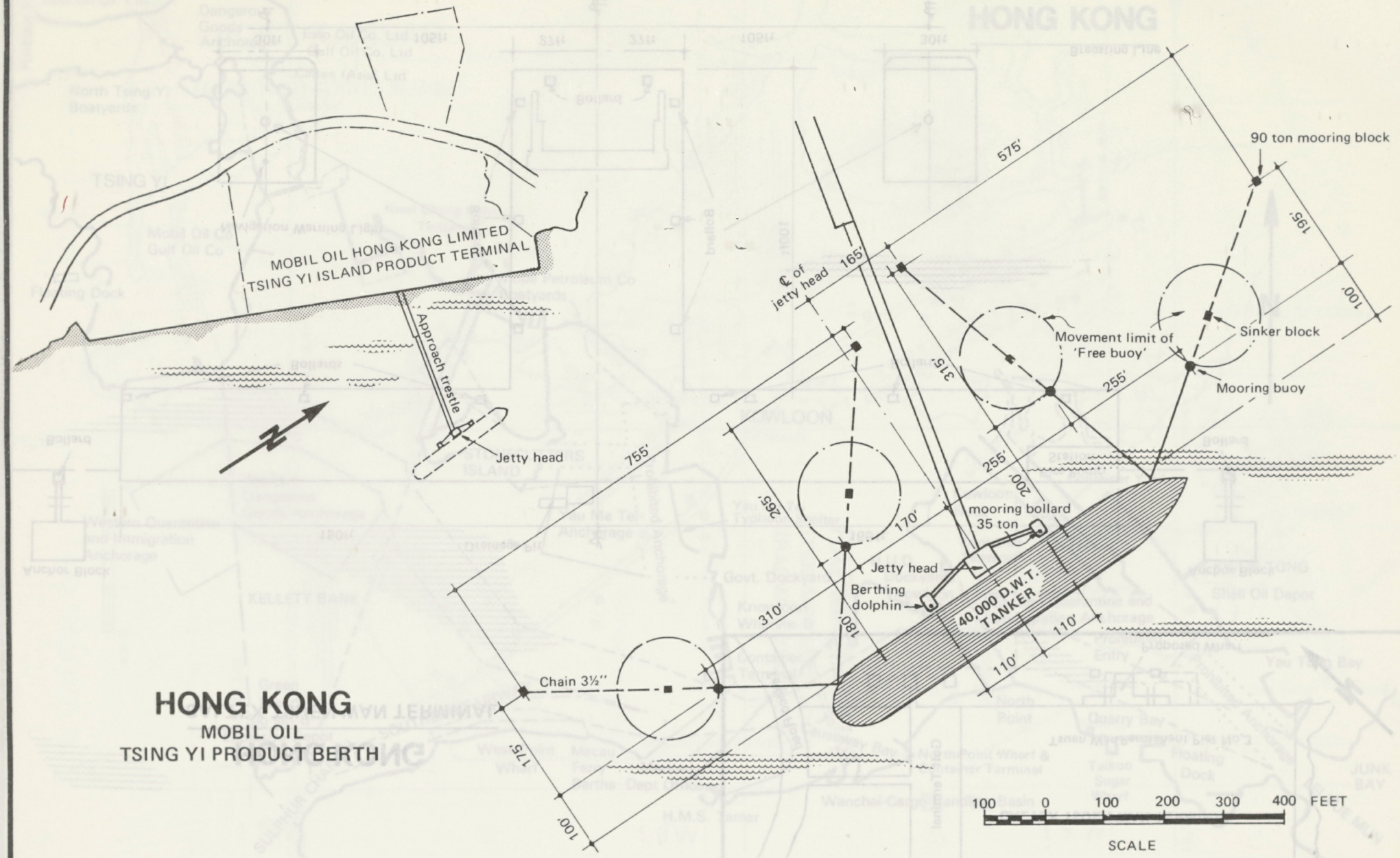

HONG KONG

MOBIL OIL
TSING YI PRODUCT BERTH

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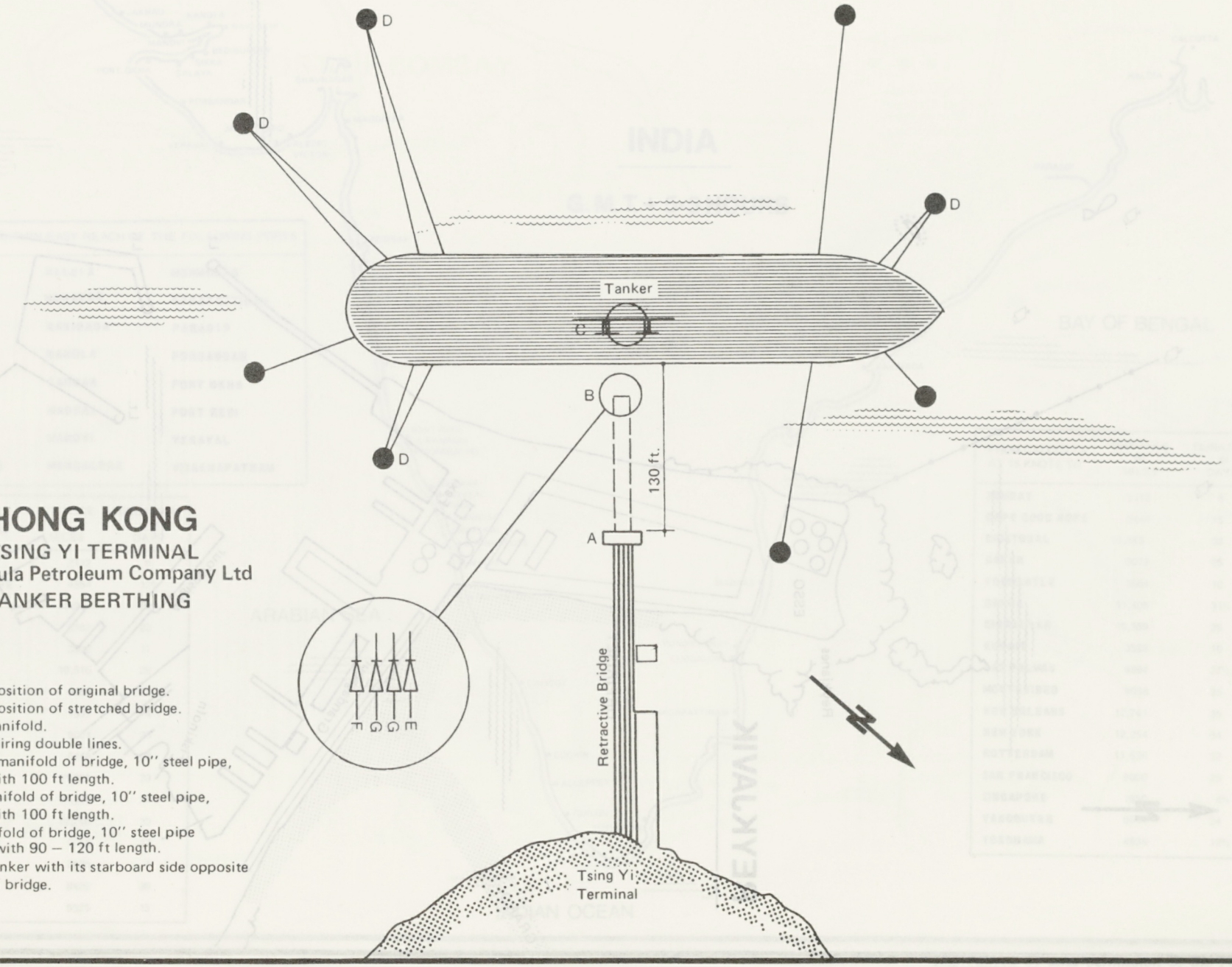

HONG KONG

TSING YI TERMINAL

Peninsula Petroleum Company Ltd

TANKER BERTHING

A. The end position of original bridge.
B. The end position of stretched bridge.
C. Tanker manifold.
D. Buoy requiring double lines.
E. Kerosene manifold of bridge, 10" steel pipe, 8" hose with 100 ft length.
F. Diesel manifold of bridge, 10" steel pipe, 8" hose with 100 ft length.
G. Fuel manifold of bridge, 10" steel pipe 10" hose with 90 – 120 ft length.
Usually tanker with its starboard side opposite the end of bridge.

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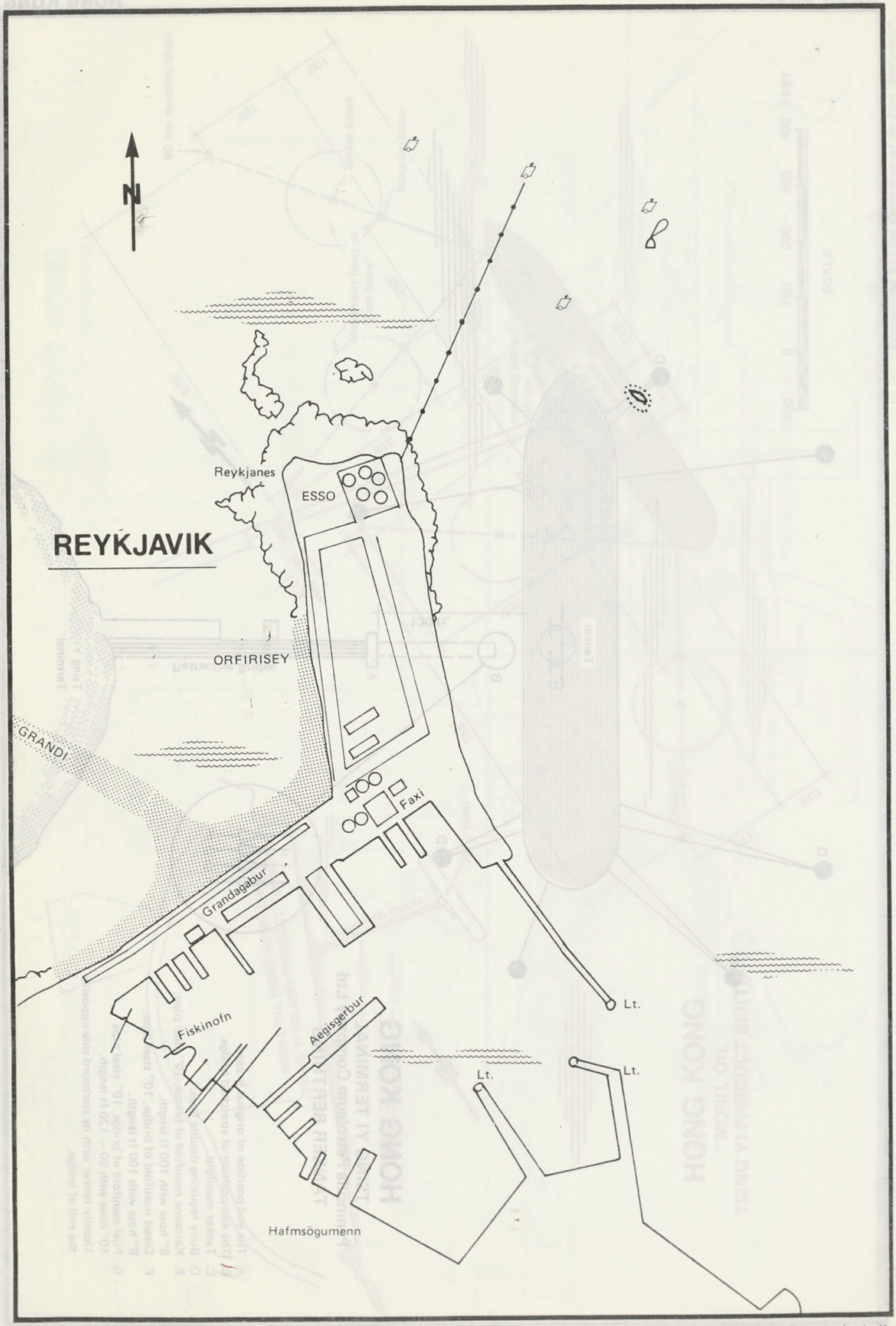

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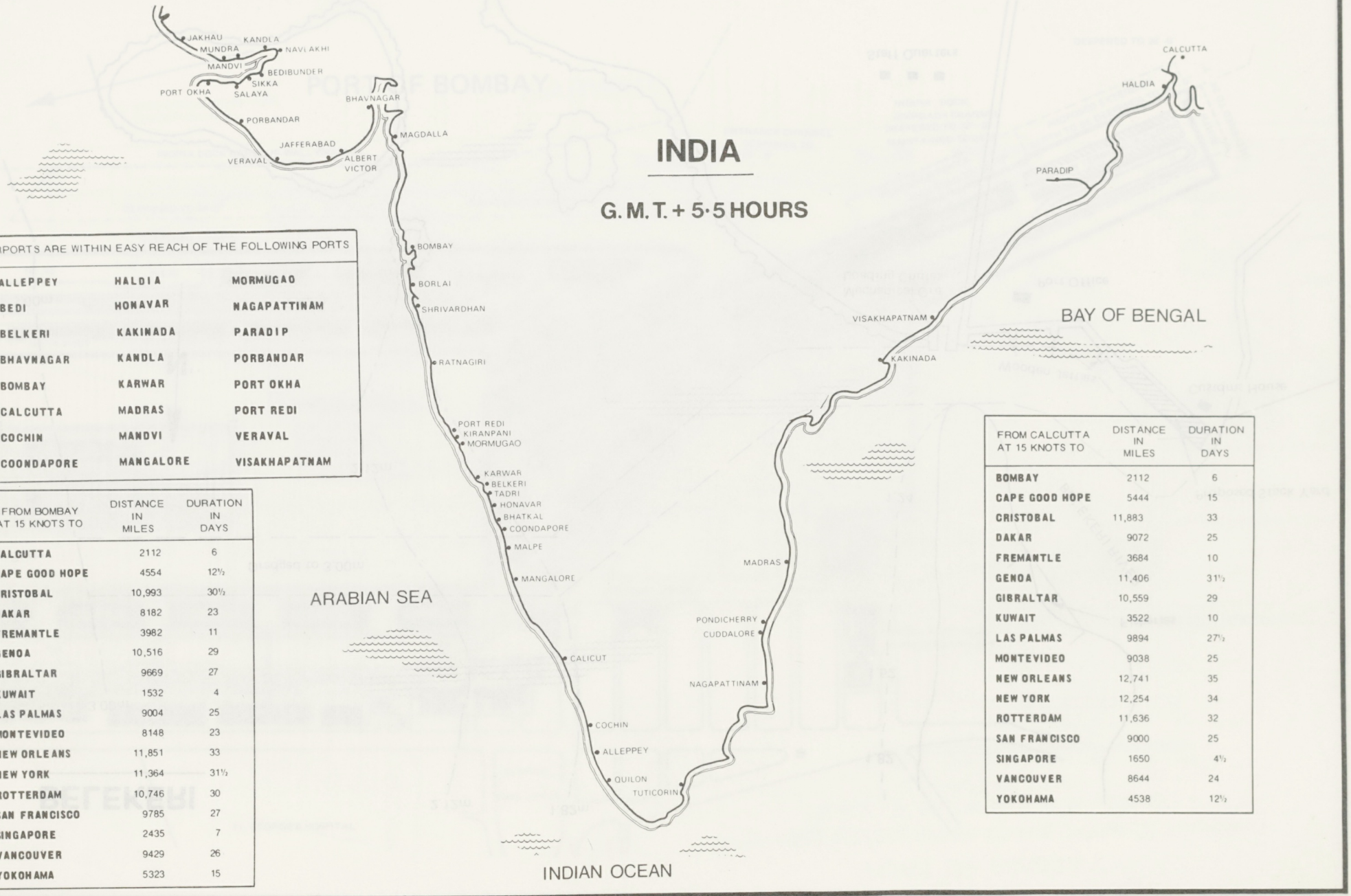

AIRPORTS ARE WITHIN EASY REACH OF THE FOLLOWING PORTS		
ALLEPPEY	HALDIA	MORMUGAO
BEDI	HONAVAR	NAGAPATTINAM
BELKERI	KAKINADA	PARADIP
BHAVNAGAR	KANDLA	PORBANDAR
BOMBAY	KARWAR	PORT OKHA
CALCUTTA	MADRAS	PORT REDI
COCHIN	MANDVI	VERAVAL
COONDAPORE	MANGALORE	VISAKHAPATNAM

FROM BOMBAY AT 15 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
CALCUTTA	2112	6
CAPE GOOD HOPE	4554	12½
CRISTOBAL	10,993	30½
DAKAR	8182	23
FREMANTLE	3982	11
GENOA	10,516	29
GIBRALTAR	9669	27
KUWAIT	1532	4
LAS PALMAS	9004	25
MONTEVIDEO	8148	23
NEW ORLEANS	11,851	33
NEW YORK	11,364	31½
ROTTERDAM	10,746	30
SAN FRANCISCO	9785	27
SINGAPORE	2435	7
VANCOUVER	9429	26
YOKOHAMA	5323	15

FROM CALCUTTA AT 15 KNOTS TO	DISTANCE IN MILES	DURATION IN DAYS
BOMBAY	2112	6
CAPE GOOD HOPE	5444	15
CRISTOBAL	11,883	33
DAKAR	9072	25
FREMANTLE	3684	10
GENOA	11,406	31½
GIBRALTAR	10,559	29
KUWAIT	3522	10
LAS PALMAS	9894	27½
MONTEVIDEO	9038	25
NEW ORLEANS	12,741	35
NEW YORK	12,254	34
ROTTERDAM	11,636	32
SAN FRANCISCO	9000	25
SINGAPORE	1650	4½
VANCOUVER	8644	24
YOKOHAMA	4538	12½

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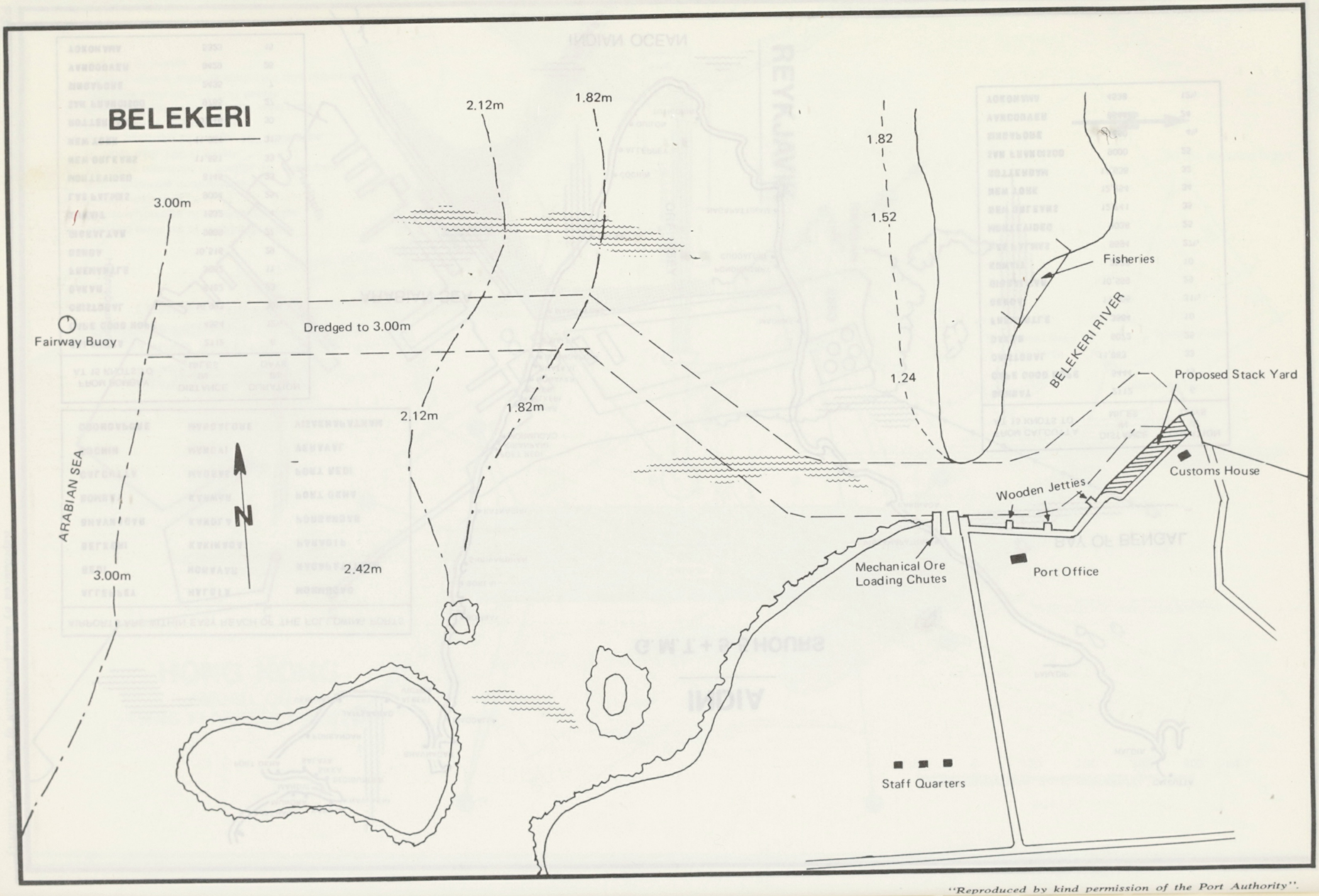

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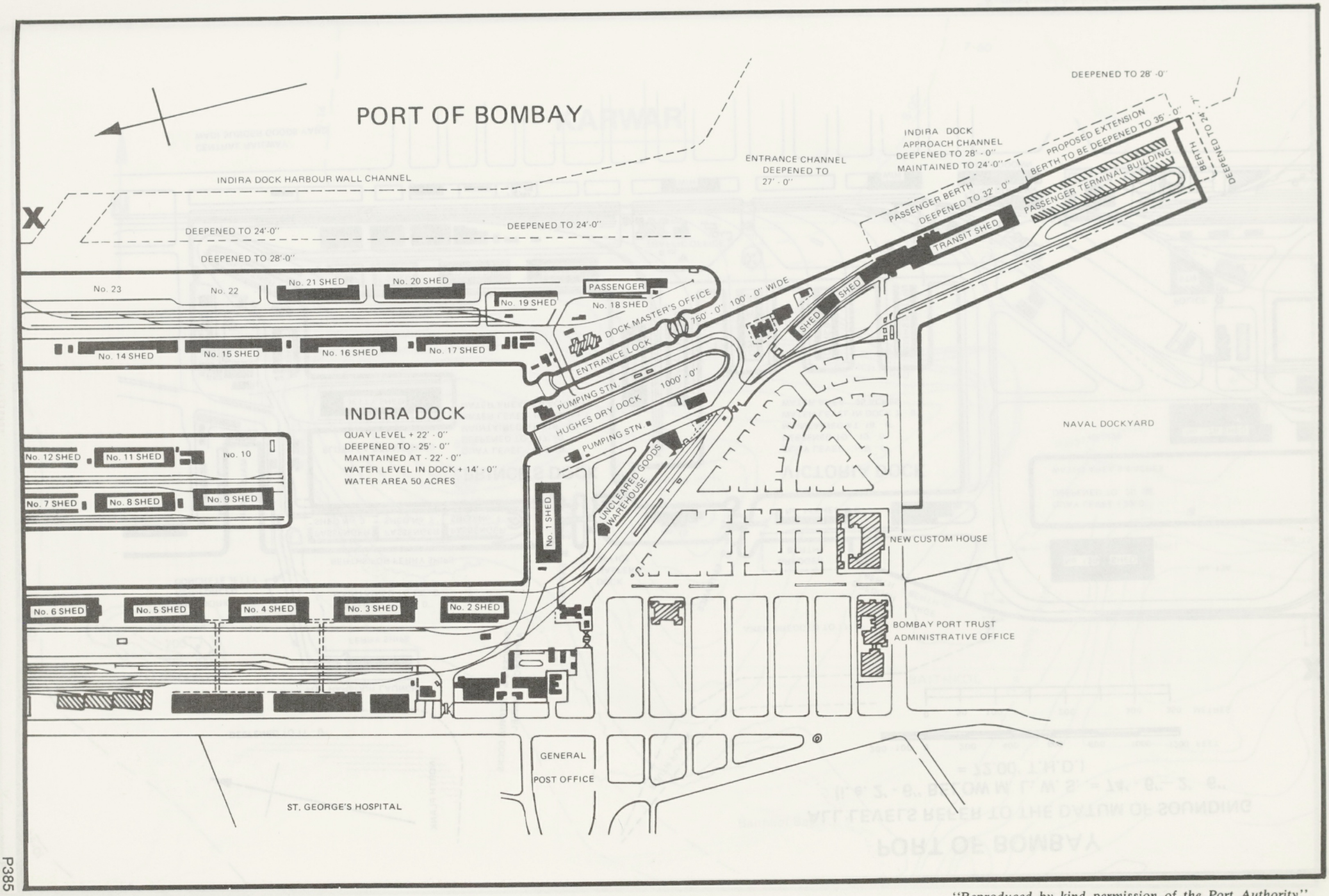

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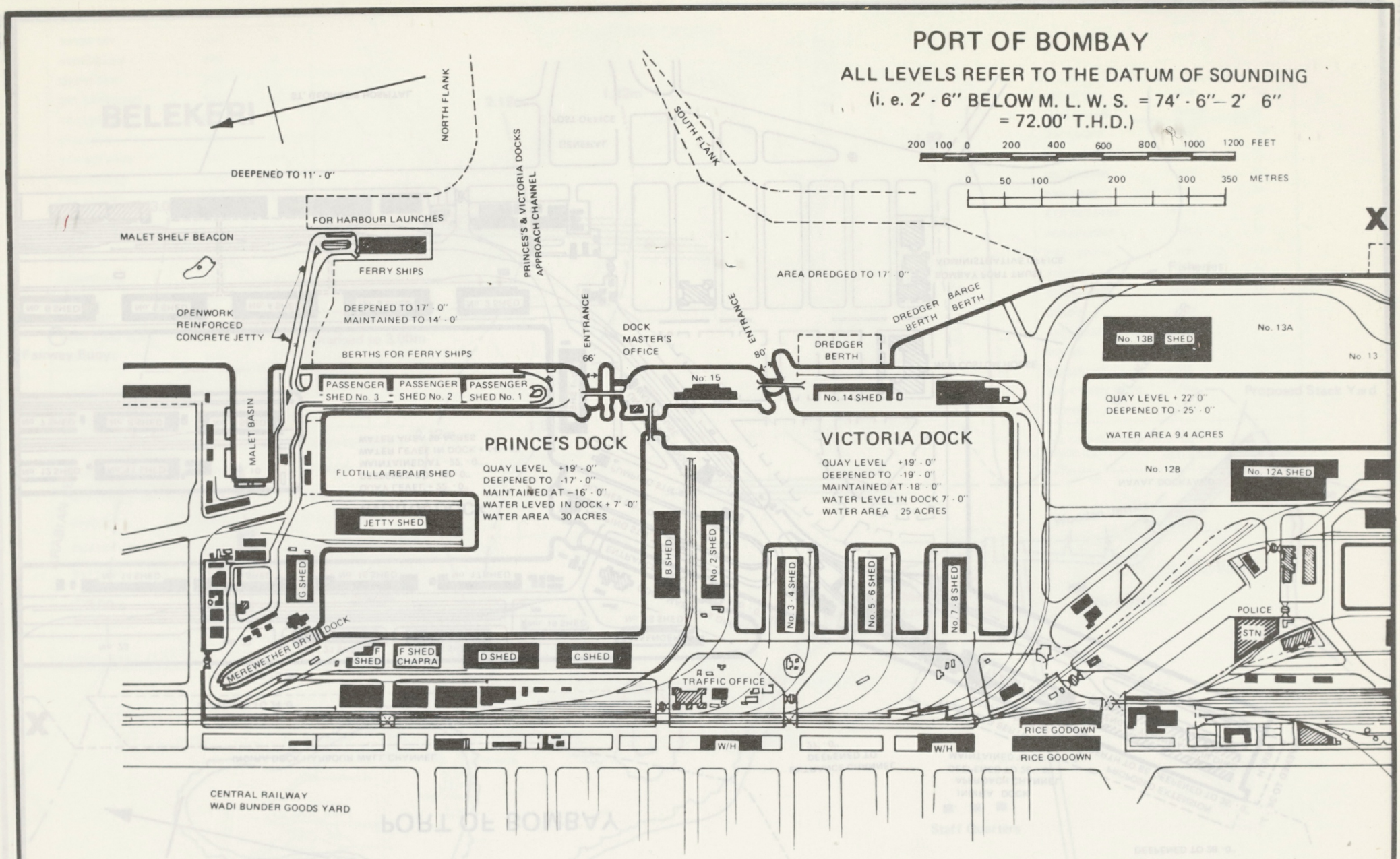
PORT OF BOMBAY

ALL LEVELS REFER TO THE DATUM OF SOUNDING

(i. e. 2' - 6" BELOW M. L. W. S. = 74' - 6" – 2' 6"
= 72.00' T.H.D.)



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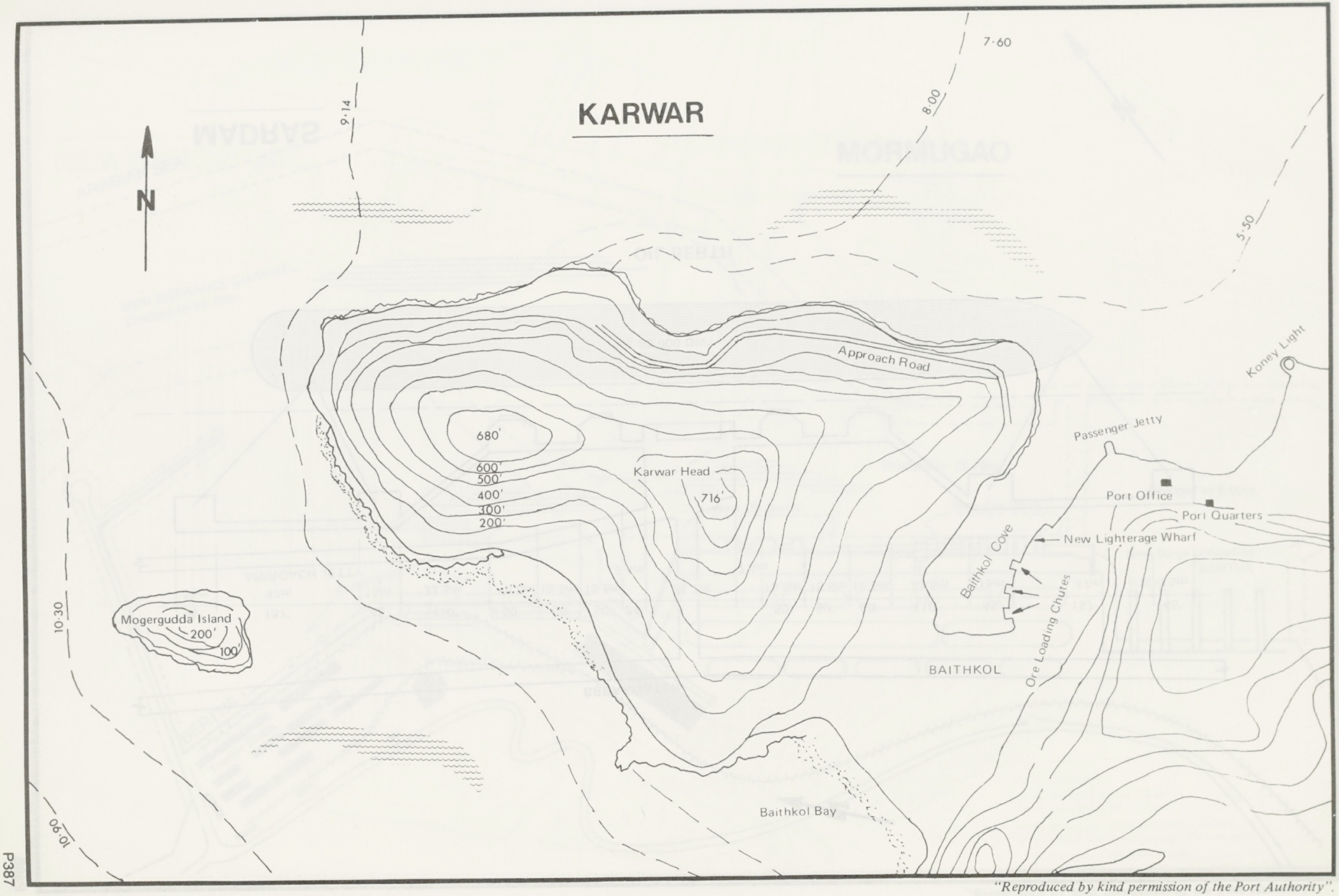

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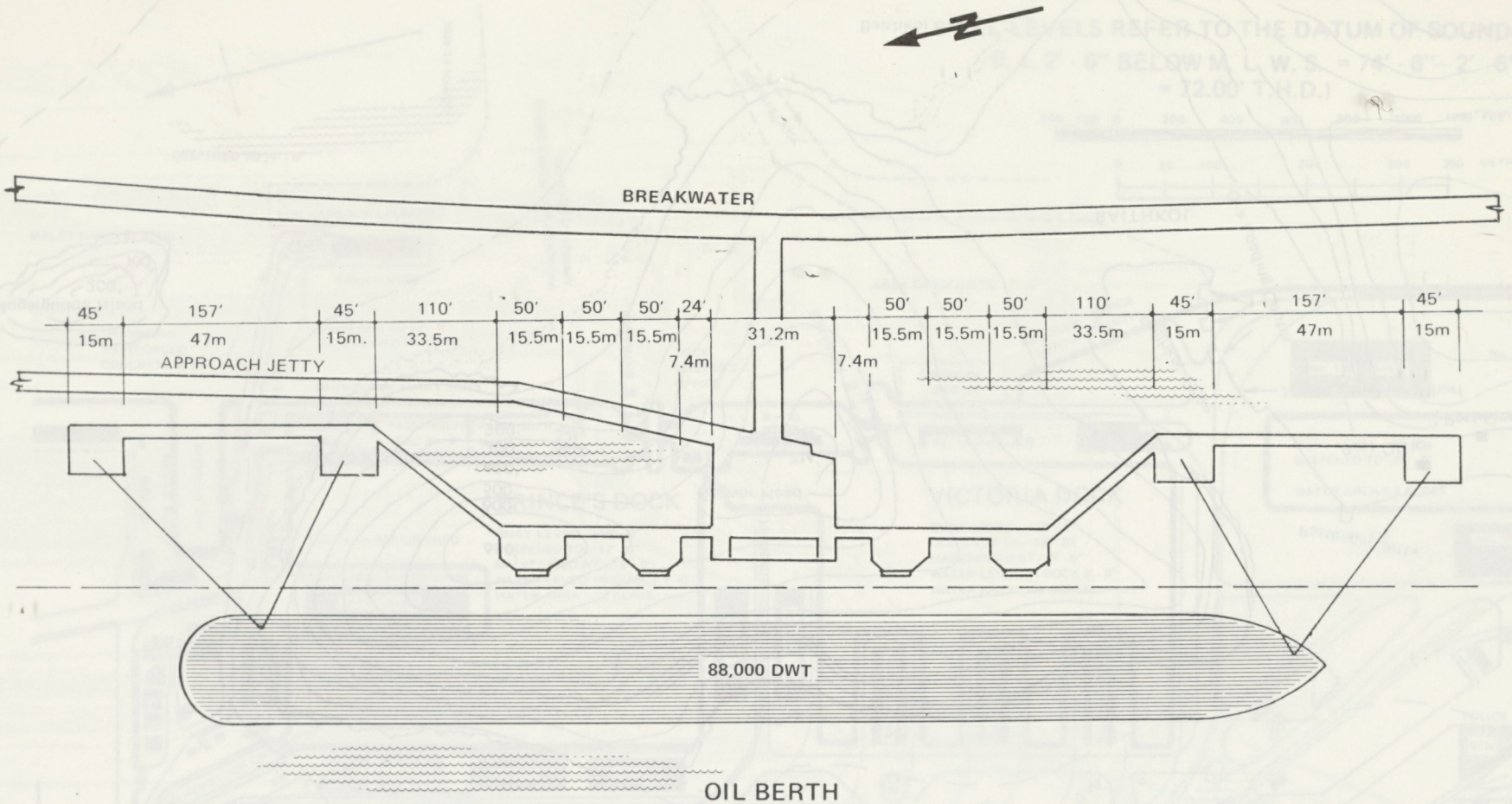

MADRAS

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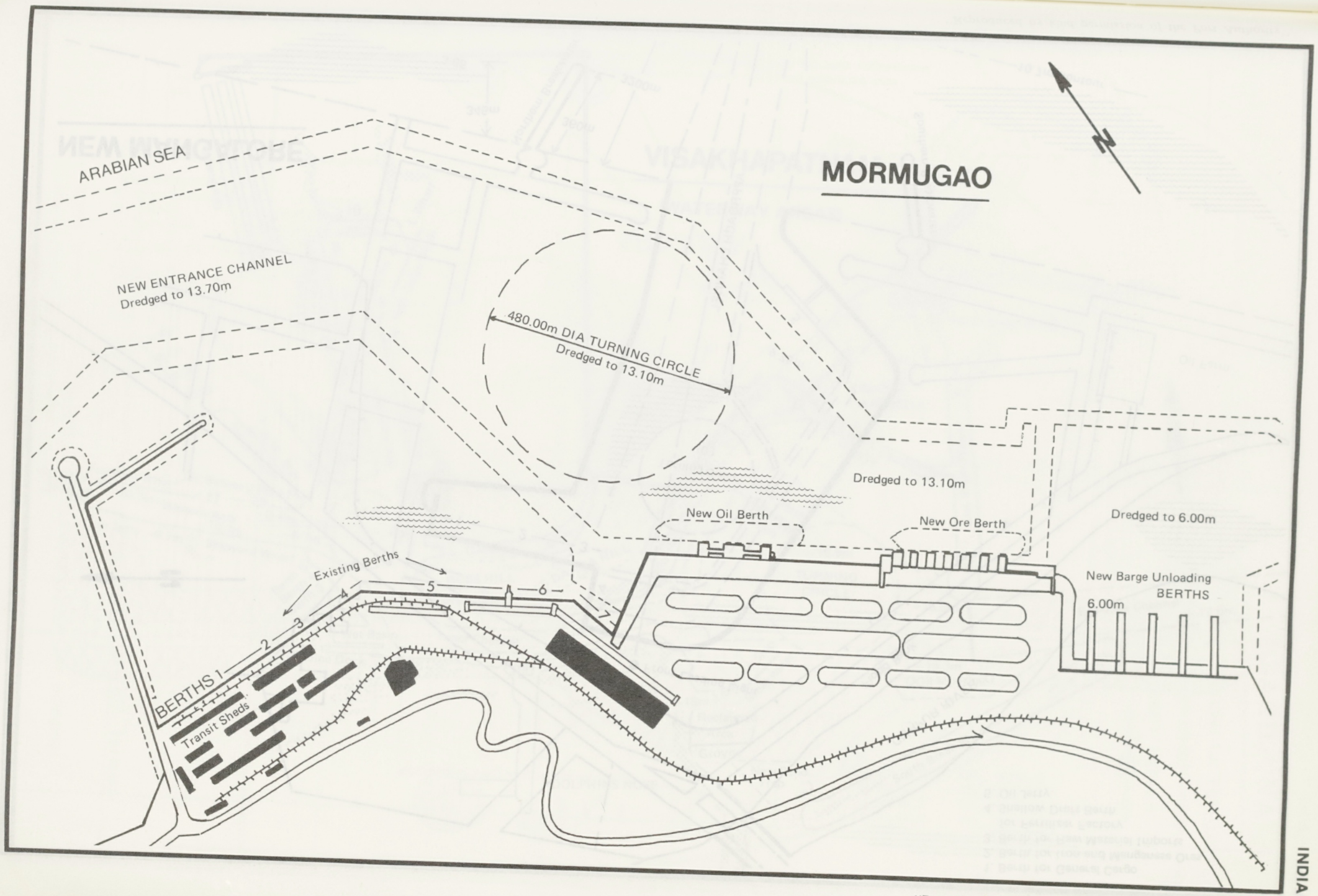

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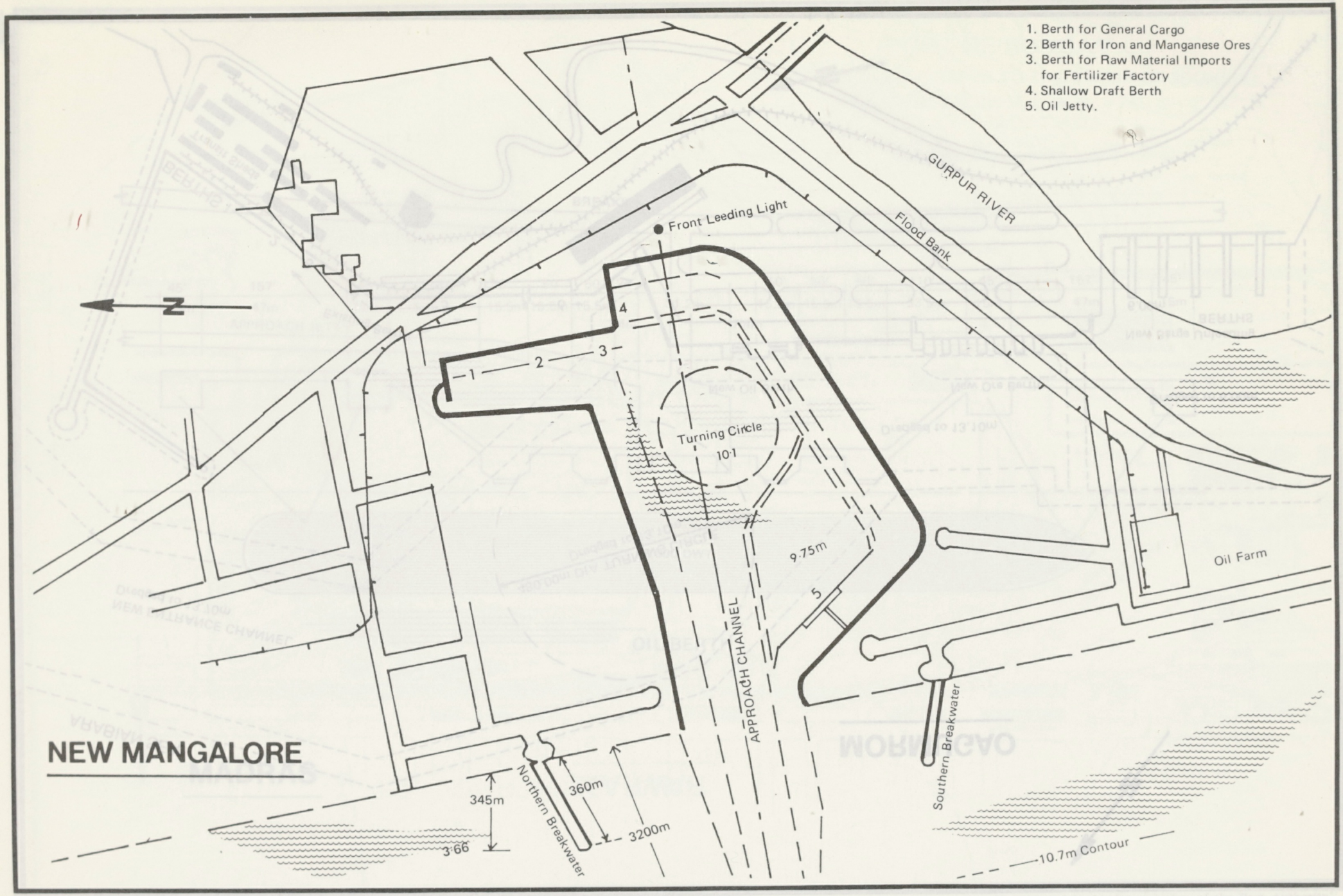

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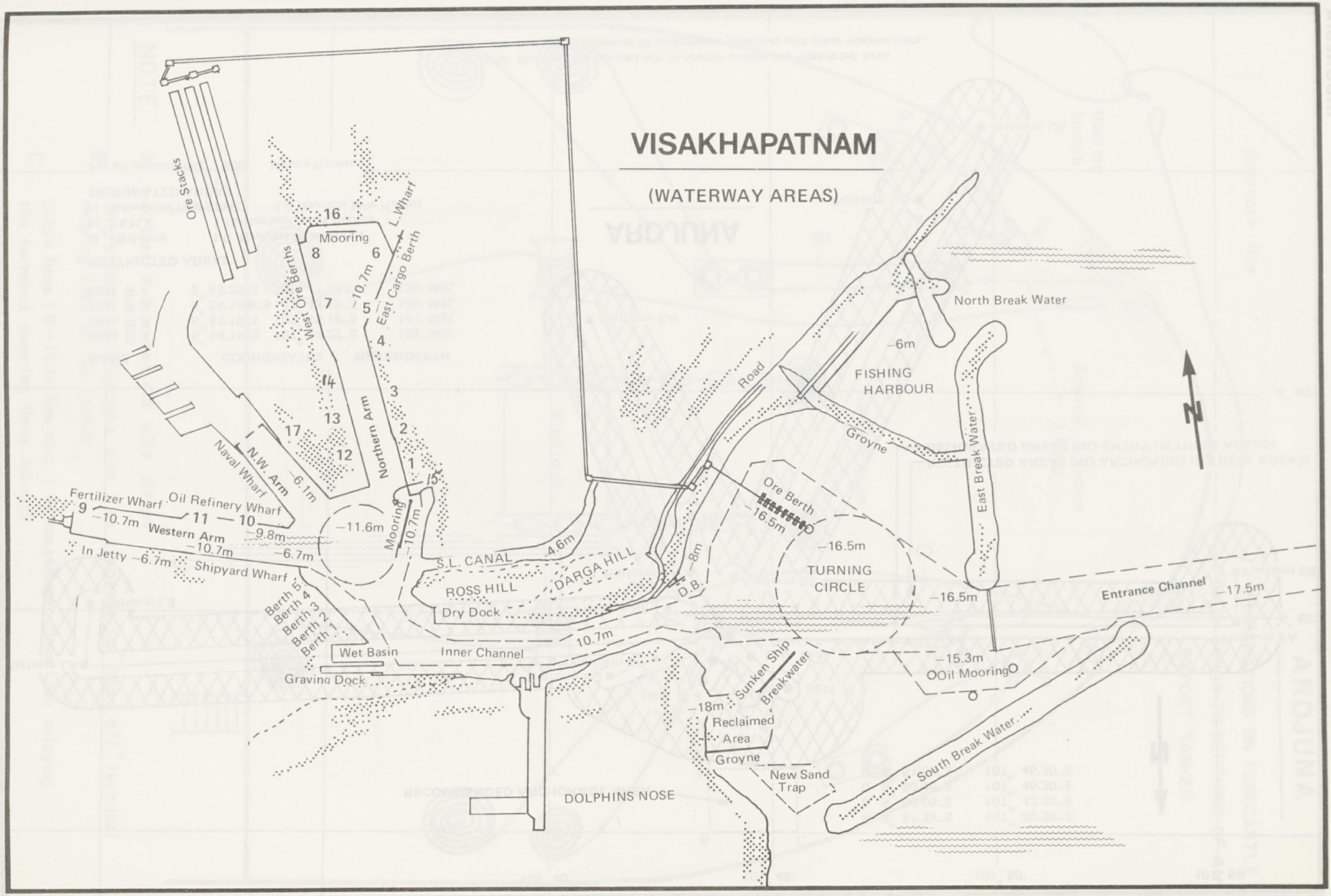

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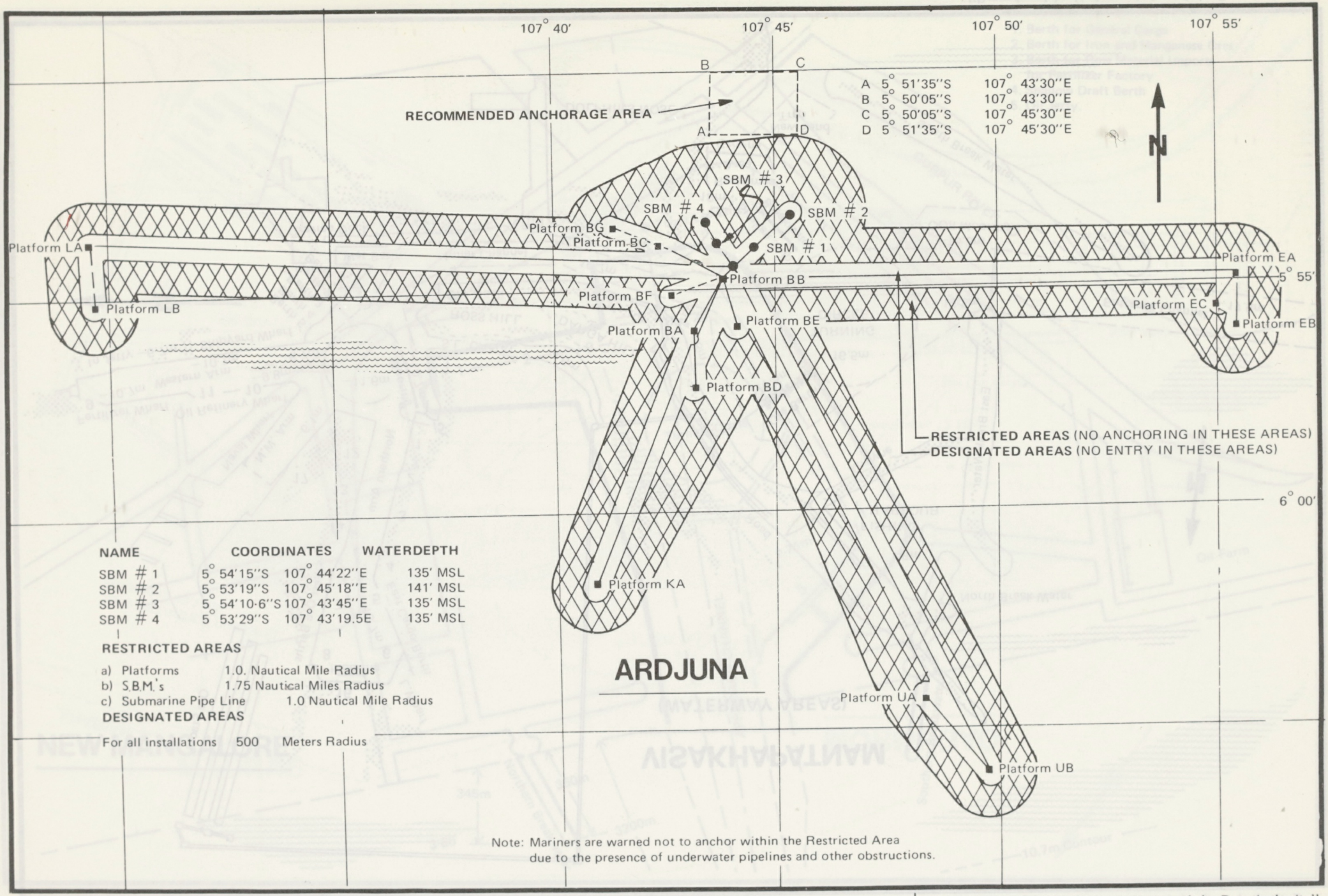

NAME	COORDINATES	WATERDEPTH
SBM # 1	5° 54′15″S 107° 44′22″E	135′ MSL
SBM # 2	5° 53′19″S 107° 45′18″E	141′ MSL
SBM # 3	5° 54′10·6″S 107° 43′45″E	135′ MSL
SBM # 4	5° 53′29″S 107° 43′19.5E	135′ MSL

RESTRICTED AREAS

a) Platforms 1.0. Nautical Mile Radius
b) S.B.M.'s 1.75 Nautical Miles Radius
c) Submarine Pipe Line 1.0 Nautical Mile Radius

DESIGNATED AREAS

For all installations 500 Meters Radius

Note: Mariners are warned not to anchor within the Restricted Area due to the presence of underwater pipelines and other obstructions.

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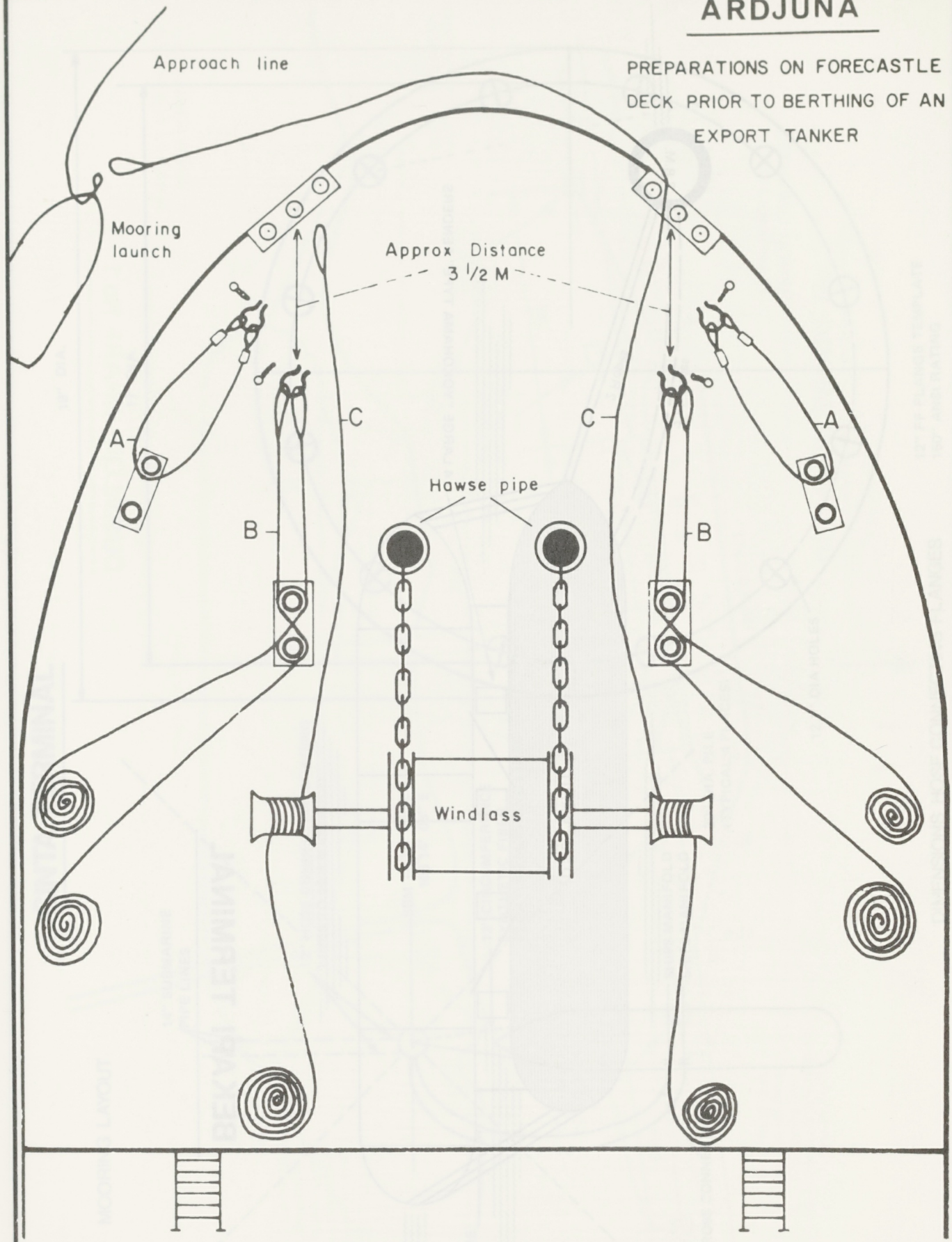
ARDJUNA

PREPARATIONS ON FORECASTLE DECK PRIOR TO BERTHING OF AN EXPORT TANKER



NOTE:

A : 30 feet X 2 inches dia. wire strops.

B : Ship's lines (8–10 inches circ.) as stoppers to "hang off" terminal mooring lines on the tanker

C : Ship's lines (8–10 inches circ.) as messenger lines for bringing the terminal mooring lines inboard.

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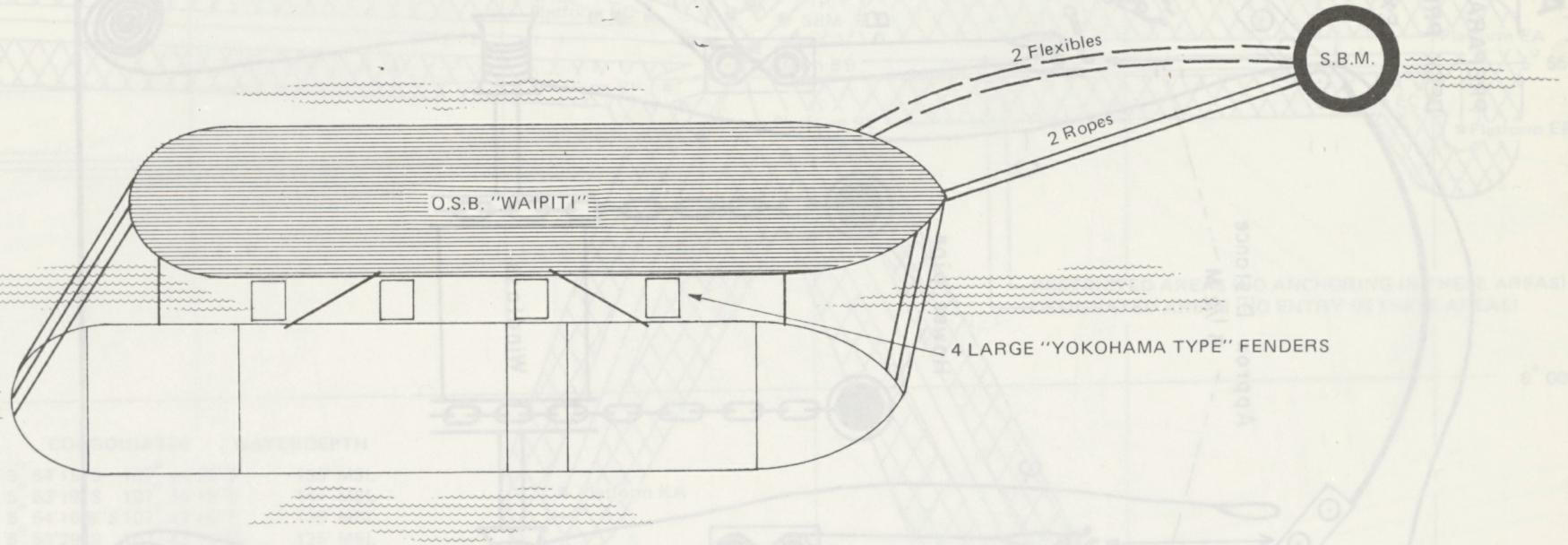
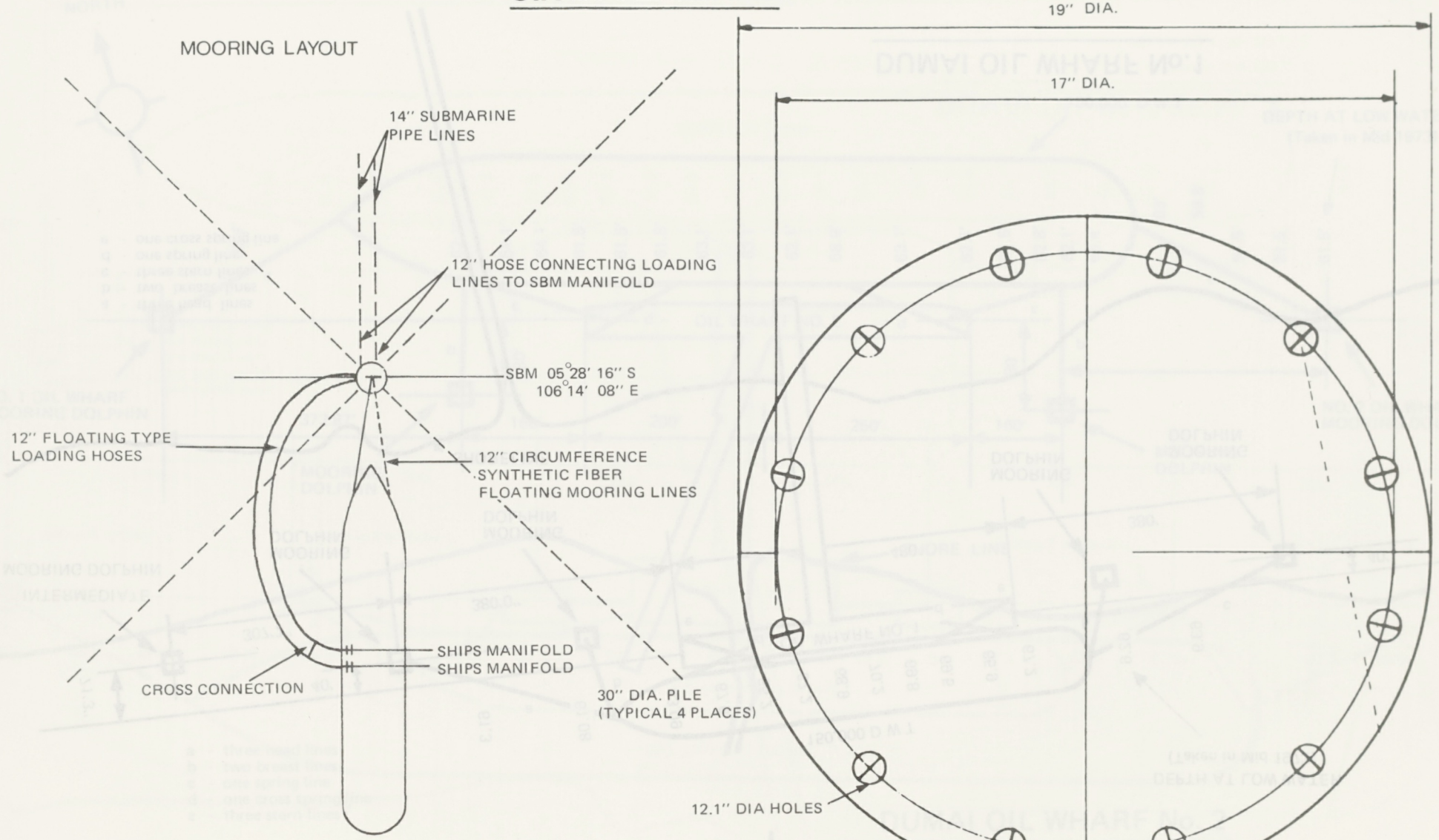


BEKAPI TERMINAL

Plan supplied by Ship's Master.

CINTA TERMINAL



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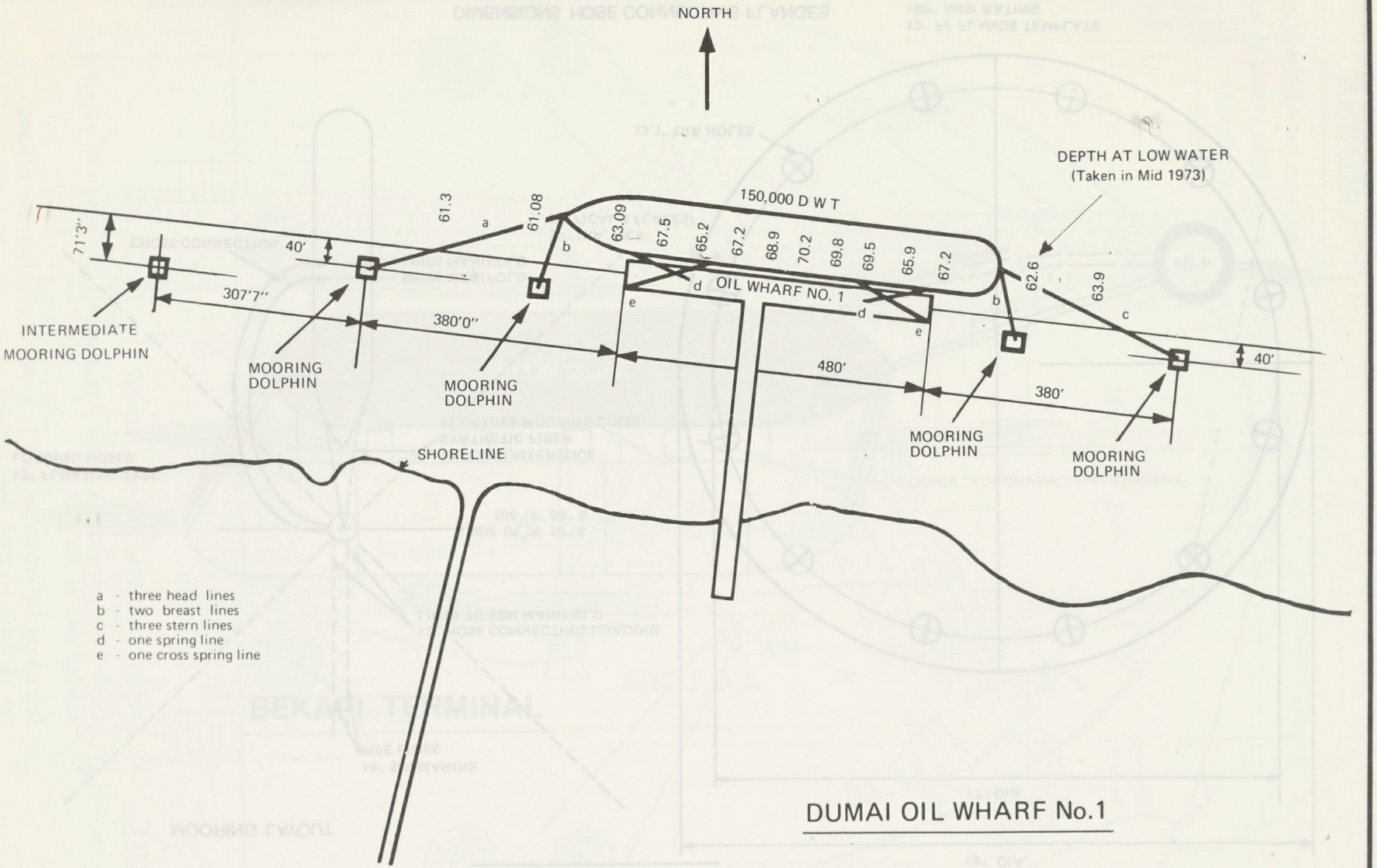

DUMAI OIL WHARF No.1

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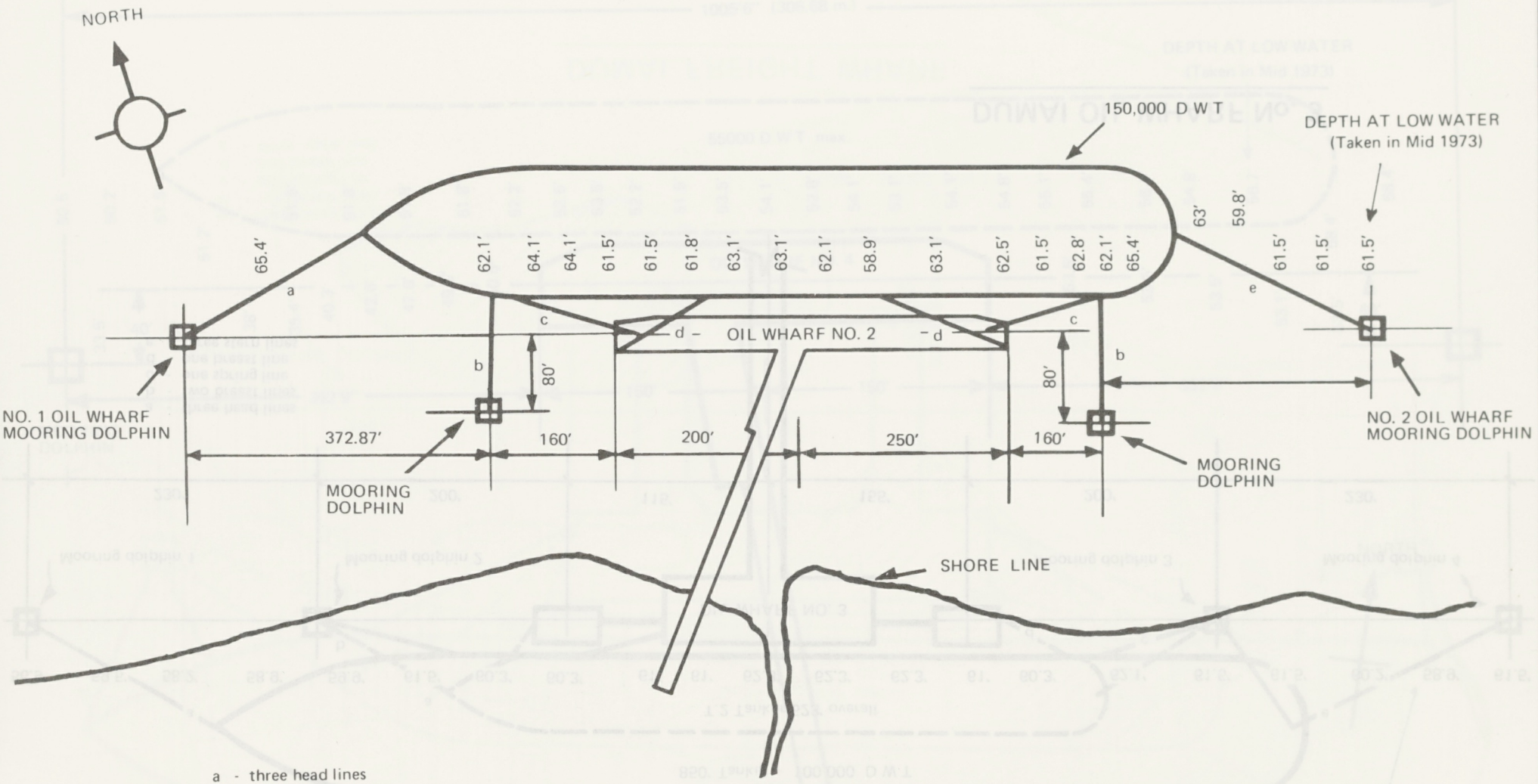

DUMAI OIL WHARF No. 2

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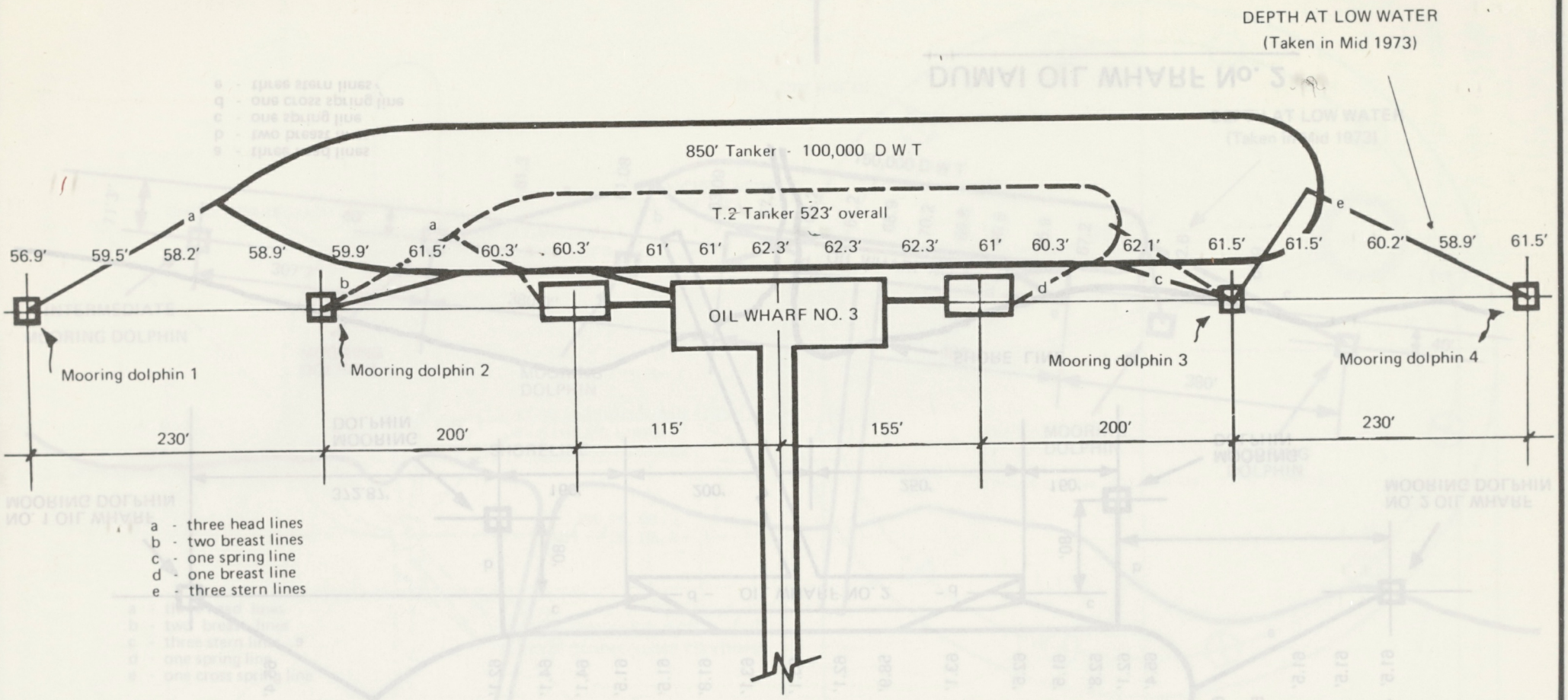

DUMAI OIL WHARF No. 3

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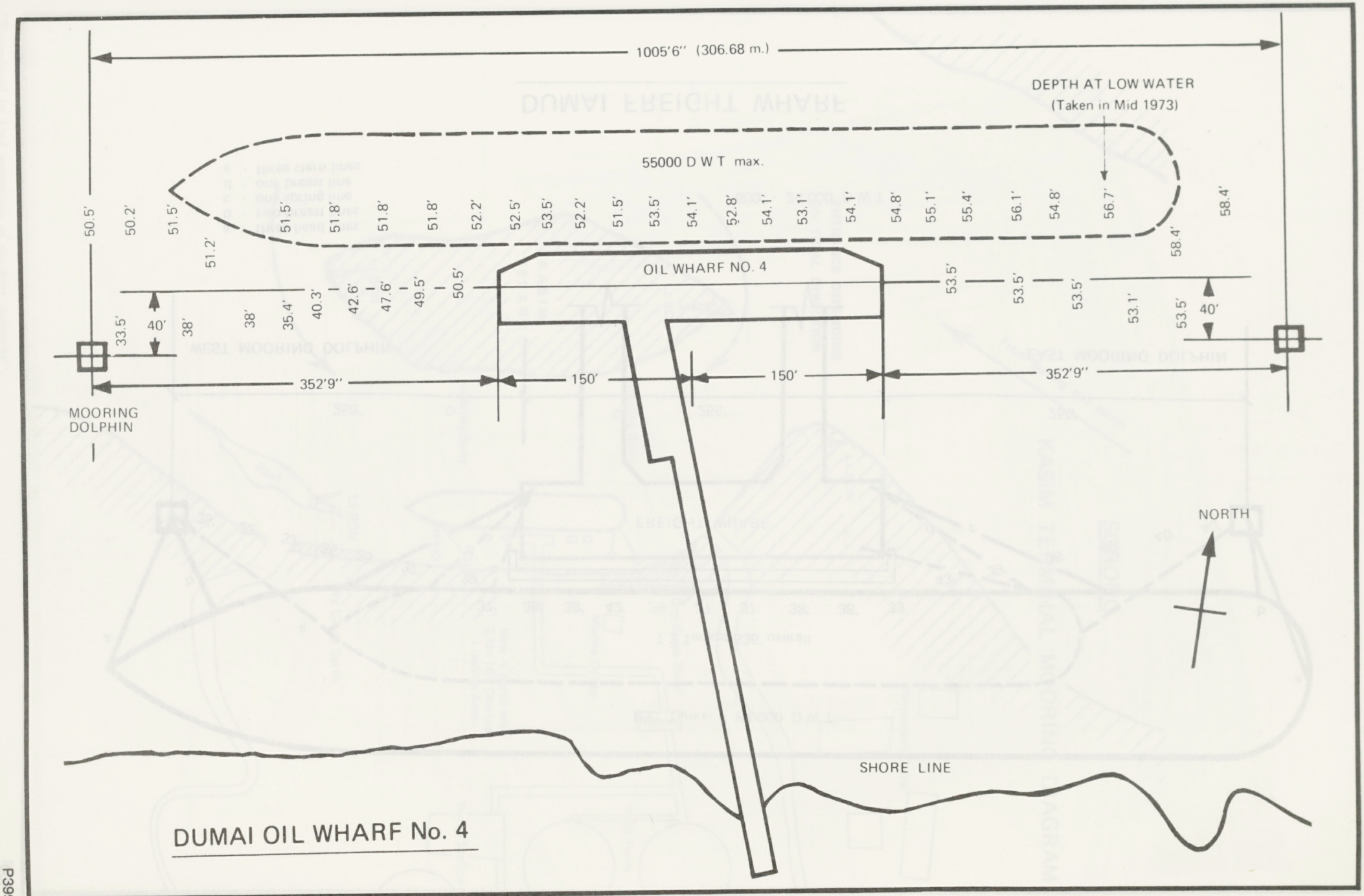

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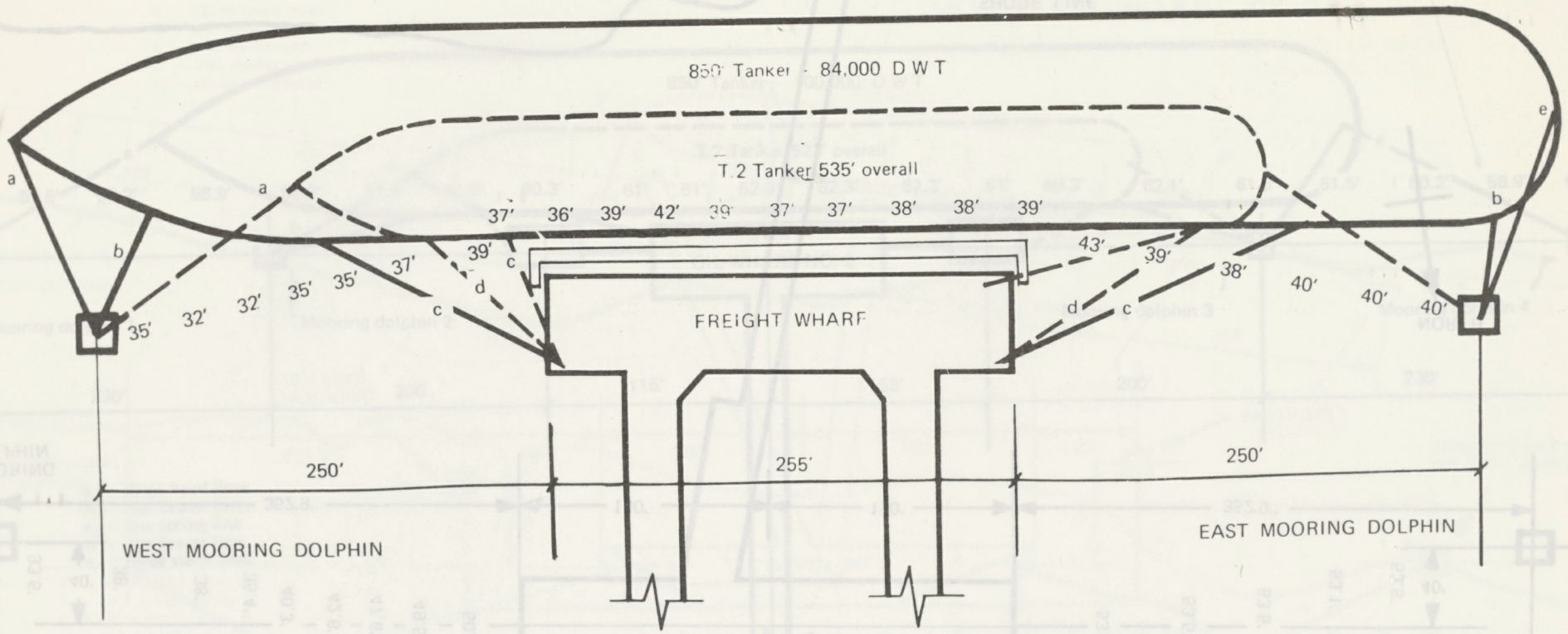
INDONESIA

P699



a - three head lines
b - two breast lines
c - one spring line
d - one breast line
e - three stern lines

DUMAI FREIGHT WHARF

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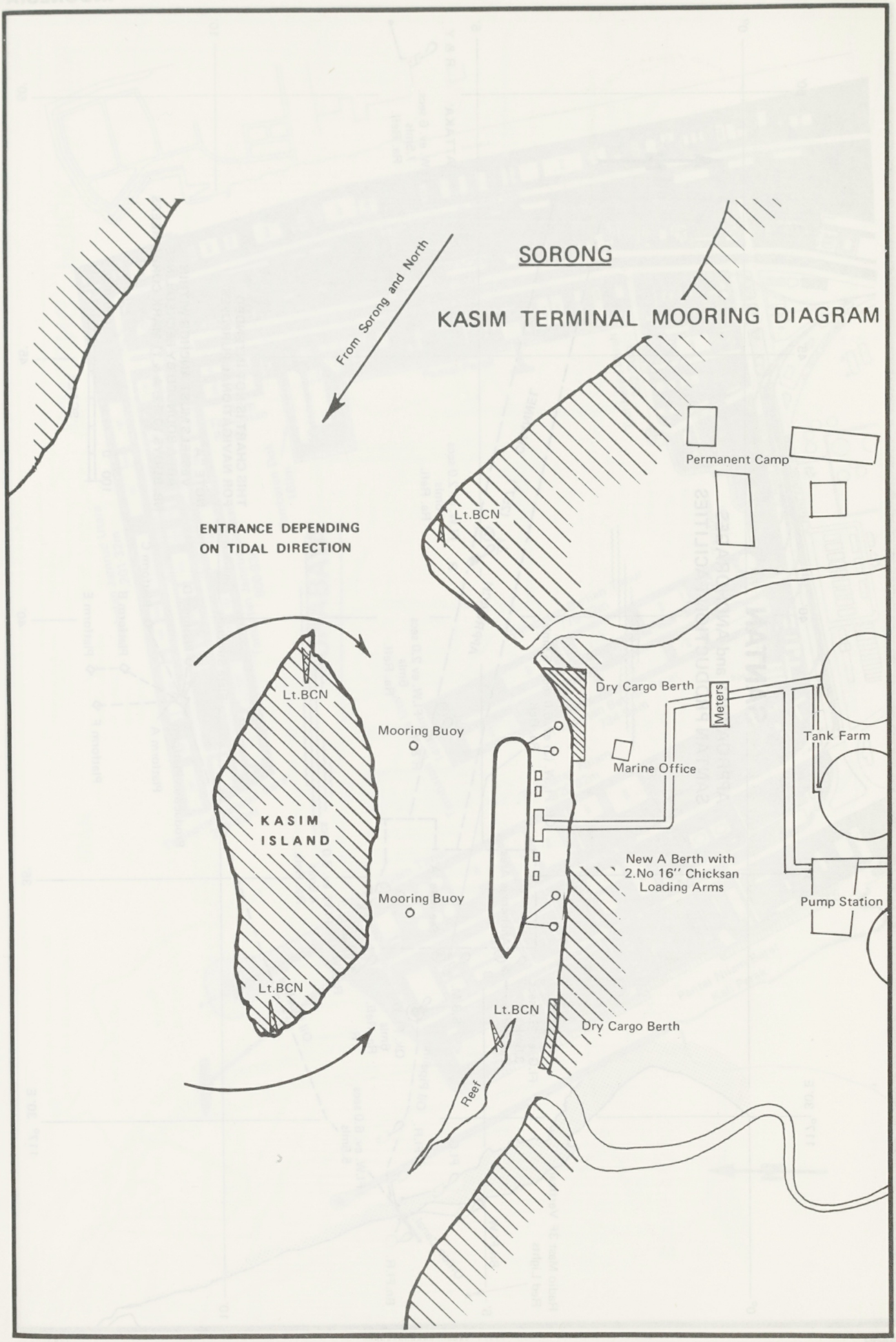

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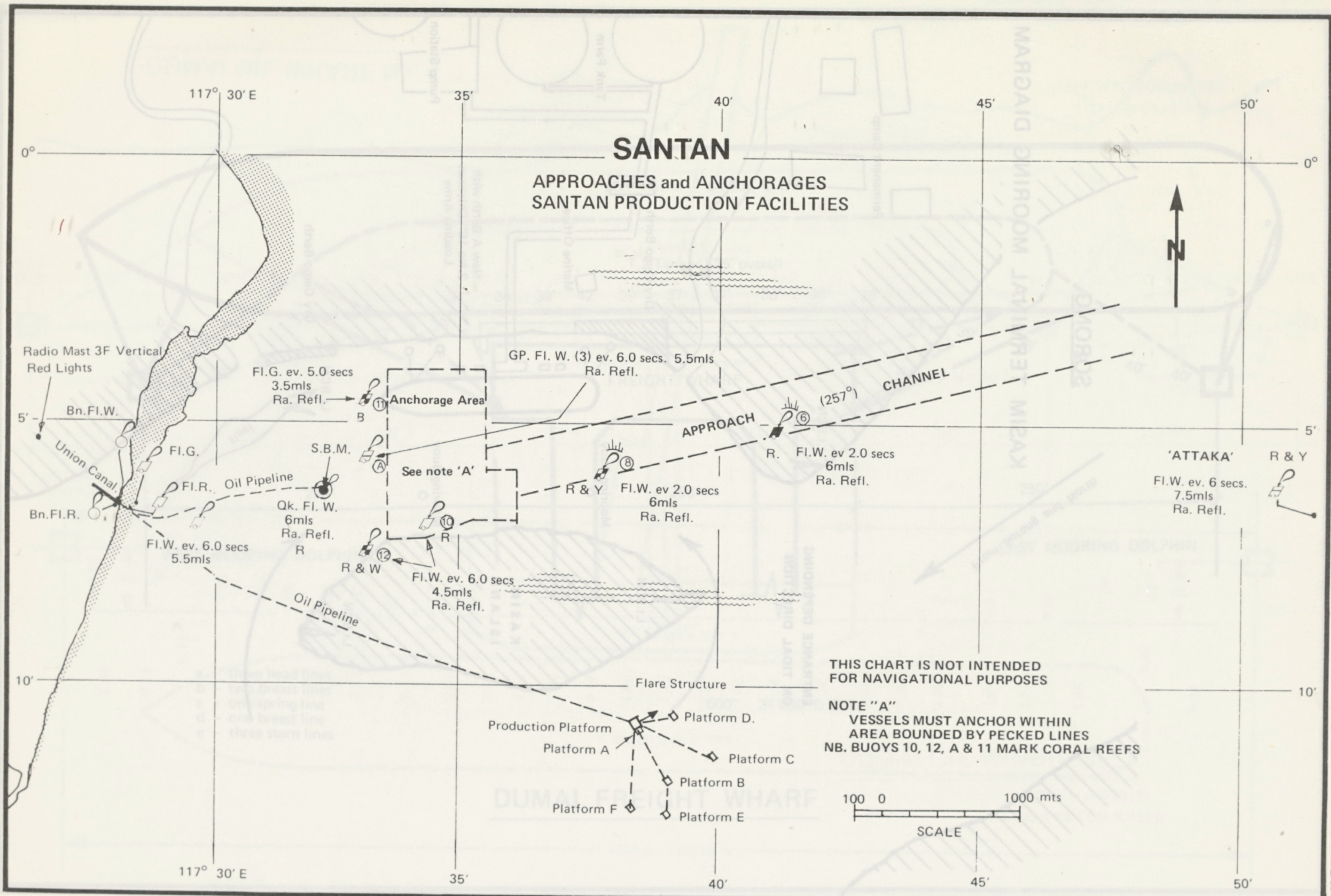

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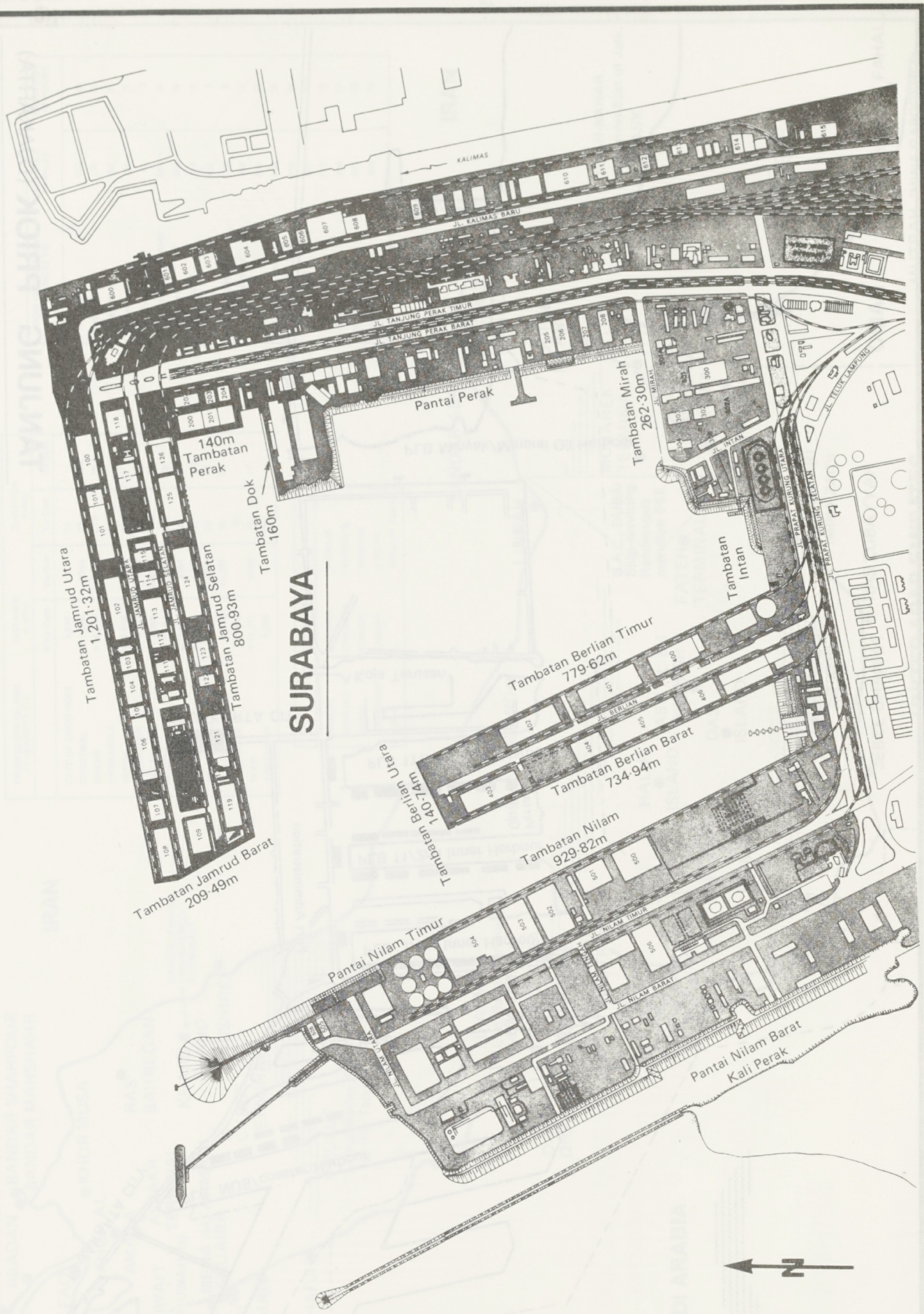

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TANJUNG PRIOK (DJAKARTA)

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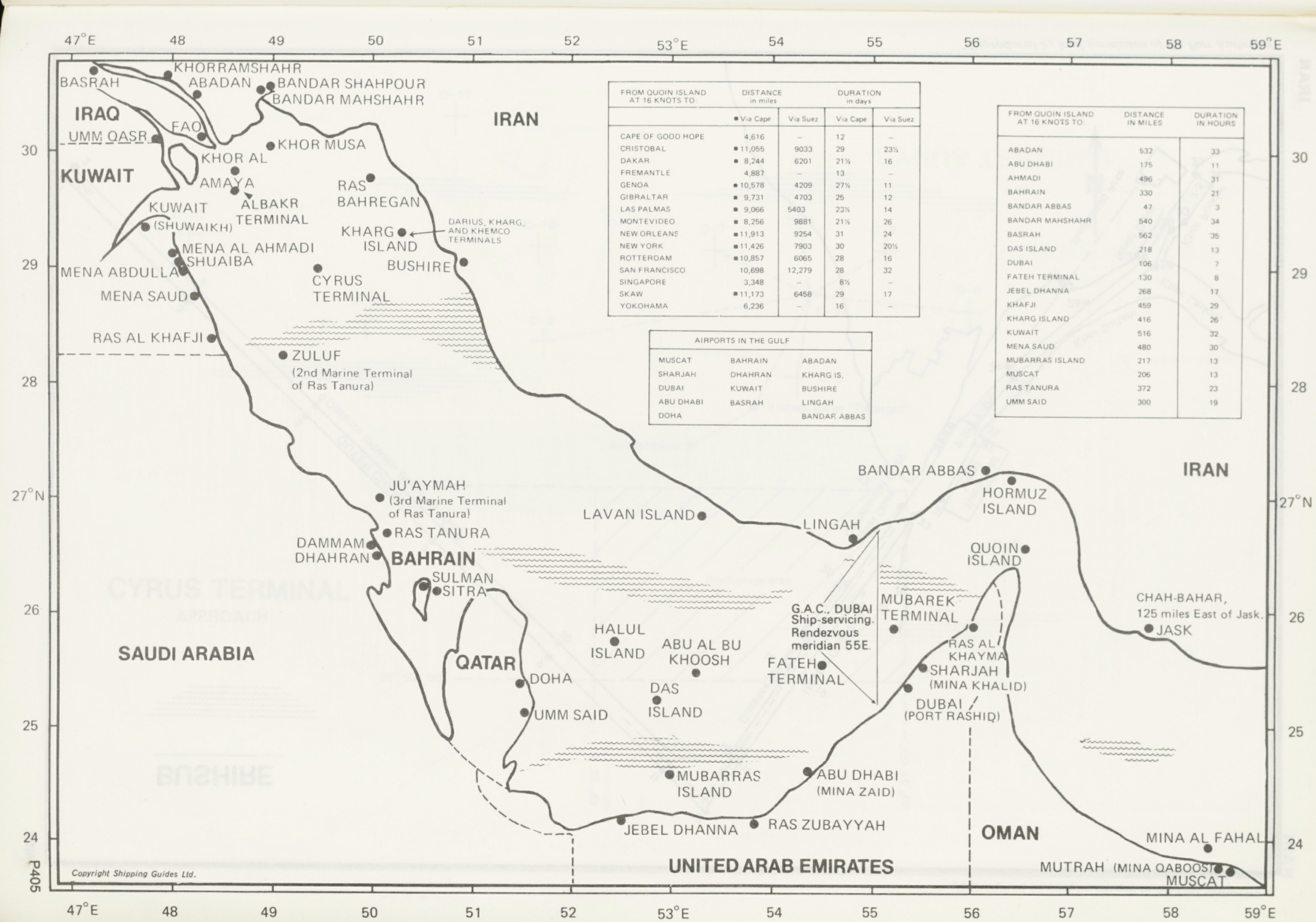
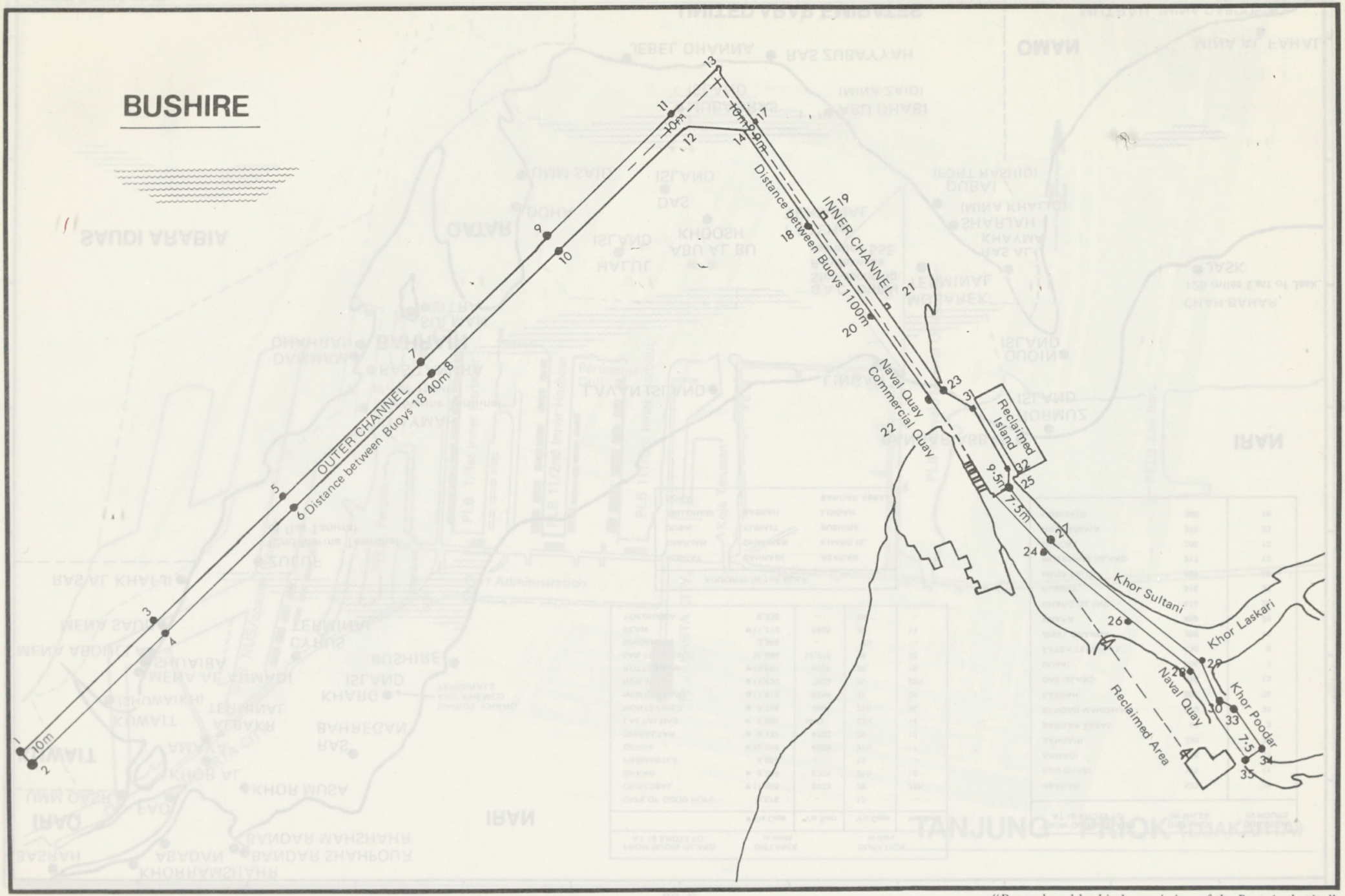


FROM QUOIN ISLAND AT 16 KNOTS TO:	DISTANCE in miles		DURATION in days	
	■ Via Cape	Via Suez	Via Cape	Via Suez
CAPE OF GOOD HOPE	4,616	–	12	–
CRISTOBAL	■ 11,055	9033	29	23½
DAKAR	■ 8,244	6201	21½	16
FREMANTLE	4,887	–	13	–
GENOA	■ 10,578	4209	27½	11
GIBRALTAR	■ 9,731	4703	25	12
LAS PALMAS	■ 9,066	5403	23½	14
MONTEVIDEO	■ 8,256	9881	21½	26
NEW ORLEANS	■ 11,913	9254	31	24
NEW YORK	■ 11,426	7903	30	20½
ROTTERDAM	■ 10,857	6065	28	16
SAN FRANCISCO	10,698	12,279	28	32
SINGAPORE	3,348	–	8½	–
SKAW	■ 11,173	6458	29	17
YOKOHAMA	6,236	–	16	–

AIRPORTS IN THE GULF		
MUSCAT	BAHRAIN	ABADAN
SHARJAH	DHAHRAN	KHARG IS.
DUBAI	KUWAIT	BUSHIRE
ABU DHABI	BASRAH	LINGAH
DOHA		BANDAR ABBAS

FROM QUOIN ISLAND AT 16 KNOTS TO:	DISTANCE IN MILES	DURATION IN HOURS
ABADAN	532	33
ABU DHABI	175	11
AHMADI	496	31
BAHRAIN	330	21
BANDAR ABBAS	47	3
BANDAR MAHSHAHR	540	34
BASRAH	562	35
DAS ISLAND	218	13
DUBAI	106	7
FATEH TERMINAL	130	8
JEBEL DHANNA	268	17
KHAFJI	459	29
KHARG ISLAND	416	26
KUWAIT	516	32
MENA SAUD	480	30
MUBARRAS ISLAND	217	13
MUSCAT	206	13
RAS TANURA	372	23
UMM SAID	300	19

BUSHIRE



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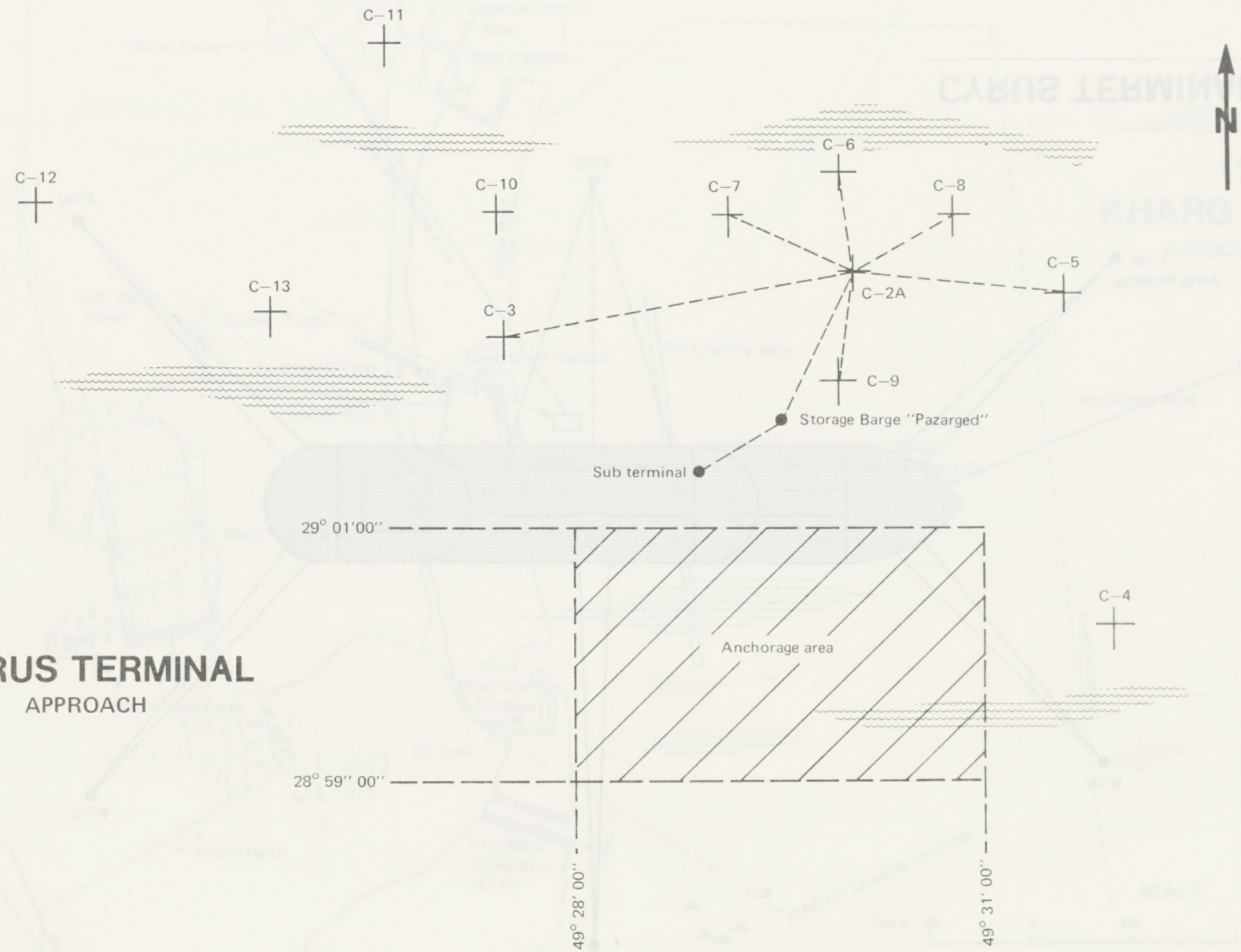

CYRUS TERMINAL

APPROACH

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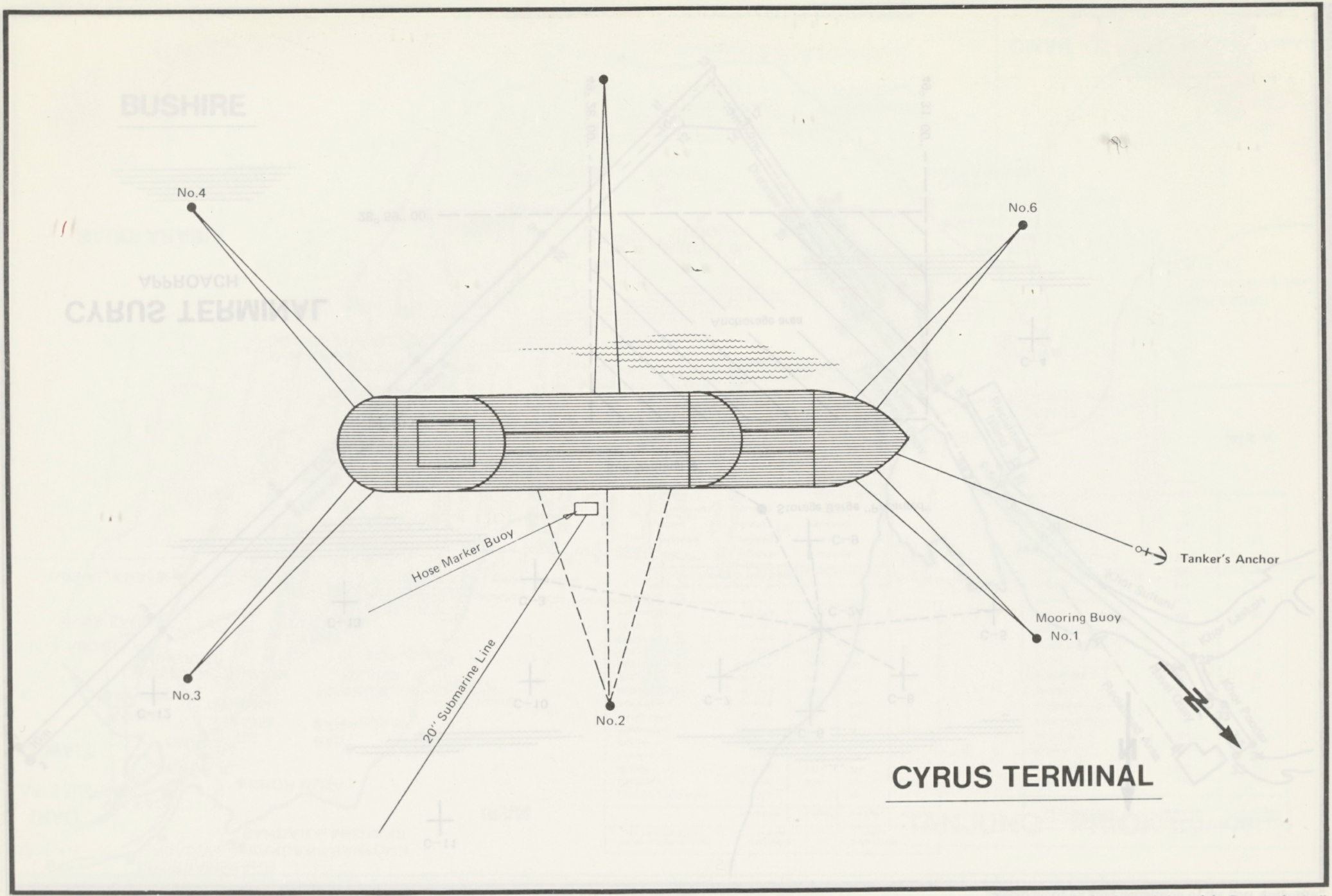

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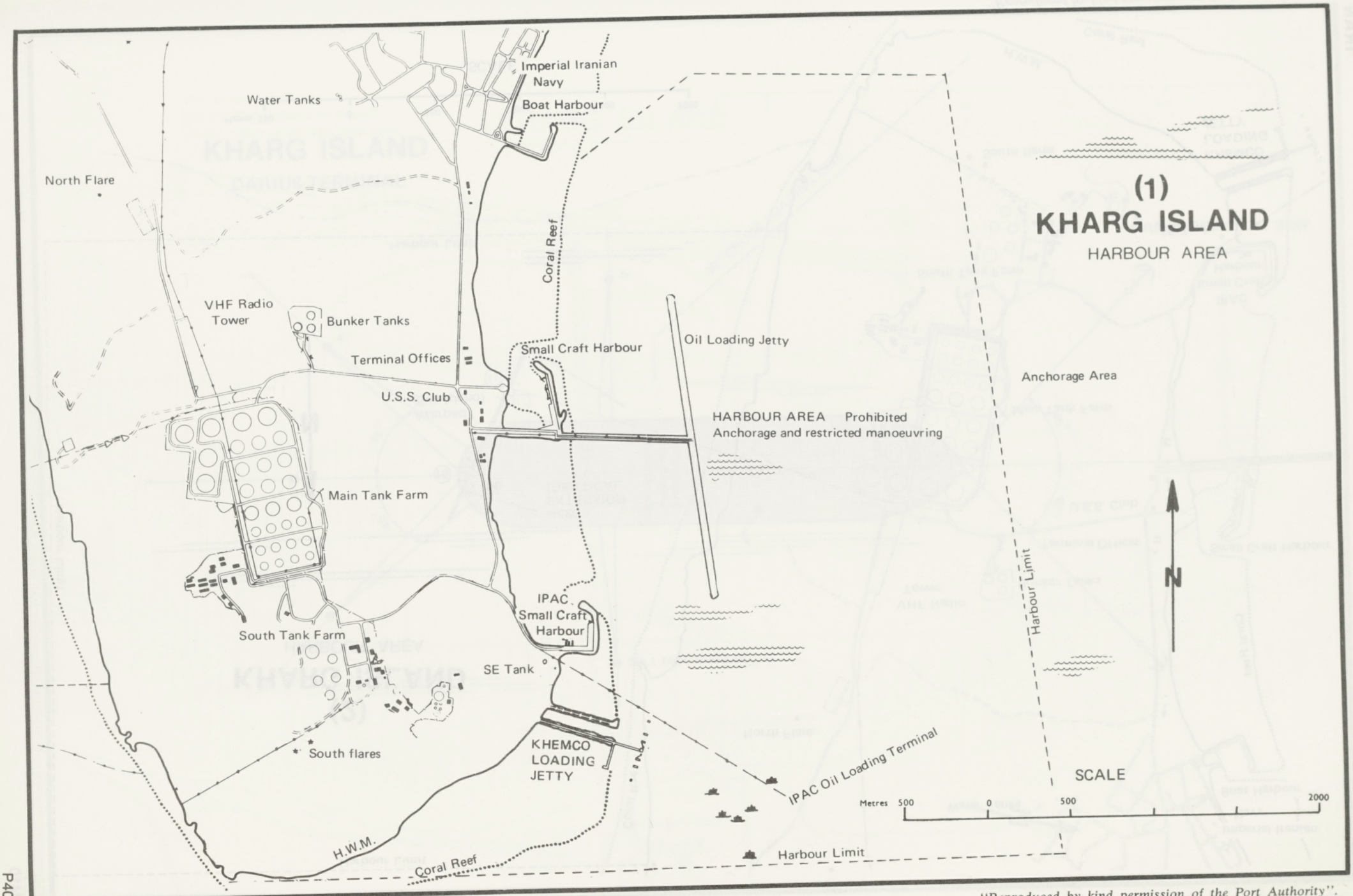

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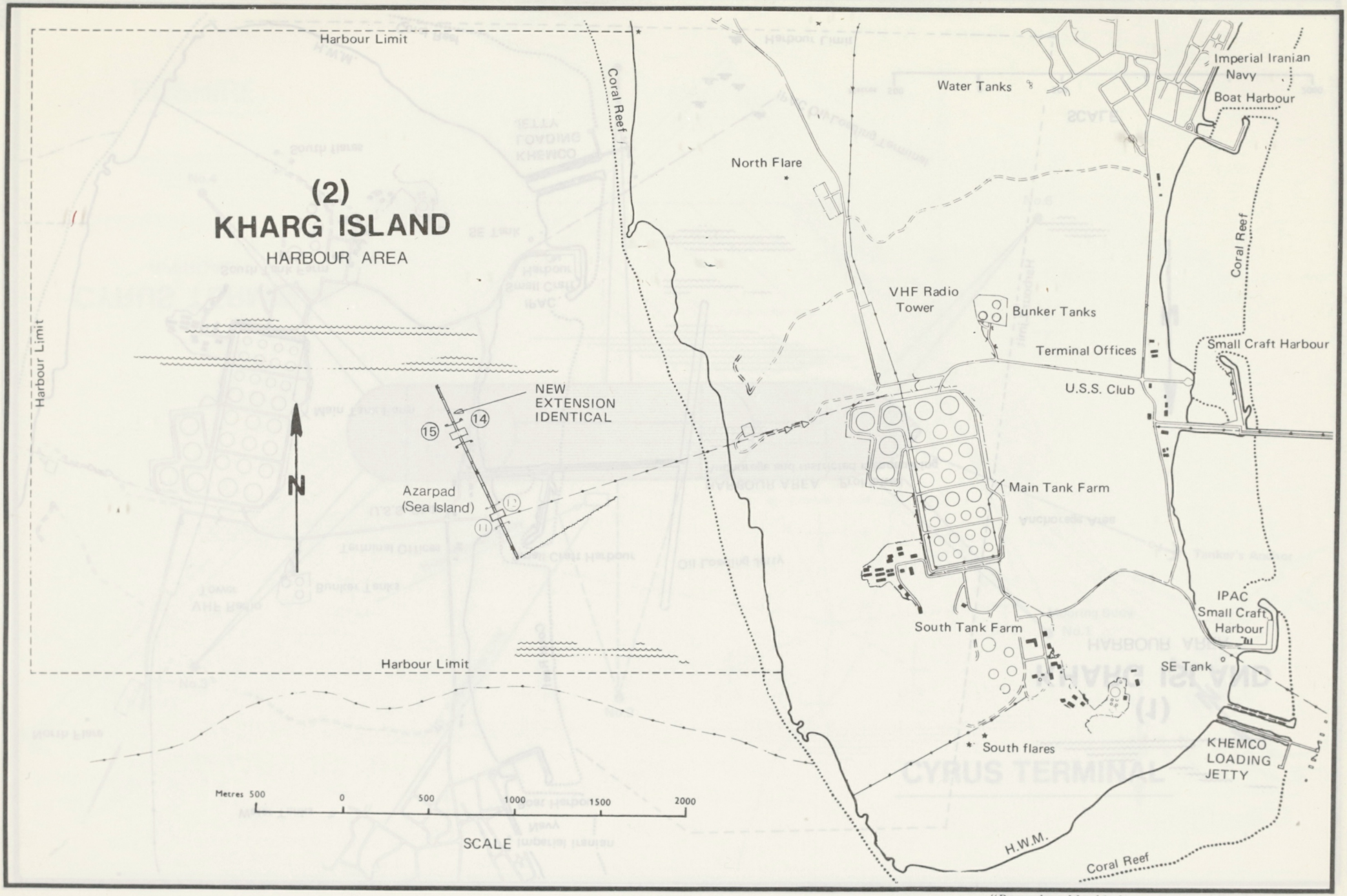

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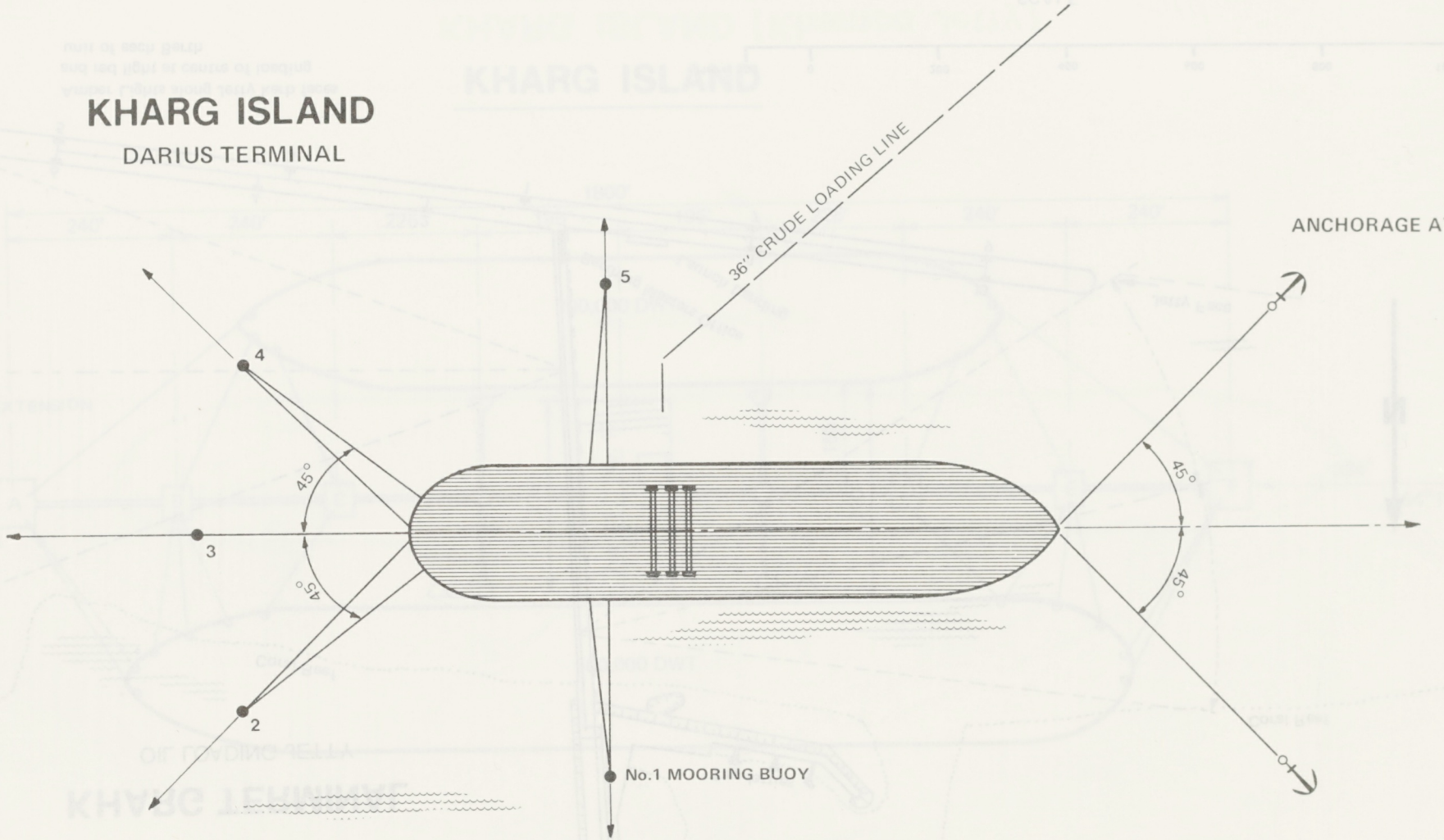
KHARG ISLAND

DARIUS TERMINAL



IRAN

P411

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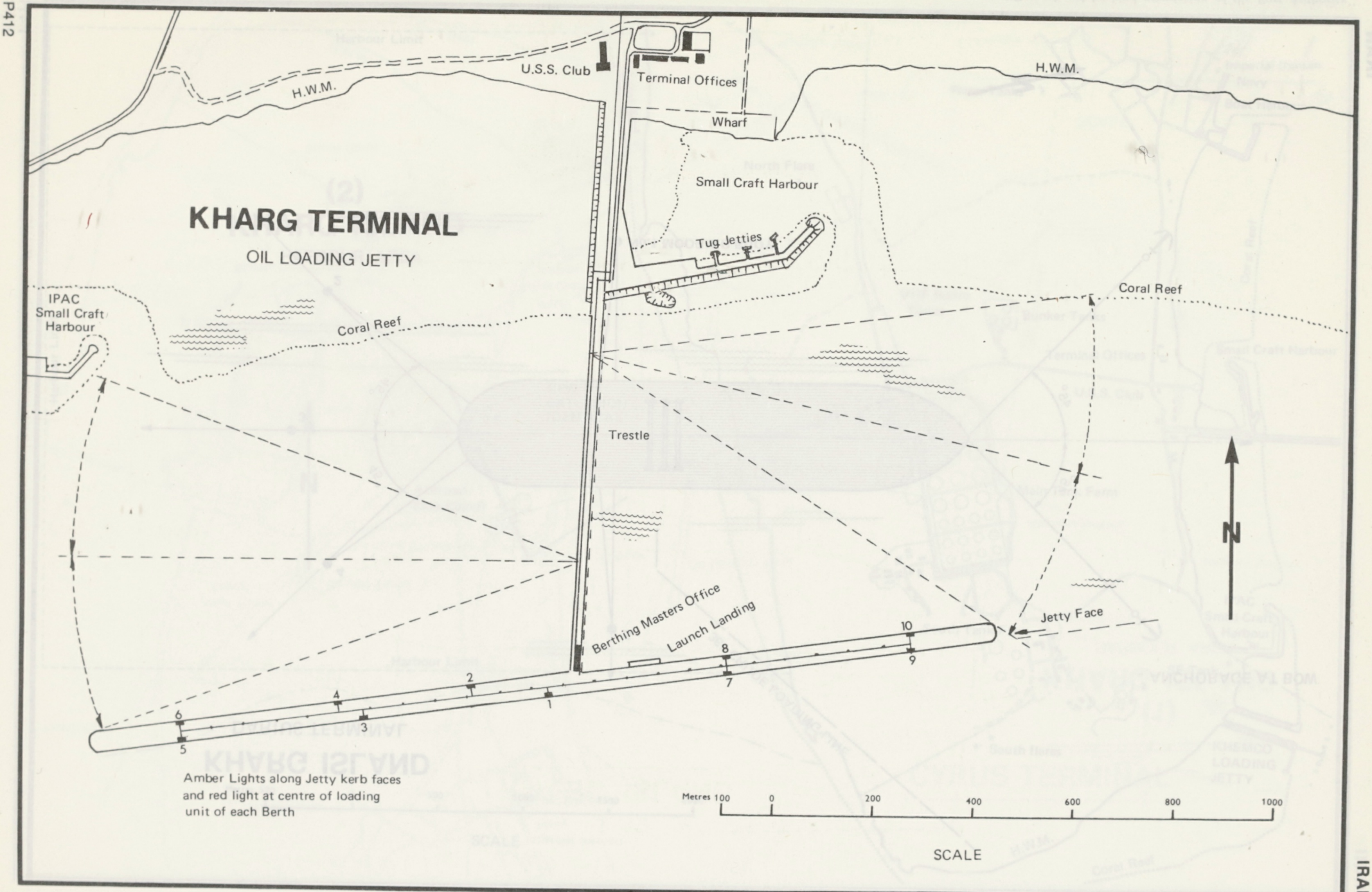

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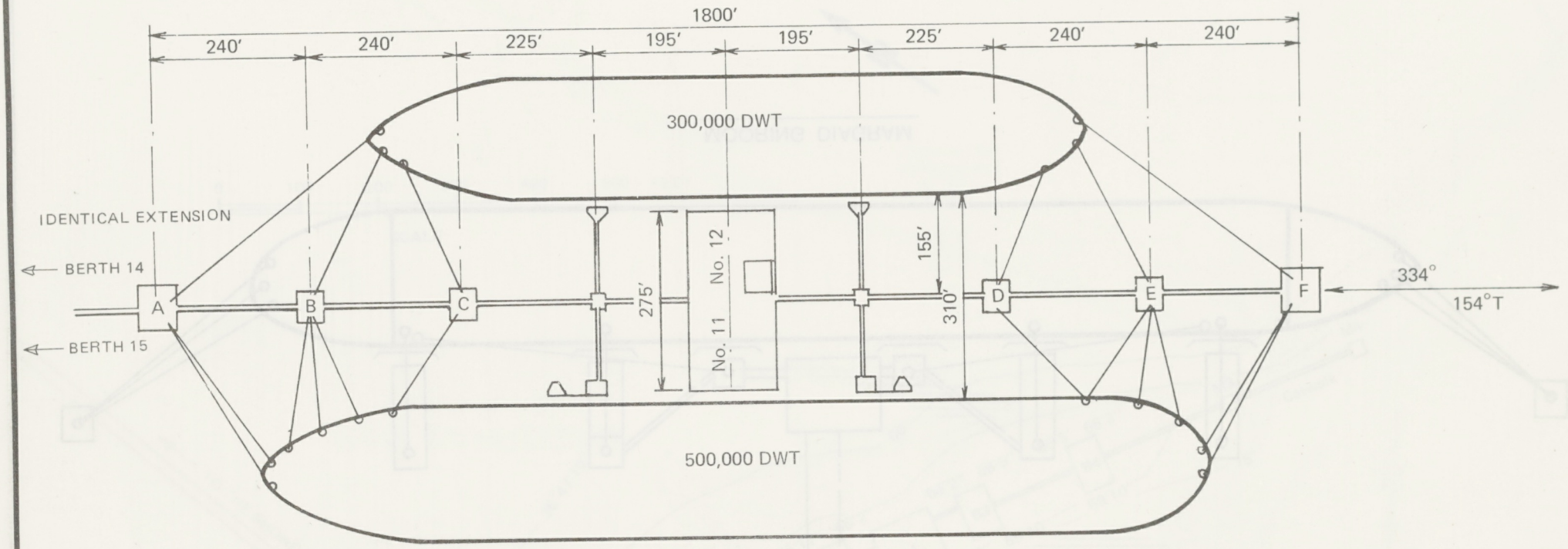
KHARG ISLAND



SEA ISLAND LOADING TERMINAL
(BERTHS No. 11 AND 12)

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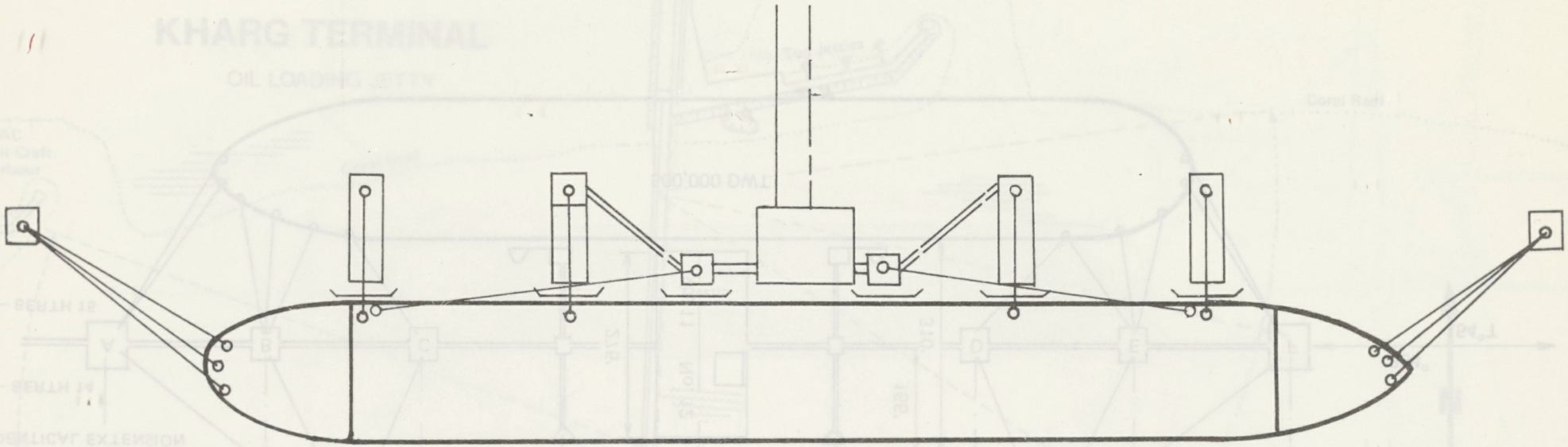

MOORING DIAGRAM

KHARG ISLAND (Khemco Jetty)

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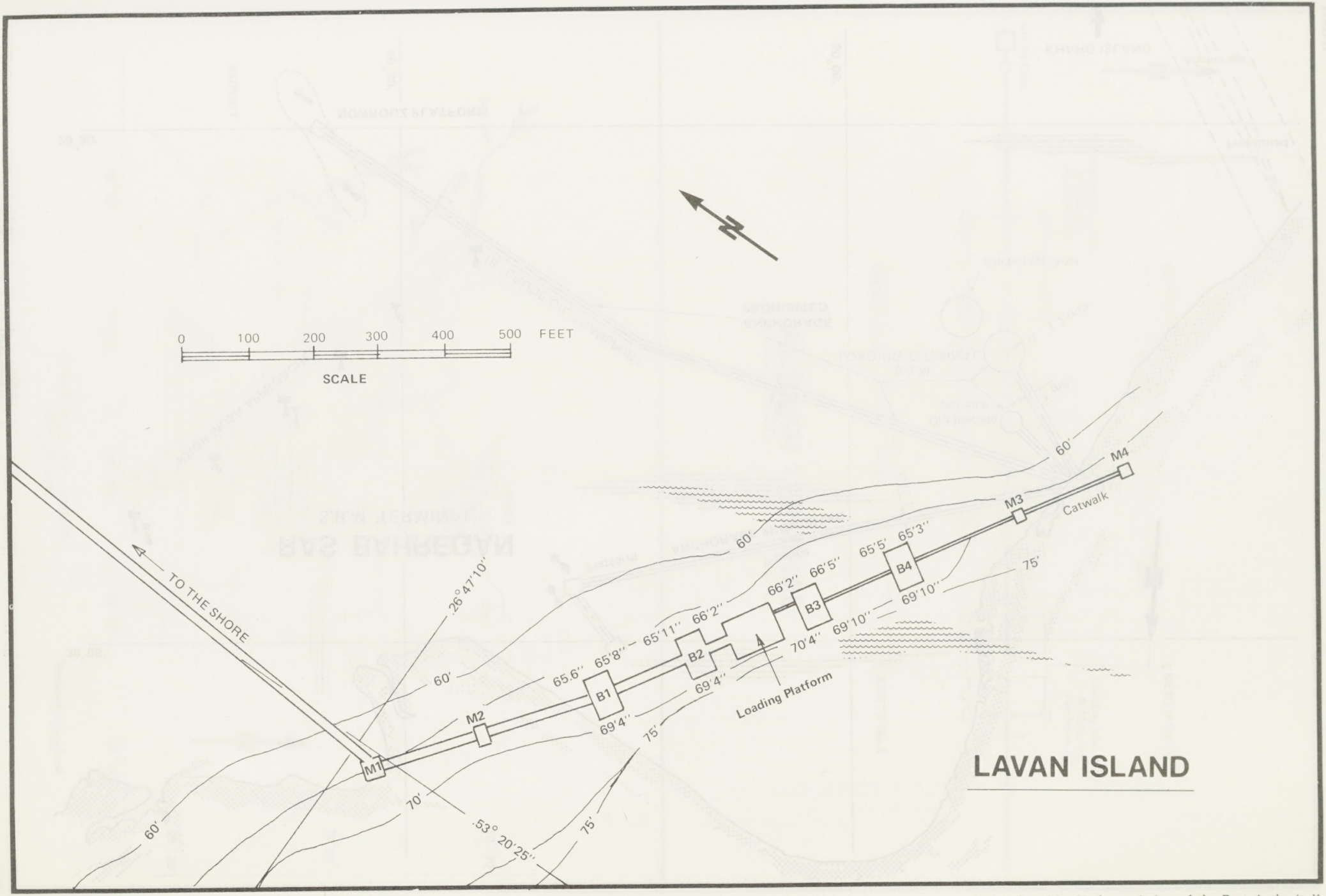

LAVAN ISLAND

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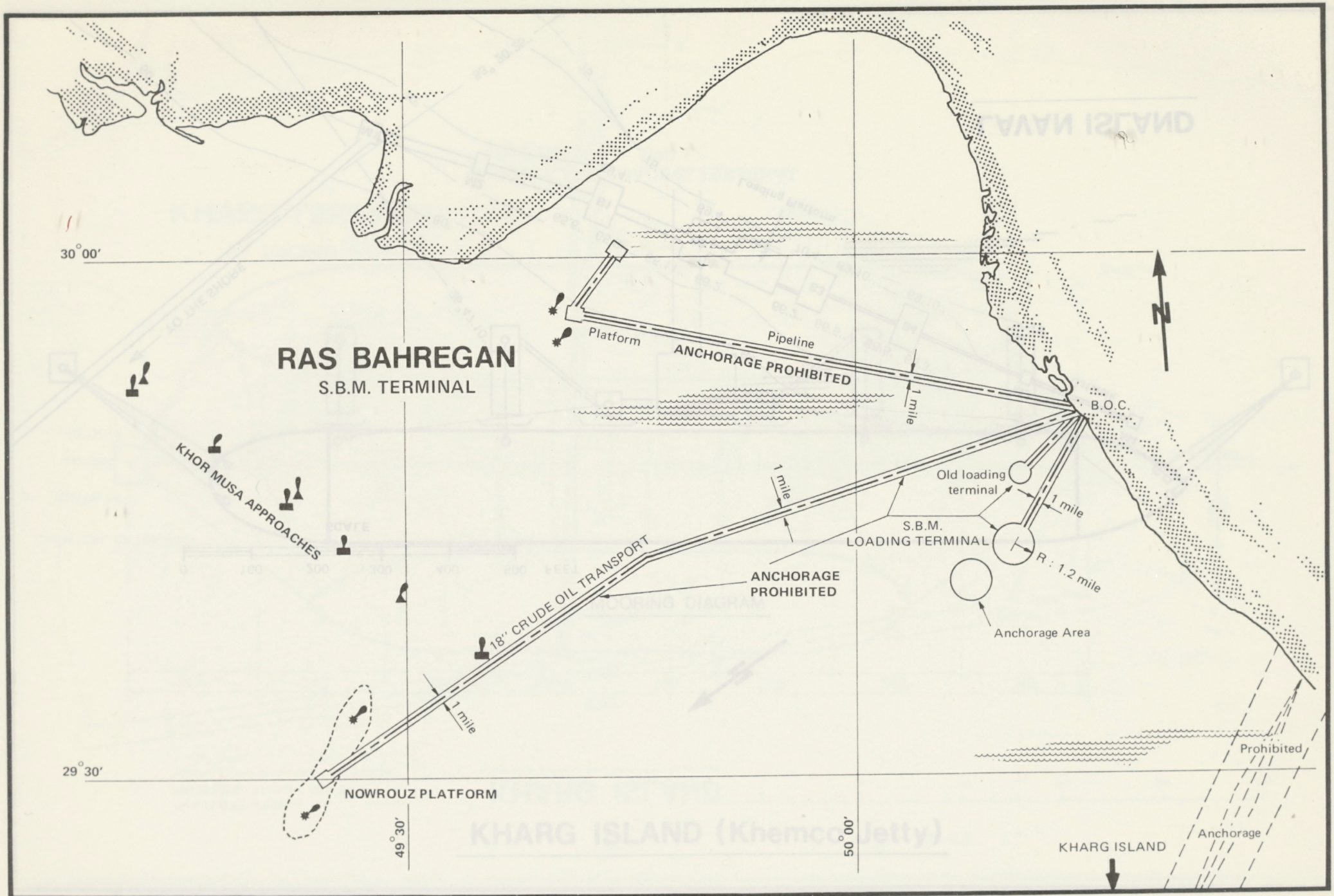

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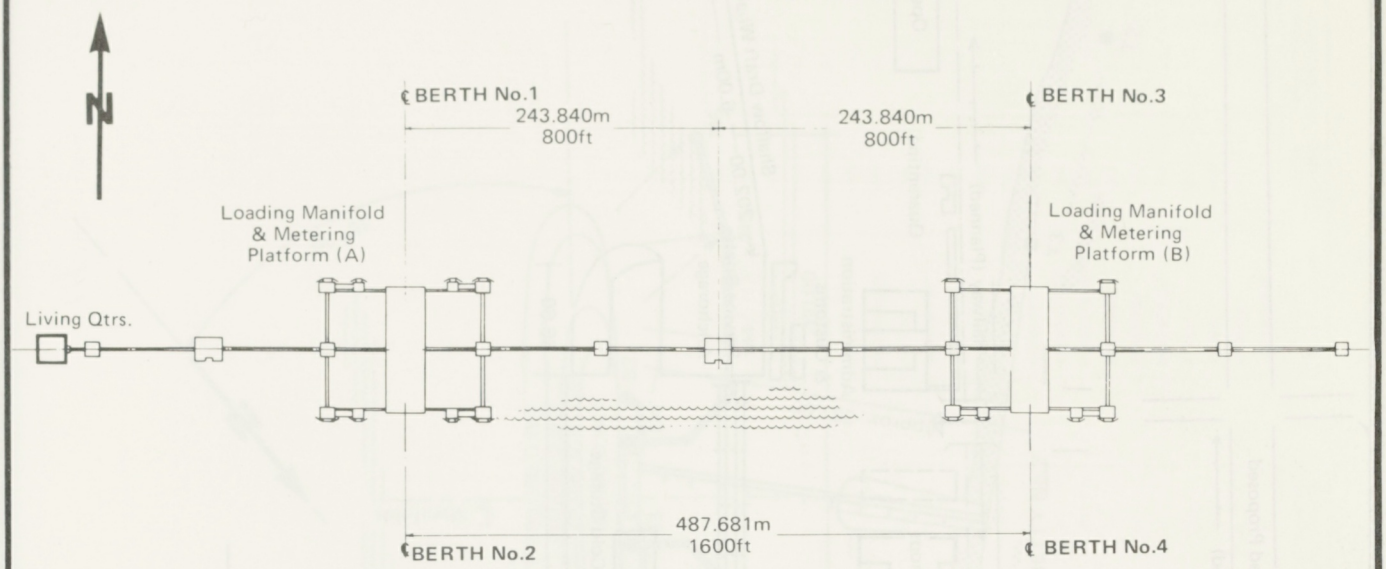
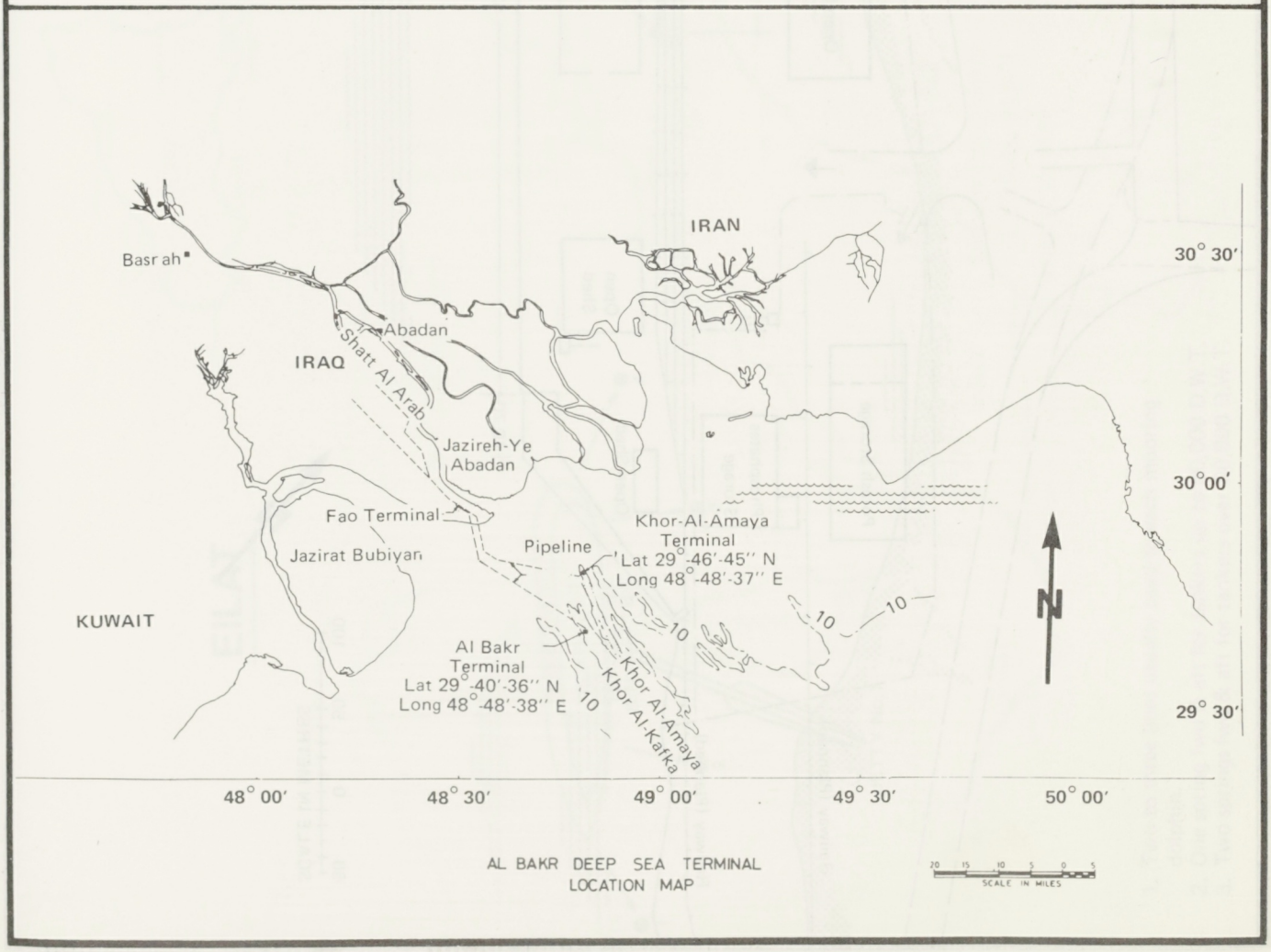


AL BAKR TERMINAL



AL BAKR DEEP SEA TERMINAL
LOCATION MAP

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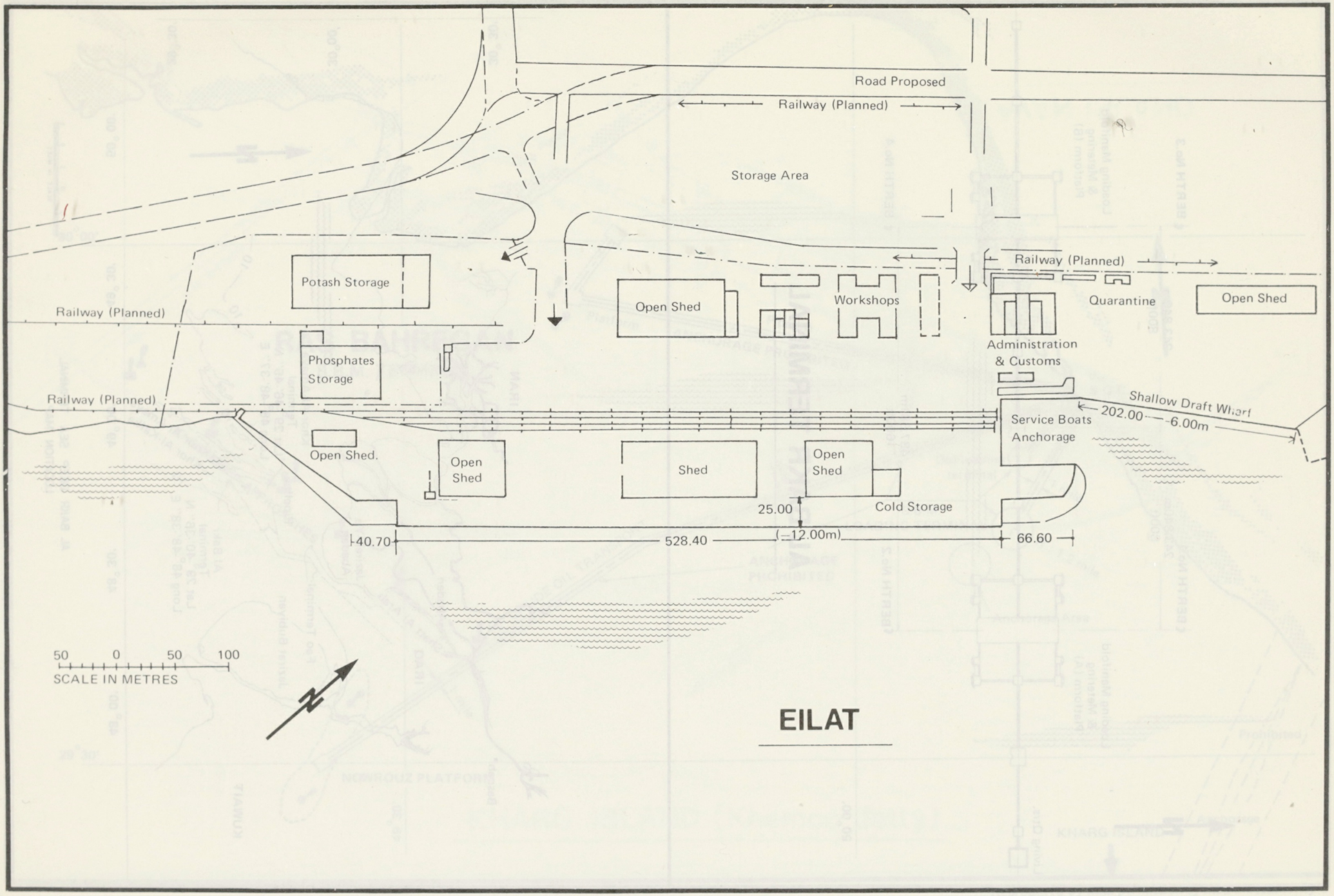

EILAT

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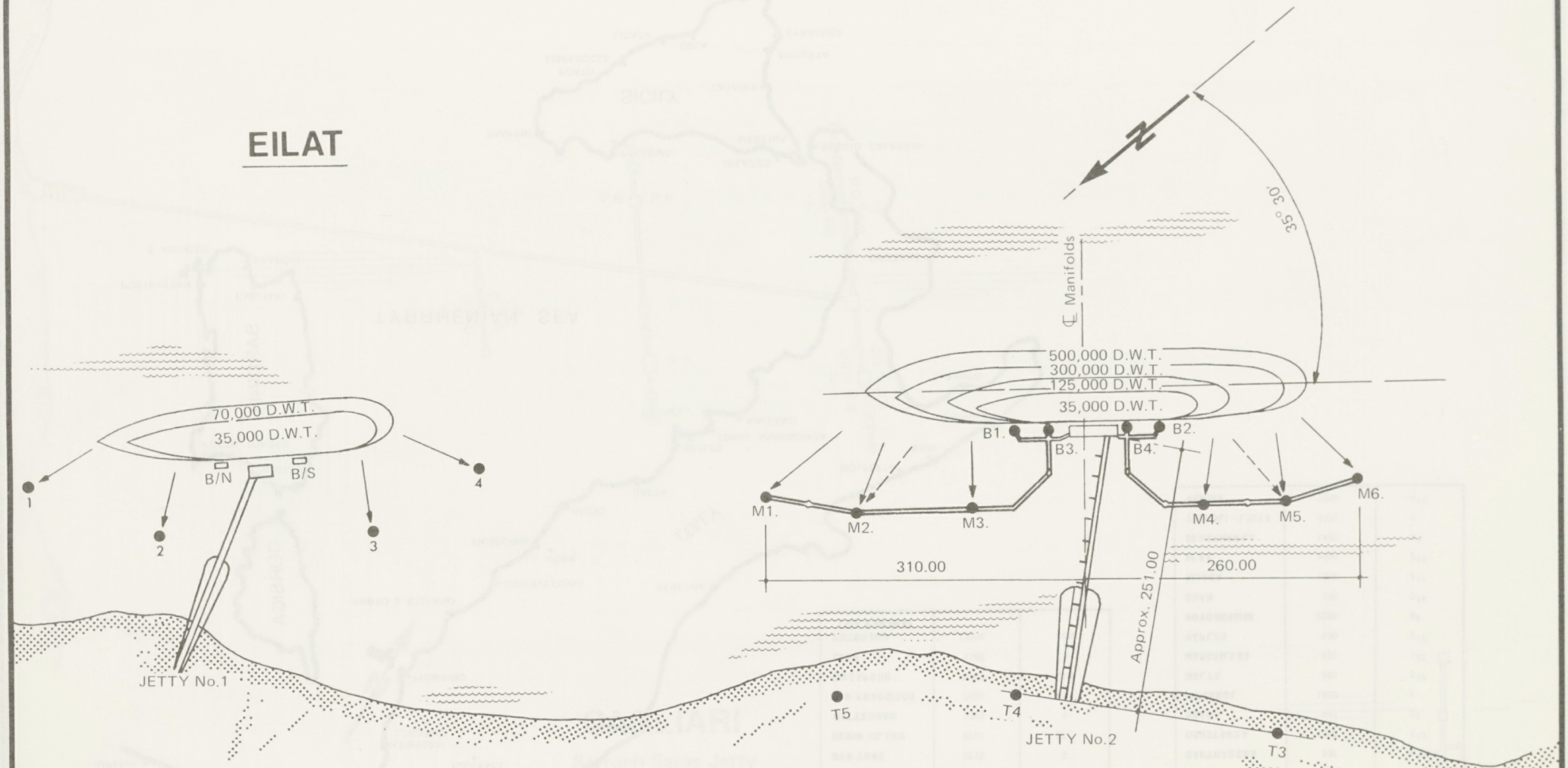
EILAT



1. Two to three lines usually used to each mooring dolphin.
2. One spring fwd & aft for tankers up to 90,000 D.W.T.
3. Two springs fwd & aft for tankers over 90,000 D.W.T.

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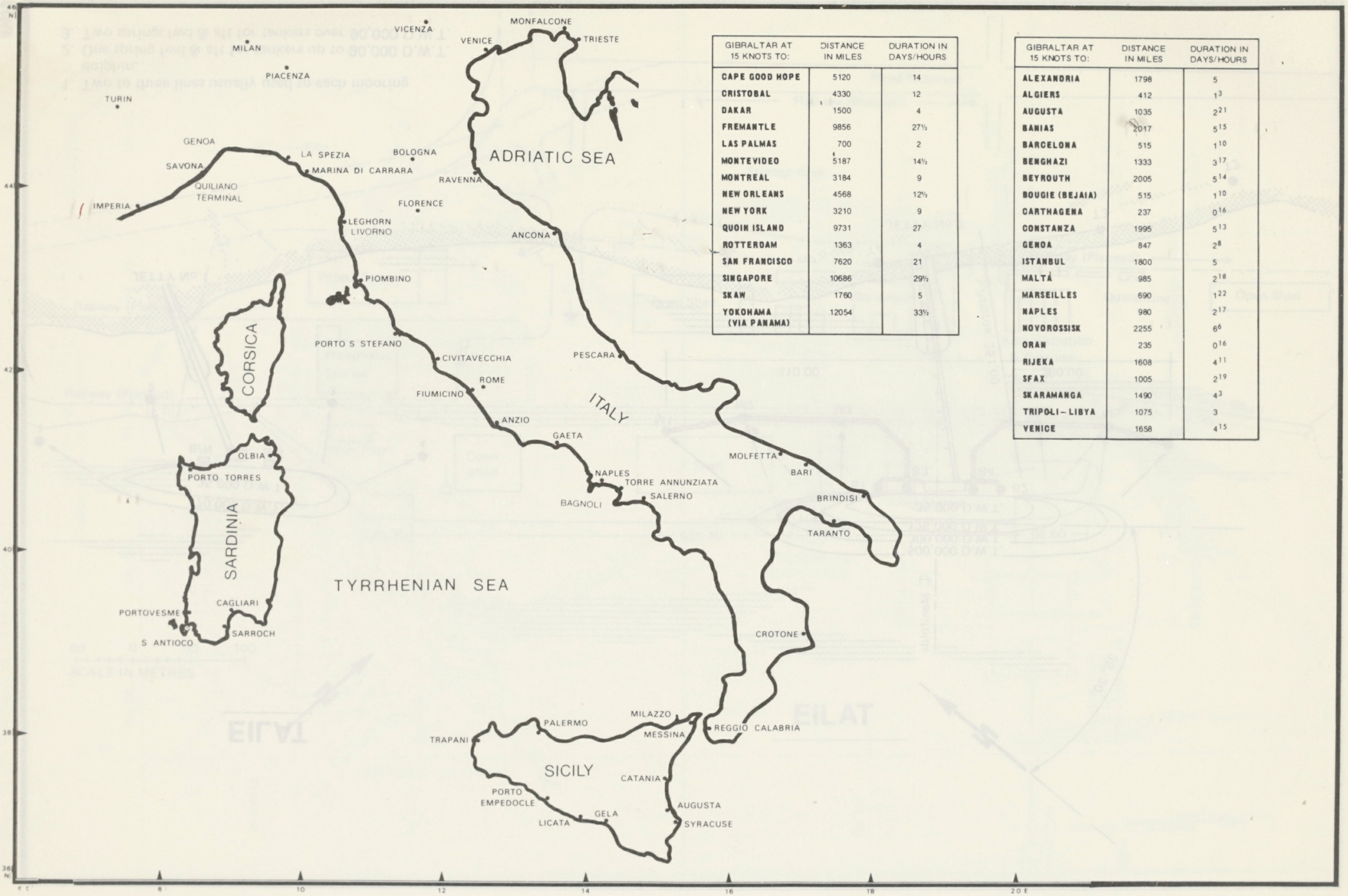
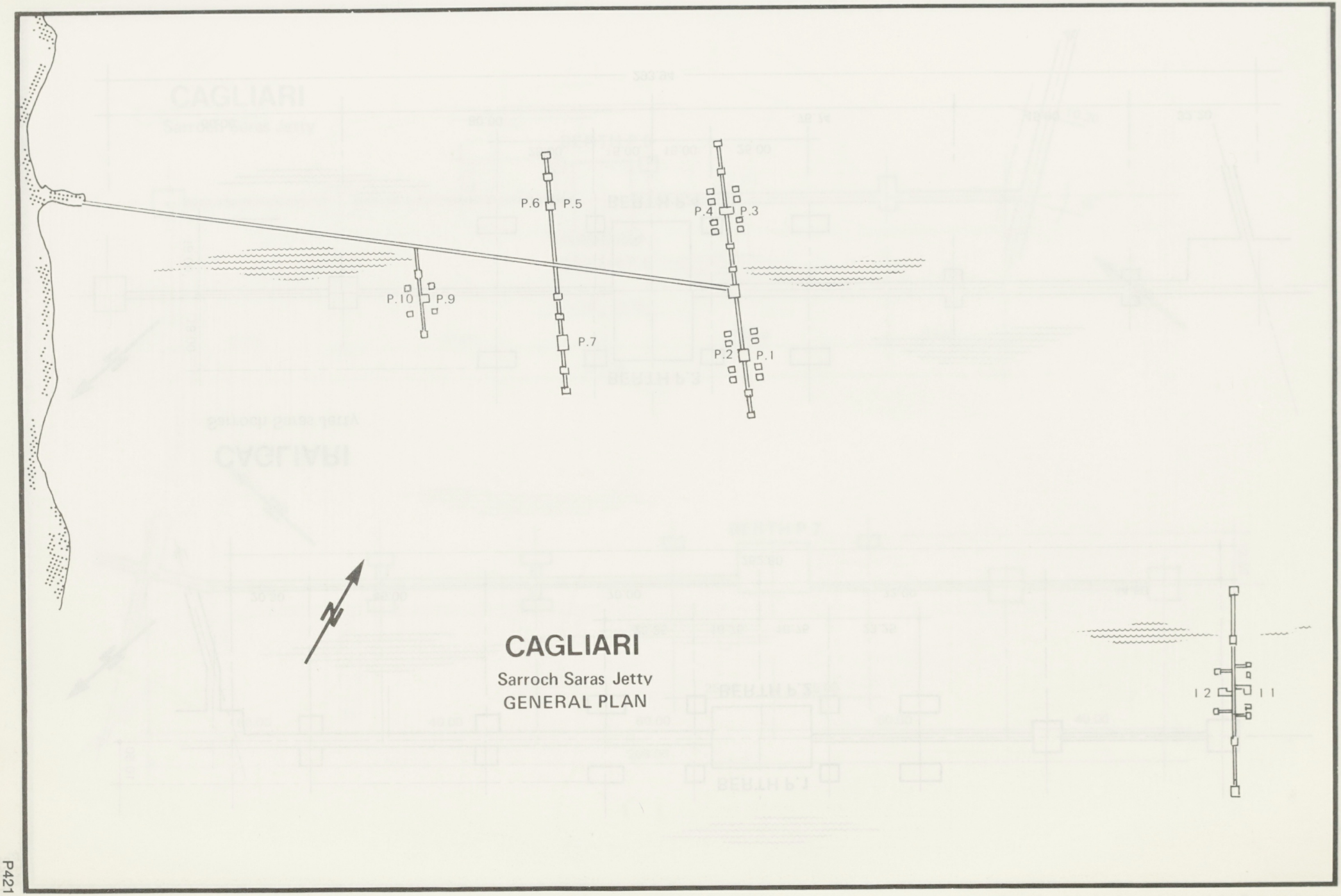


GIBRALTAR AT 15 KNOTS TO:	DISTANCE IN MILES	DURATION IN DAYS/HOURS
CAPE GOOD HOPE	5120	14
CRISTOBAL	4330	12
DAKAR	1500	4
FREMANTLE	9856	27½
LAS PALMAS	700	2
MONTEVIDEO	5187	14½
MONTREAL	3184	9
NEW ORLEANS	4568	12½
NEW YORK	3210	9
QUOIN ISLAND	9731	27
ROTTERDAM	1363	4
SAN FRANCISCO	7620	21
SINGAPORE	10686	29½
SKAW	1760	5
YOKOHAMA (VIA PANAMA)	12054	33½

GIBRALTAR AT 15 KNOTS TO:	DISTANCE IN MILES	DURATION IN DAYS/HOURS
ALEXANDRIA	1798	5
ALGIERS	412	1^{3}
AUGUSTA	1035	2^{21}
BANIAS	2017	5^{15}
BARCELONA	515	1^{10}
BENGHAZI	1333	3^{17}
BEYROUTH	2005	5^{14}
BOUGIE (BEJAIA)	515	1^{10}
CARTHAGENA	237	0^{16}
CONSTANZA	1995	5^{13}
GENOA	847	2^{8}
ISTANBUL	1800	5
MALTA	985	2^{18}
MARSEILLES	690	1^{22}
NAPLES	980	2^{17}
NOVOROSSISK	2255	6^{6}
ORAN	235	0^{16}
RIJEKA	1608	4^{11}
SFAX	1005	2^{19}
SKARAMANGA	1490	4^{3}
TRIPOLI – LIBYA	1075	3
VENICE	1658	4^{15}



CAGLIARI

Sarroch Saras Jetty

GENERAL PLAN

P421

ITALY

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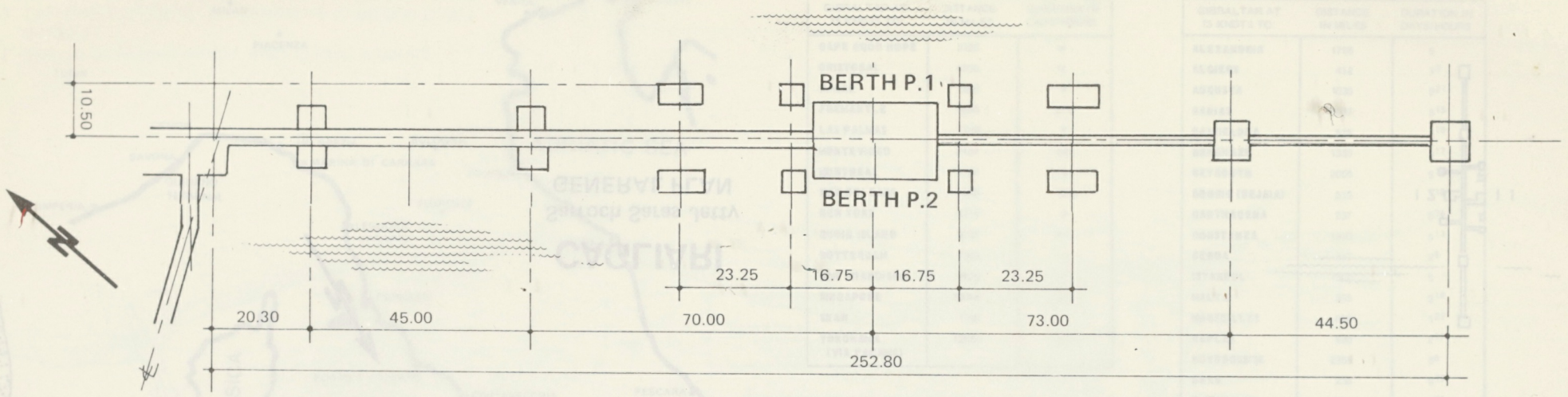
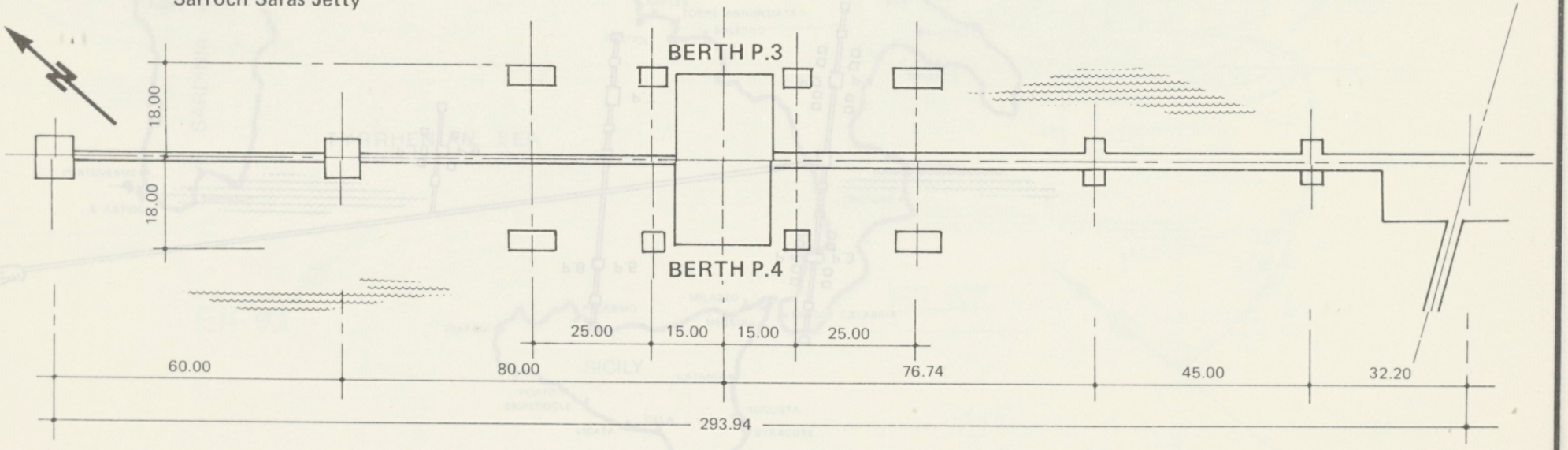


CAGLIARI

Sarroch Saras Jetty



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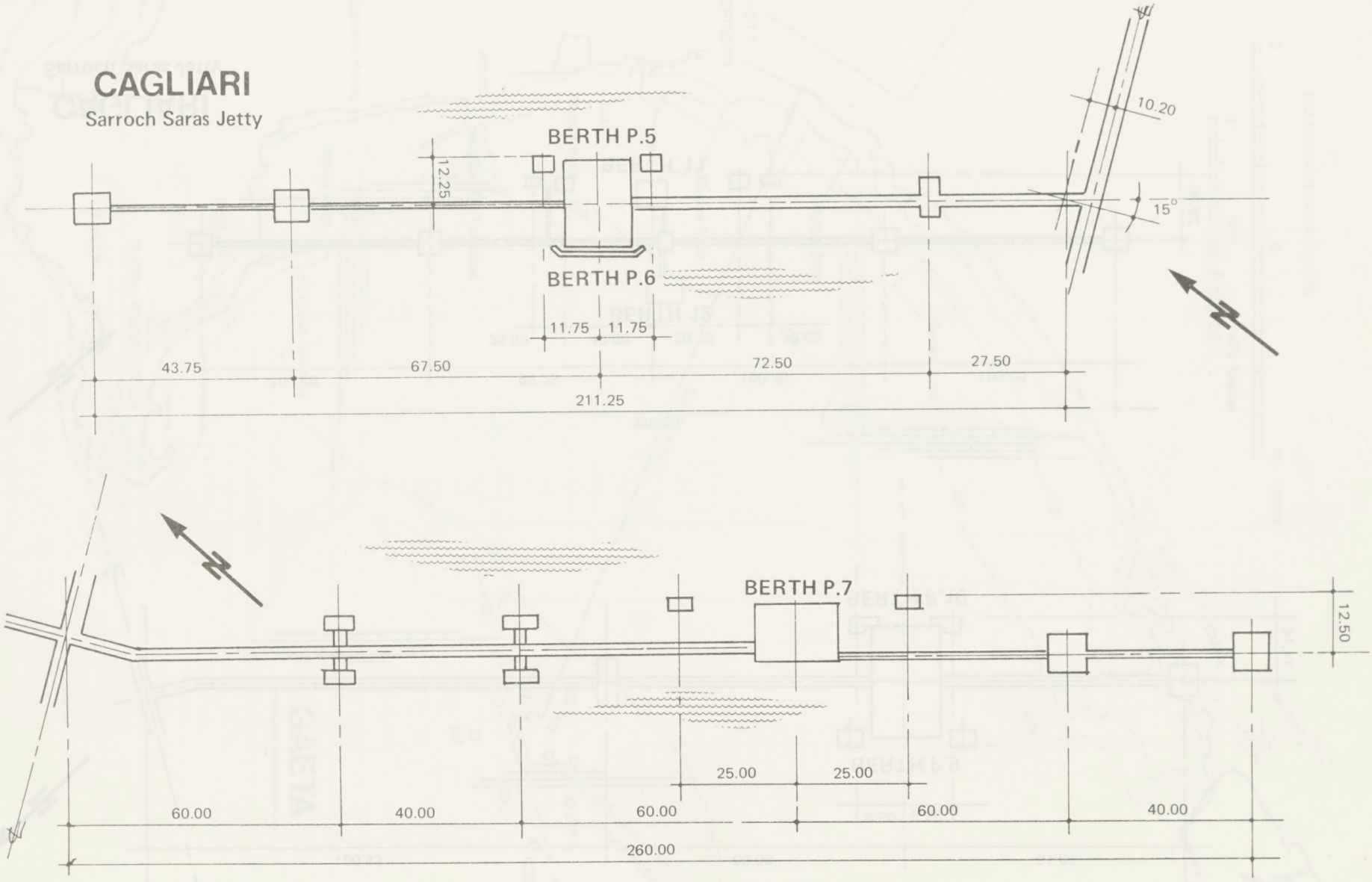
CAGLIARI

Sarroch Saras Jetty



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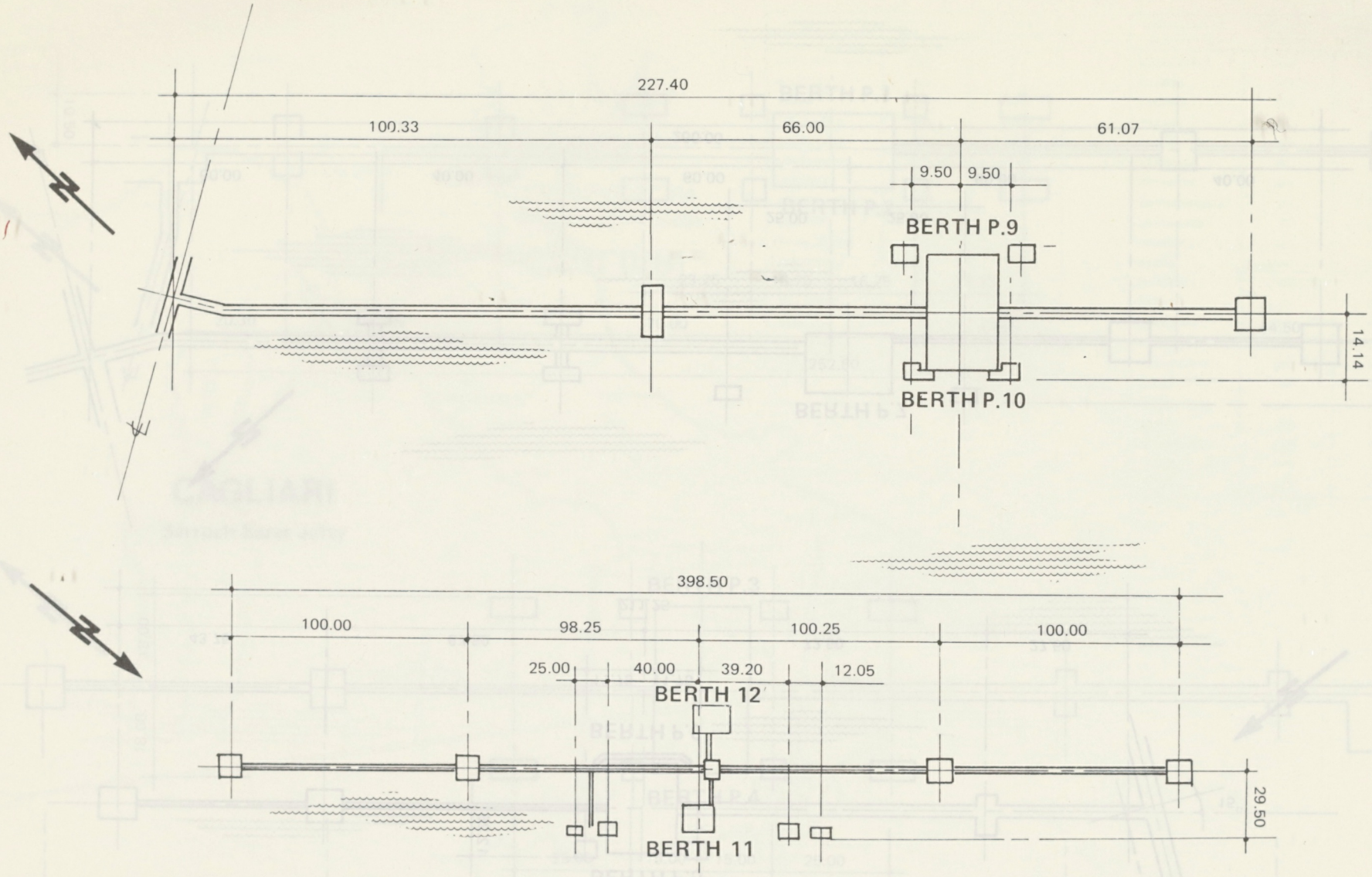

CAGLIARI

Sarroch Saras Jetty

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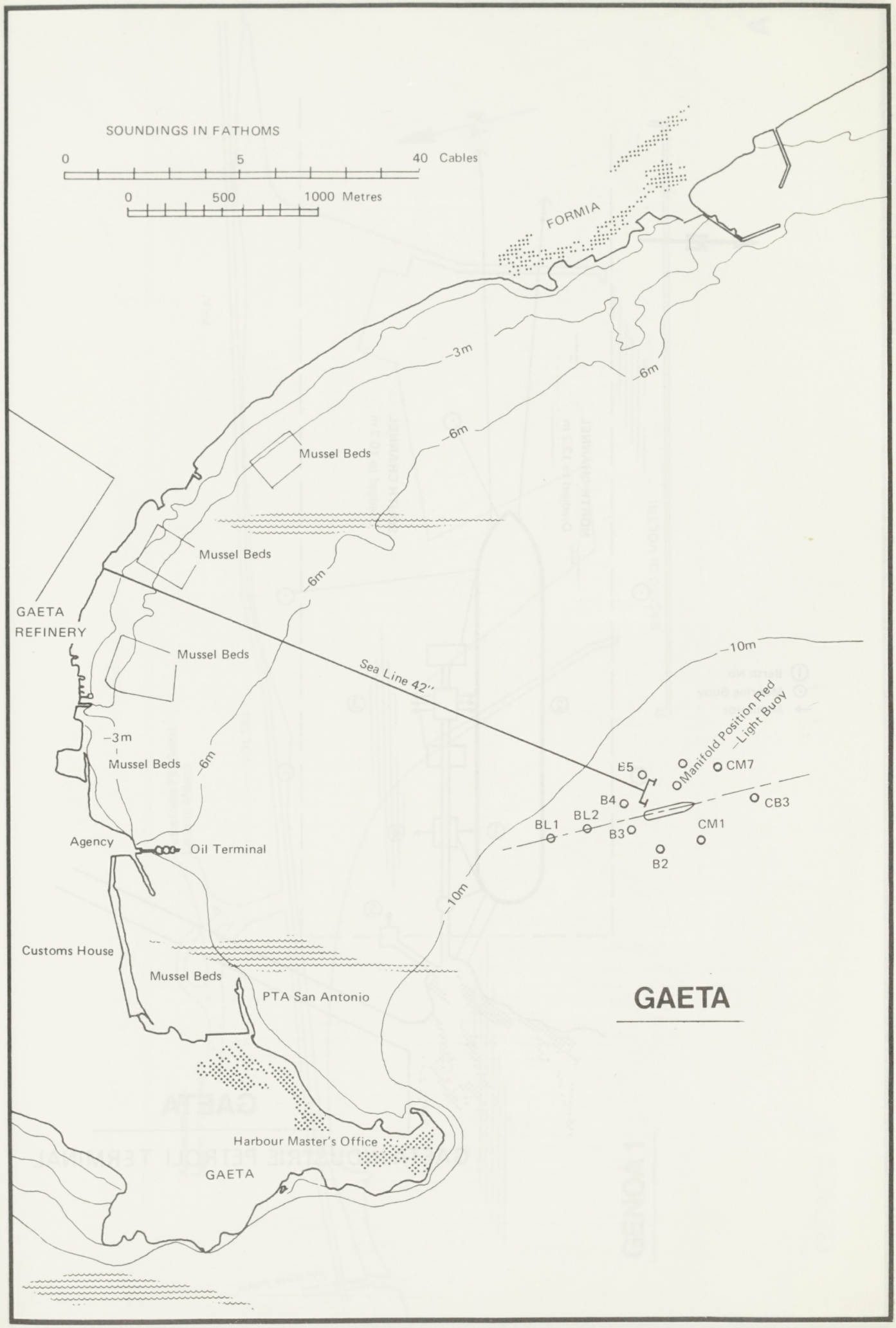

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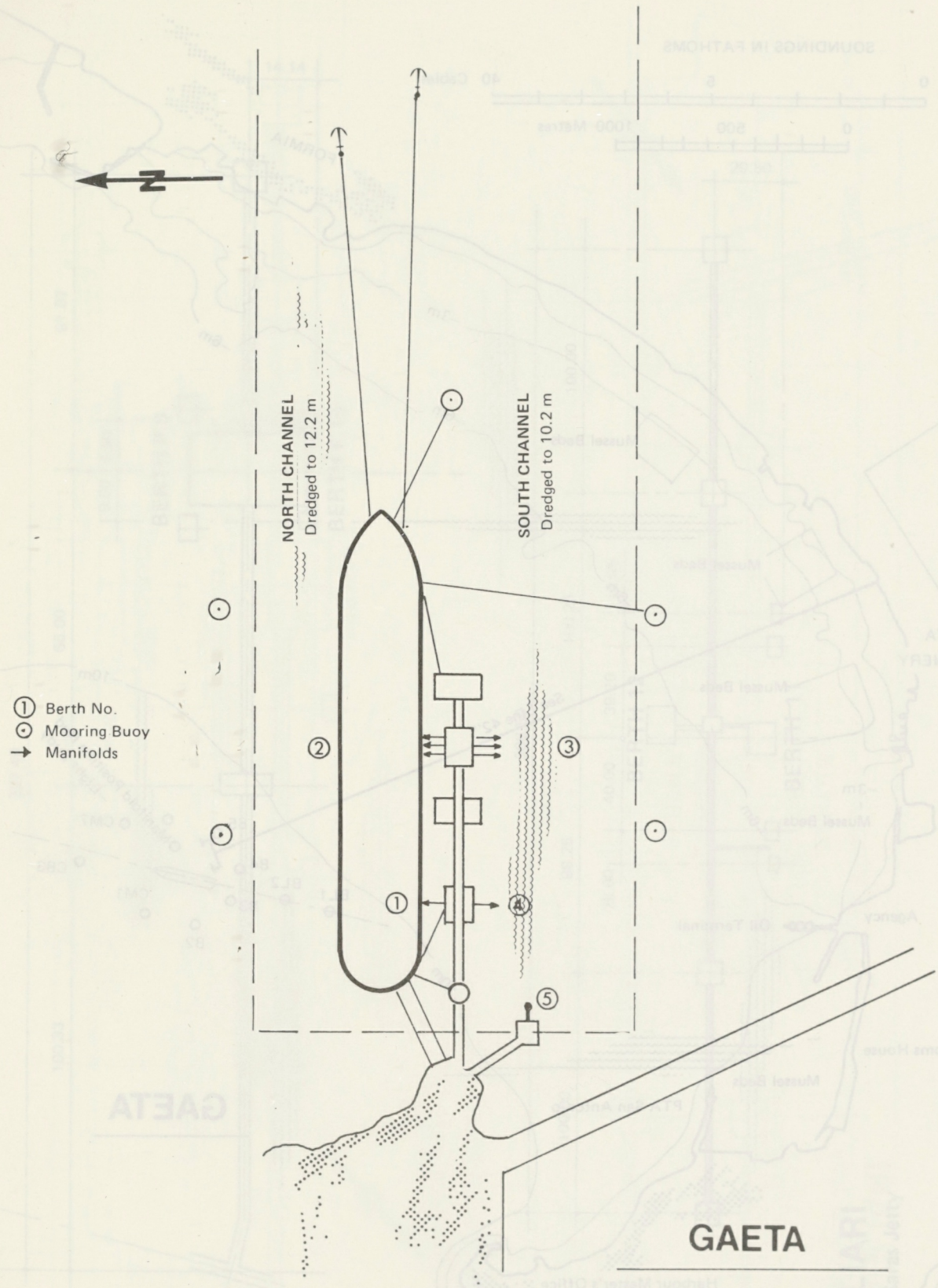

GAETA

GAETA INDUSTRIE PETROLI TERMINAL

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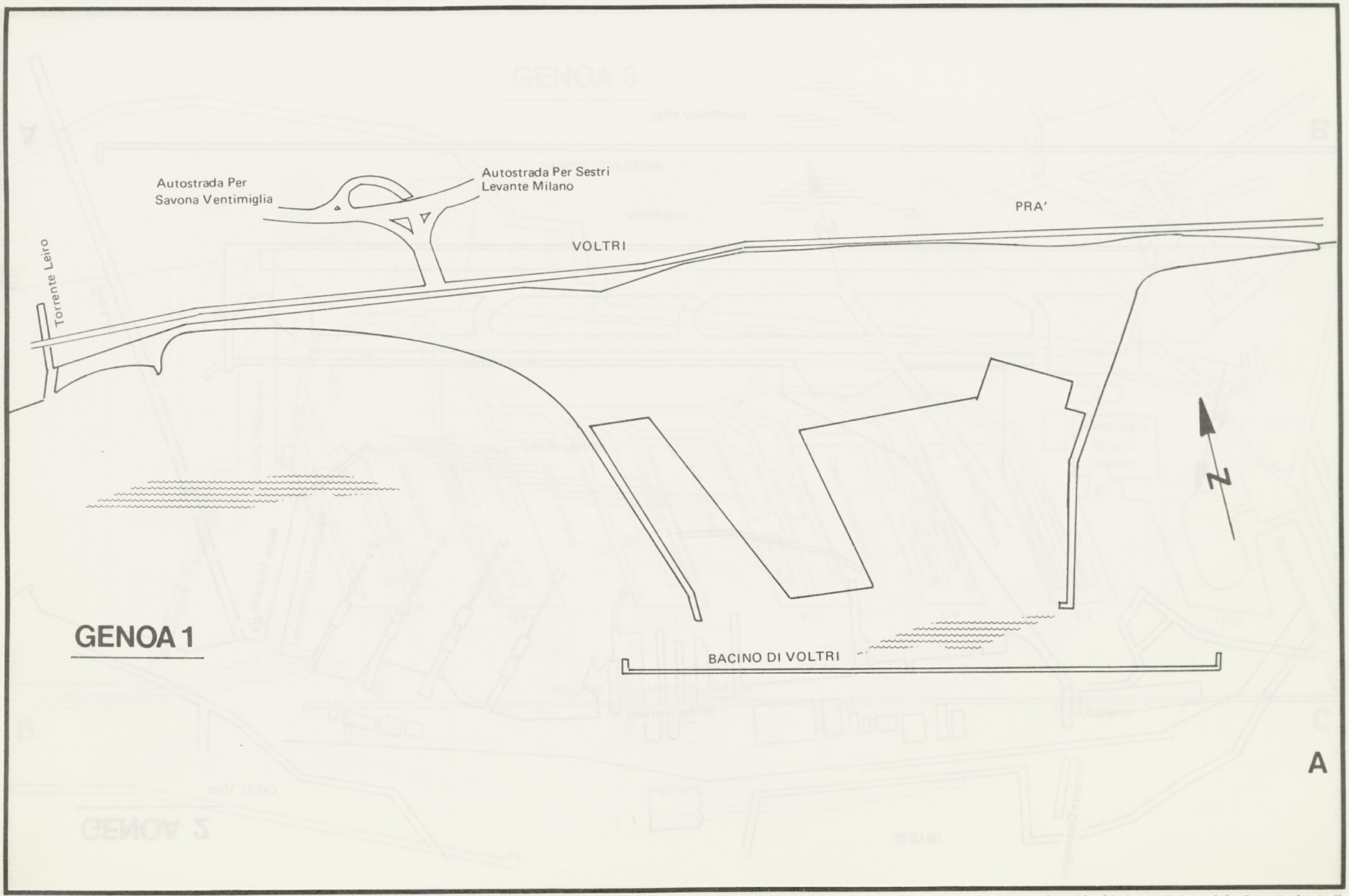

GENOA 1

A

ITALY

P427

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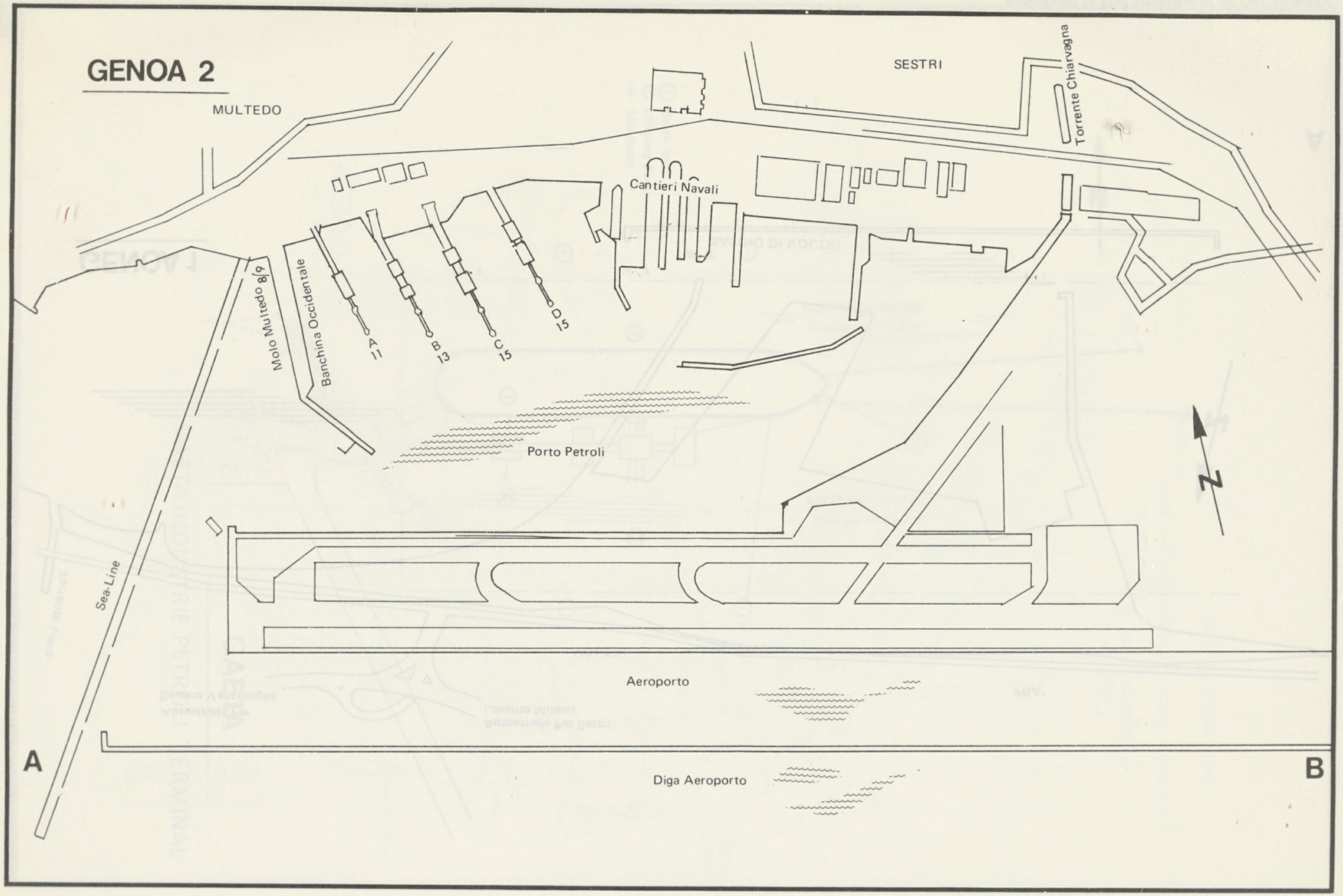

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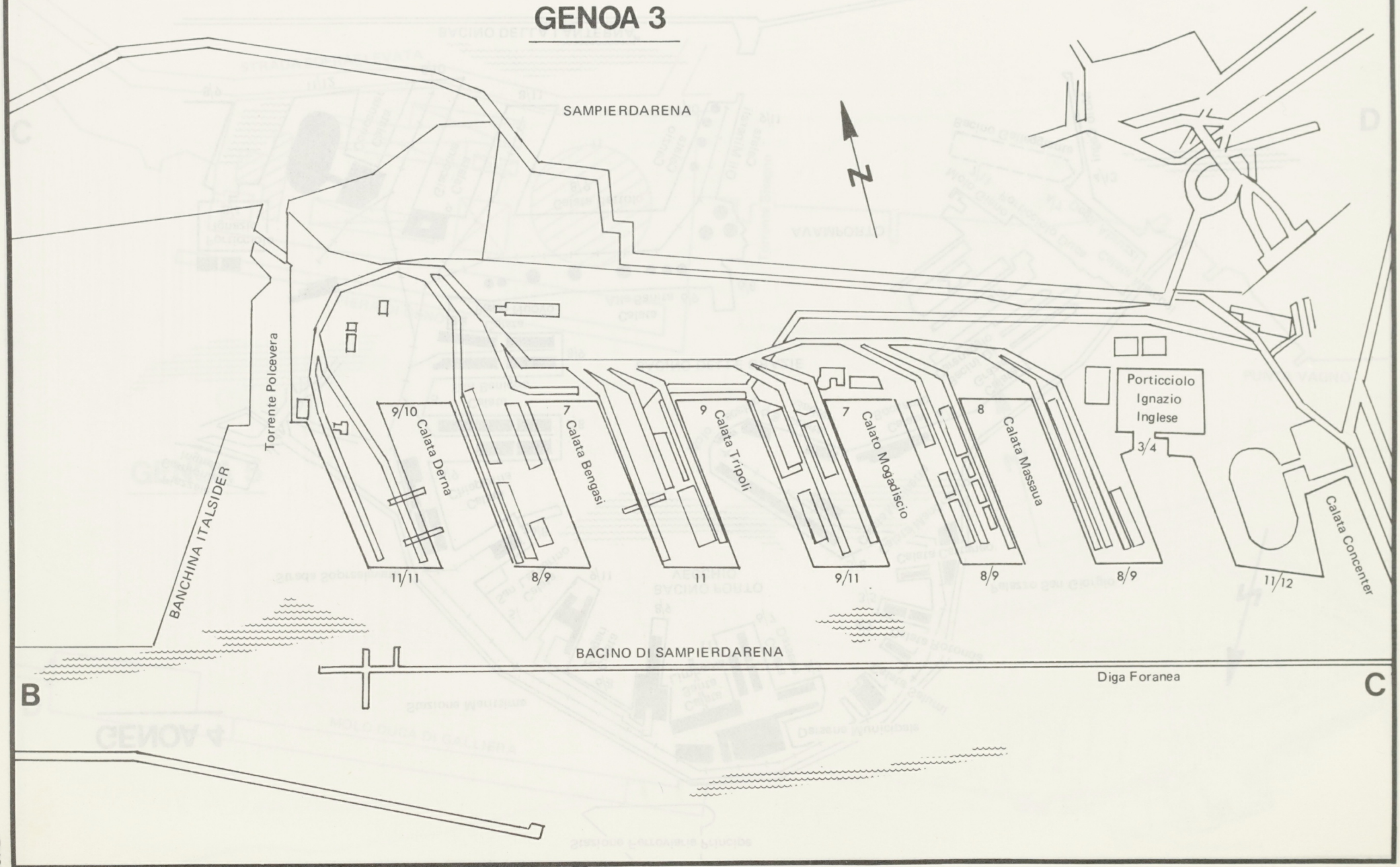
GENOA 3



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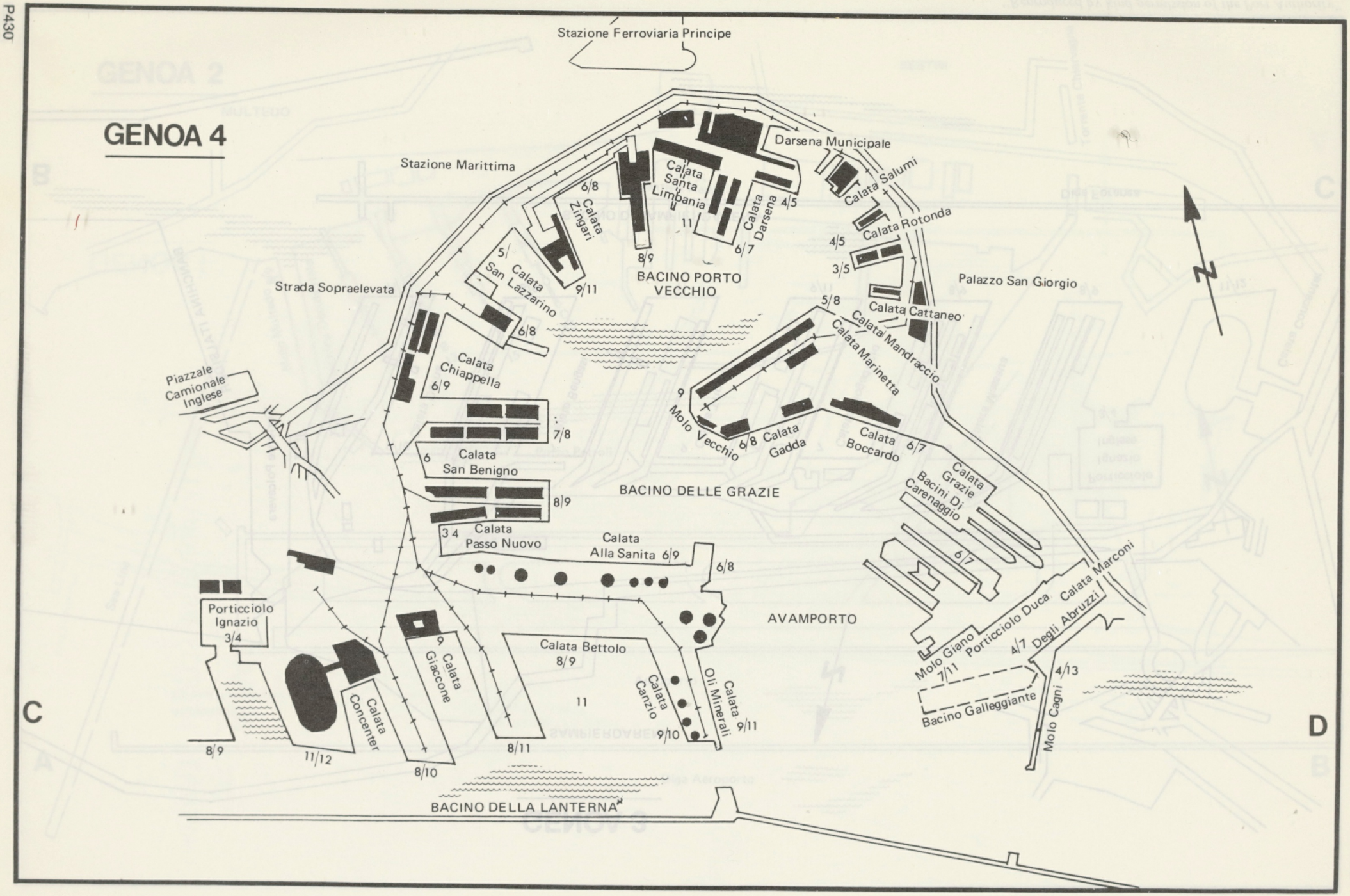

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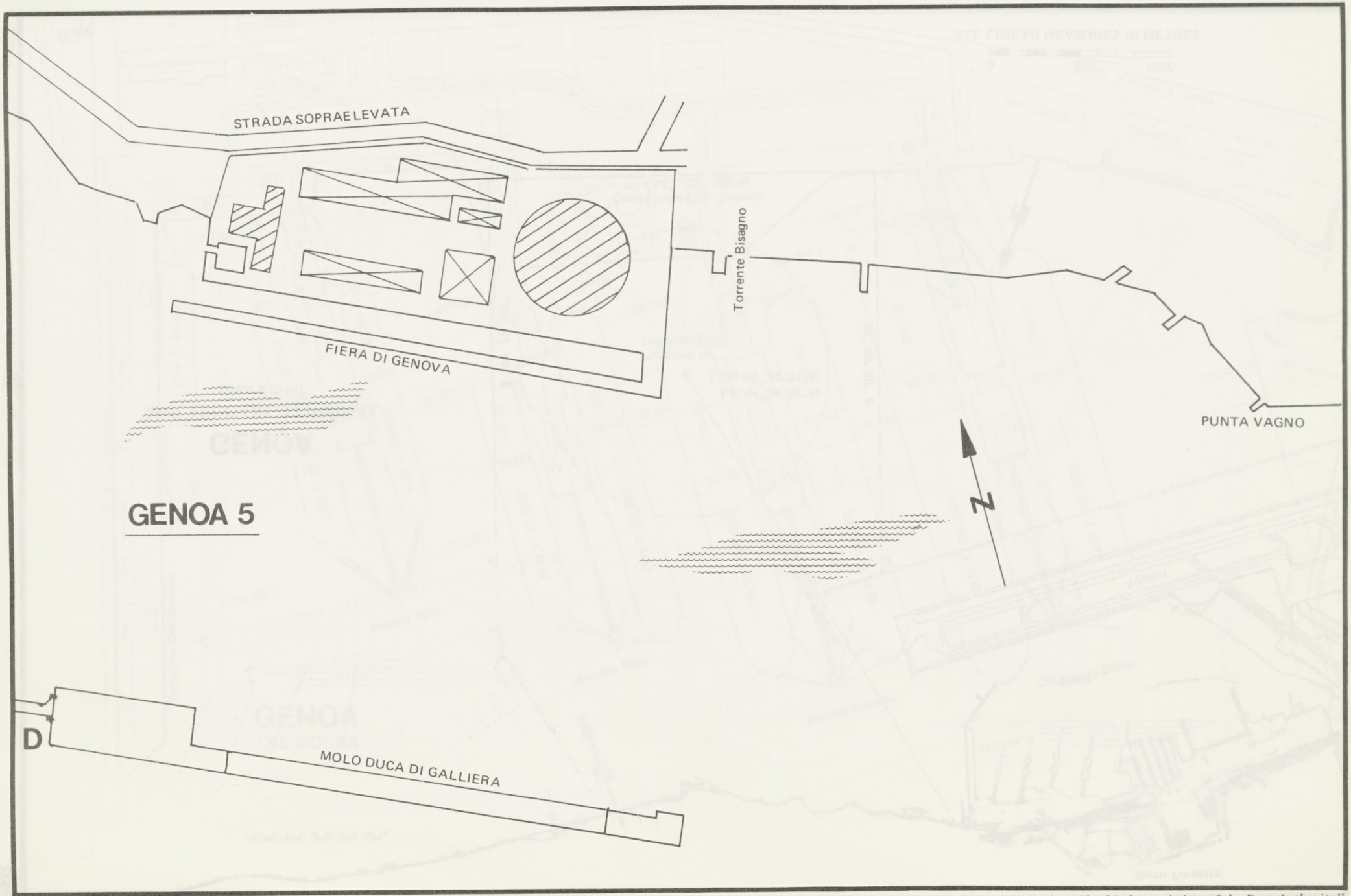

GENOA 5

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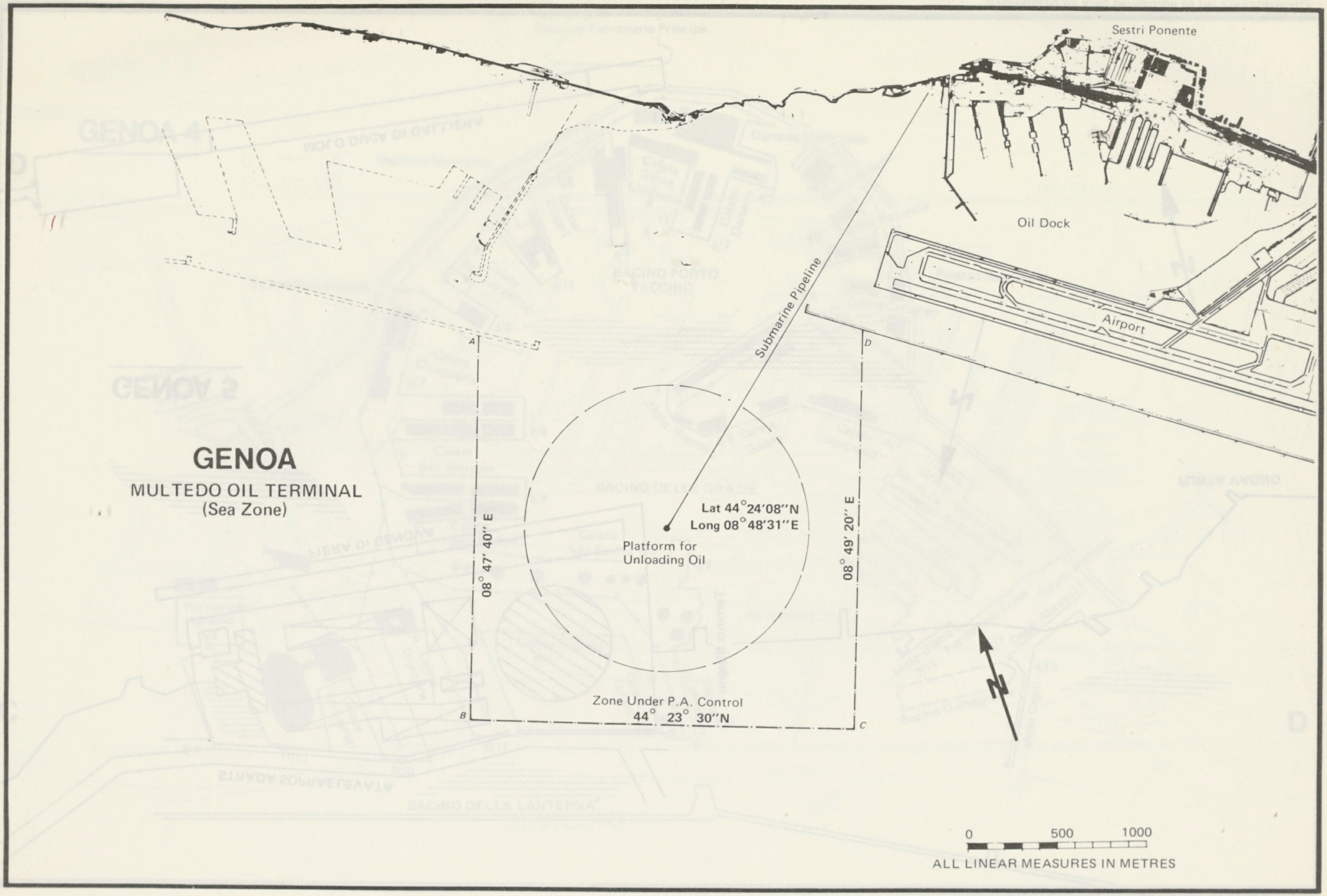

GENOA

MULTEDO OIL TERMINAL
(Sea Zone)

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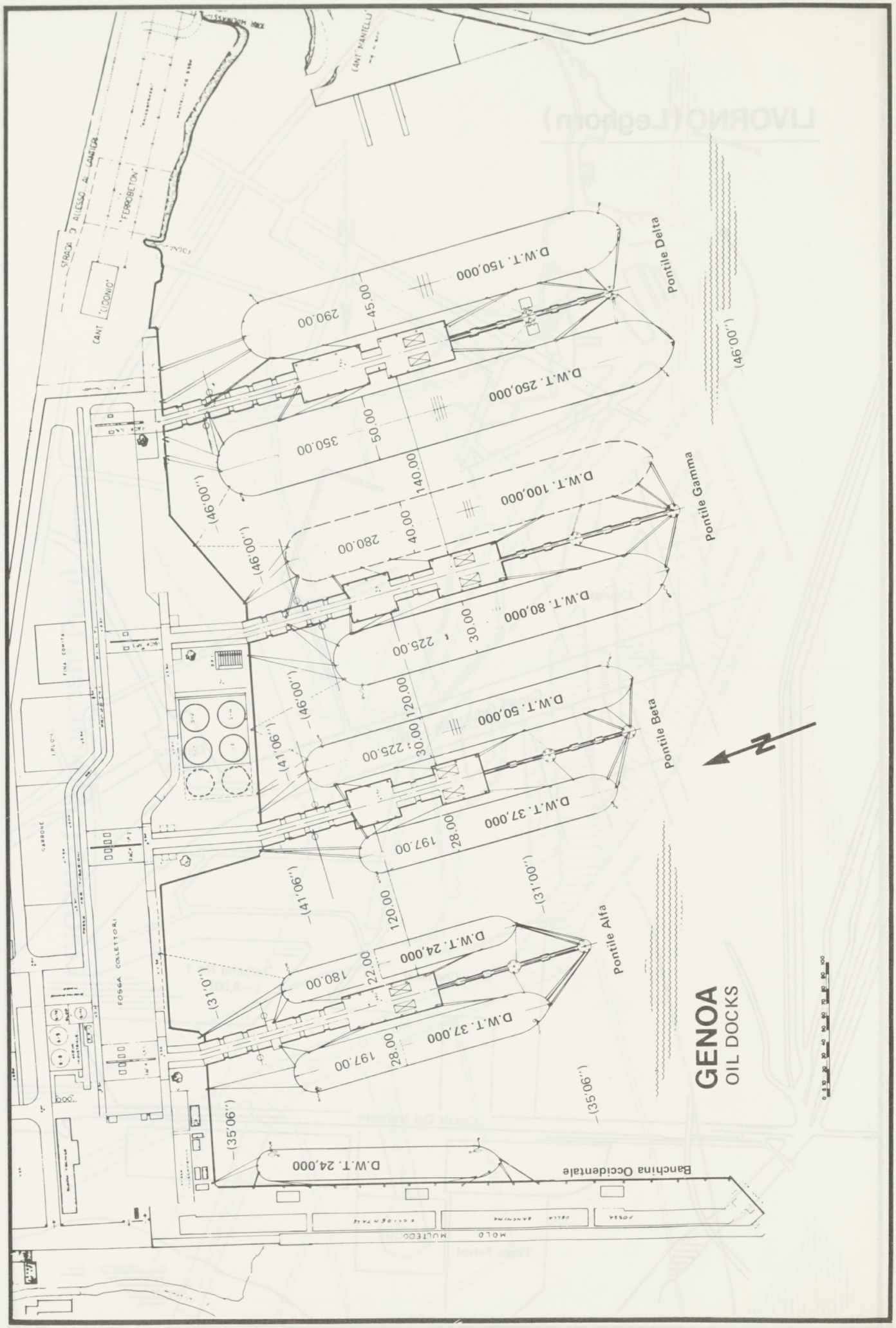

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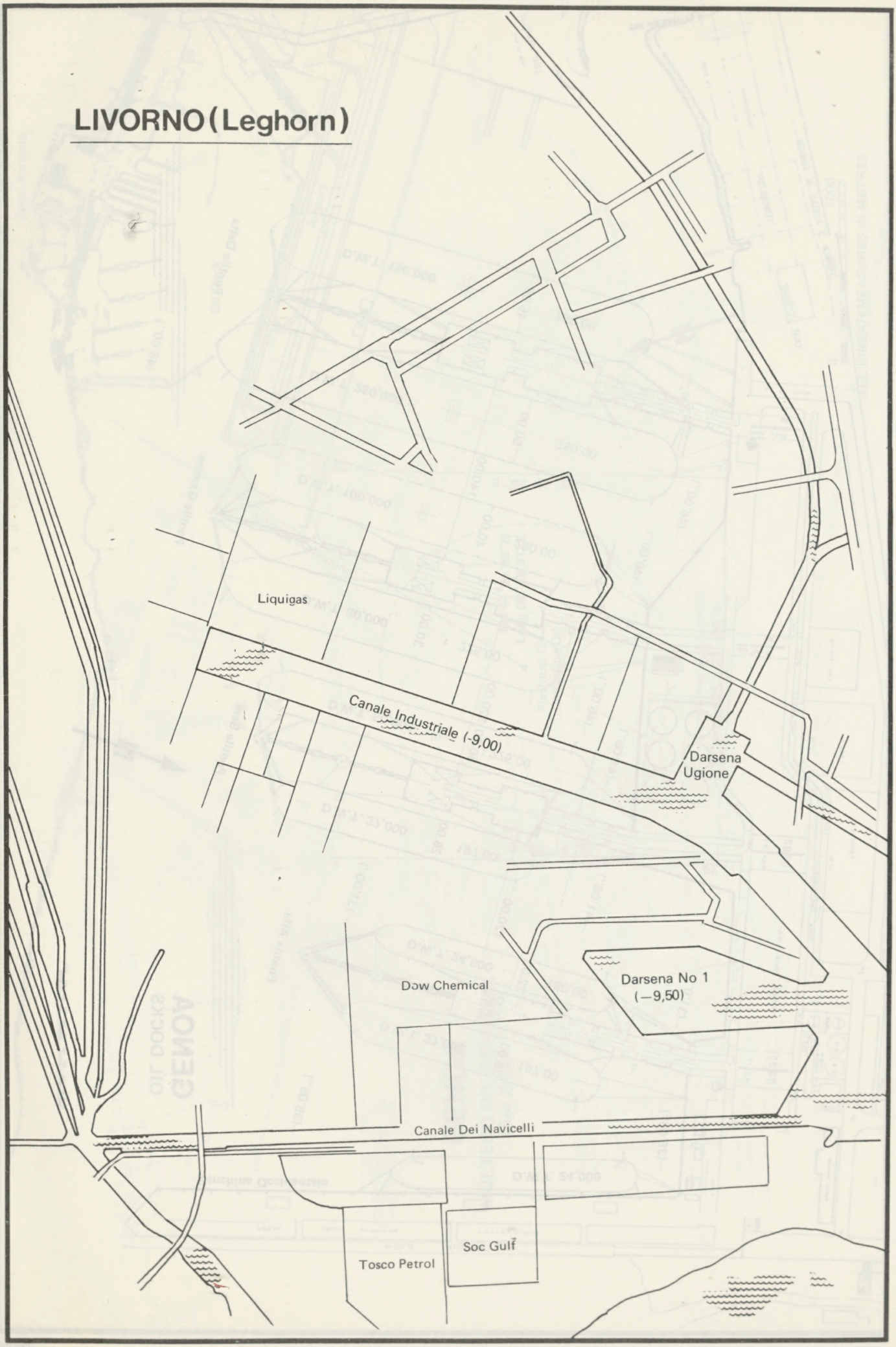

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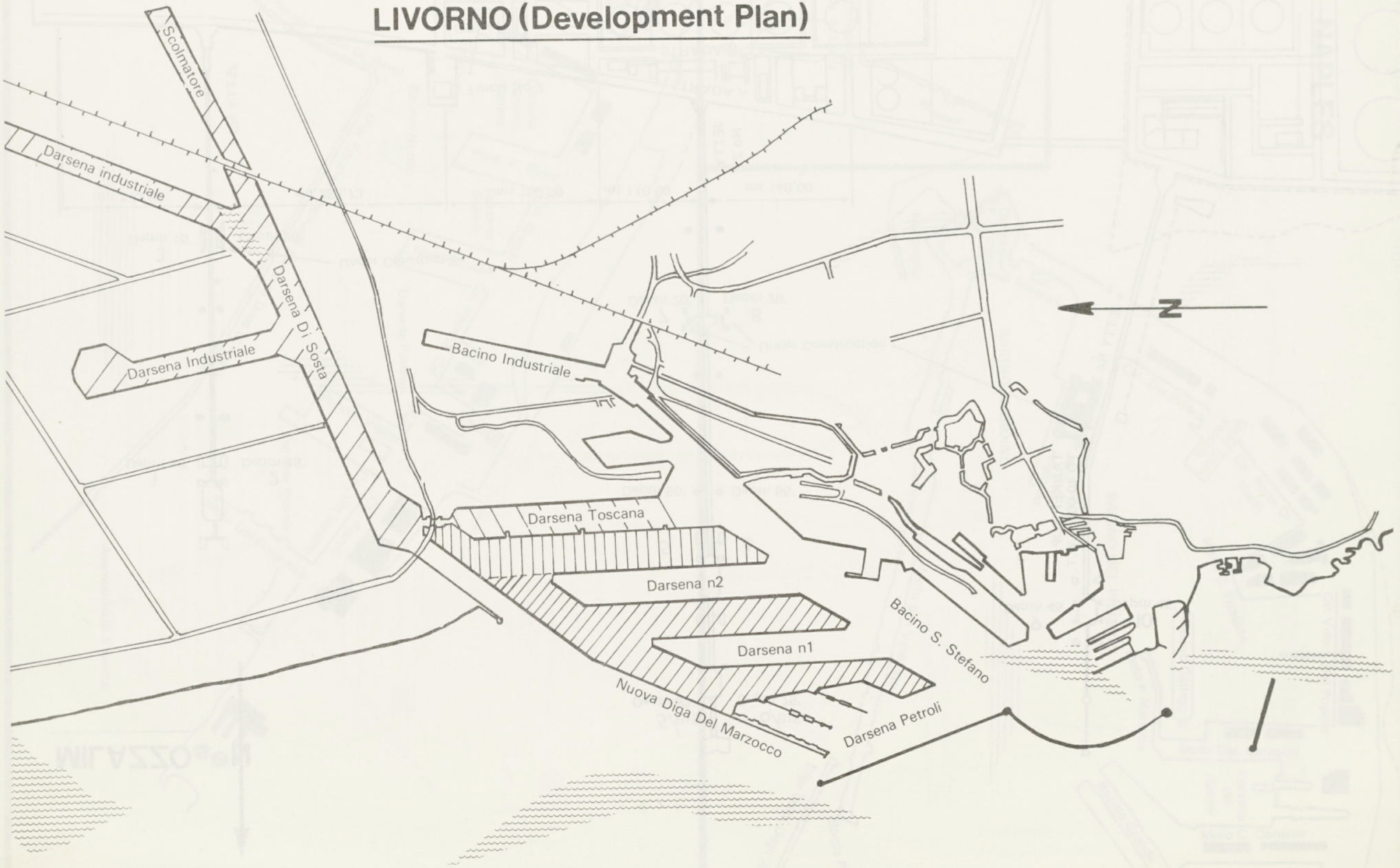
LIVORNO (Development Plan)



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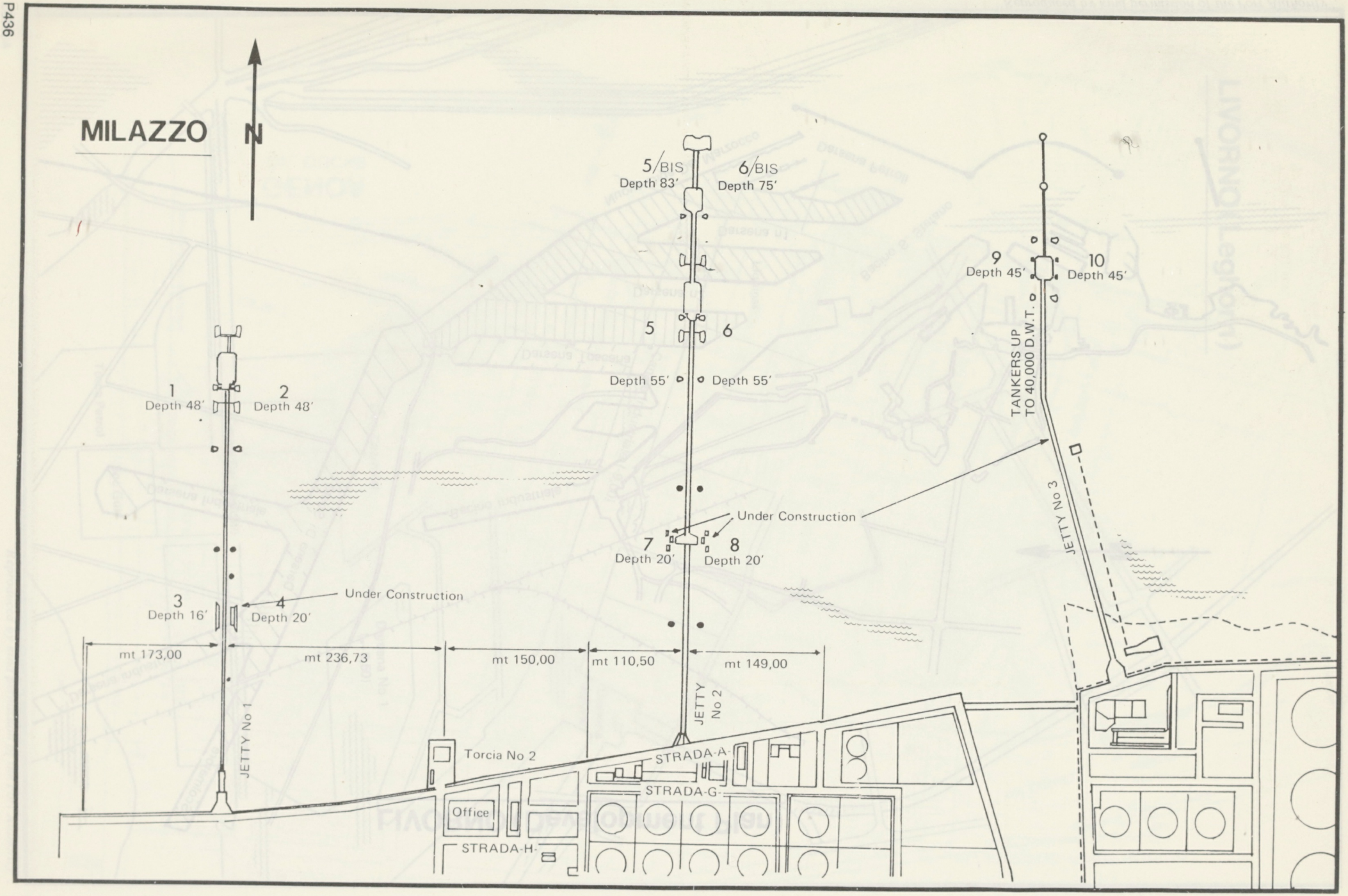

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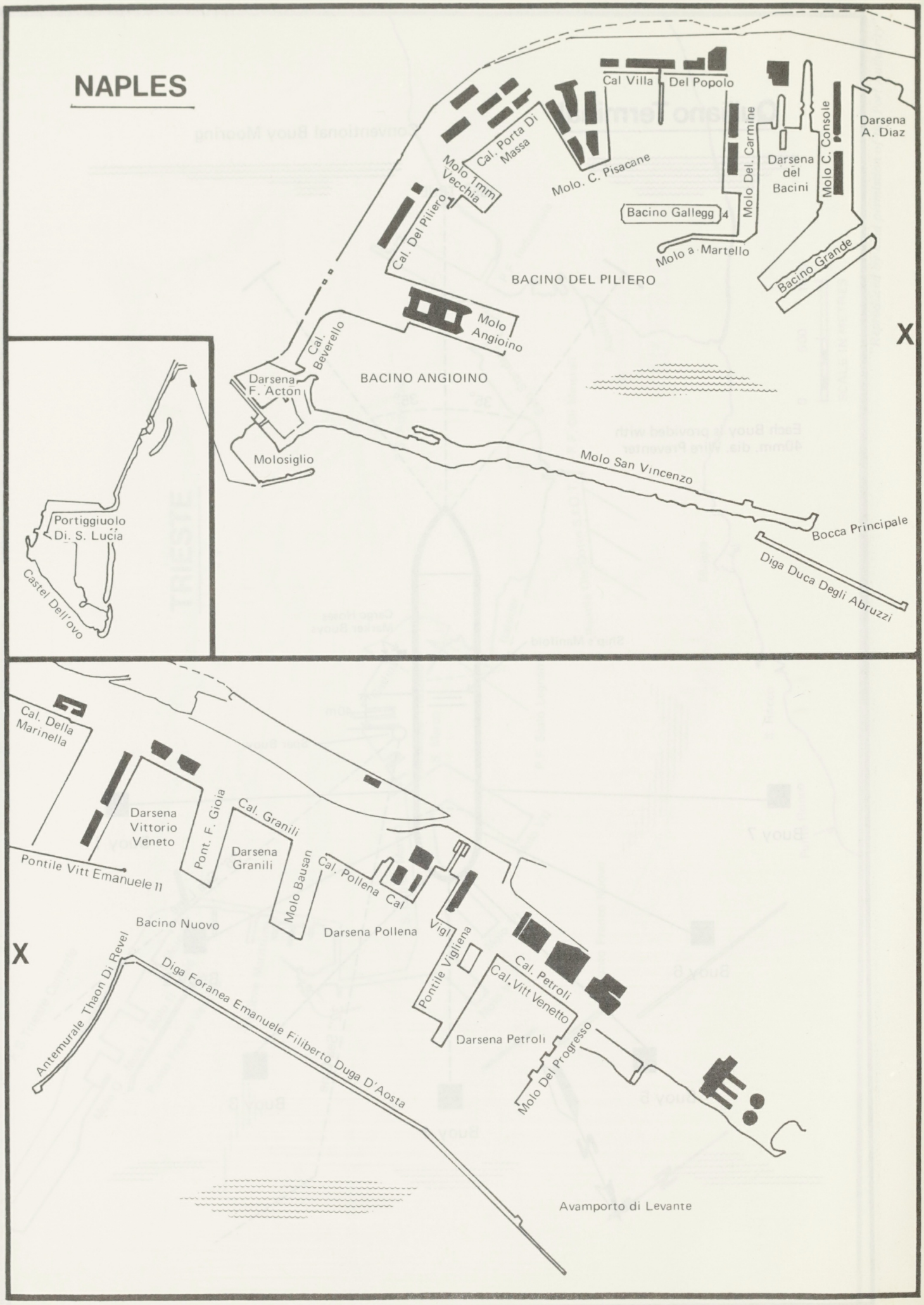

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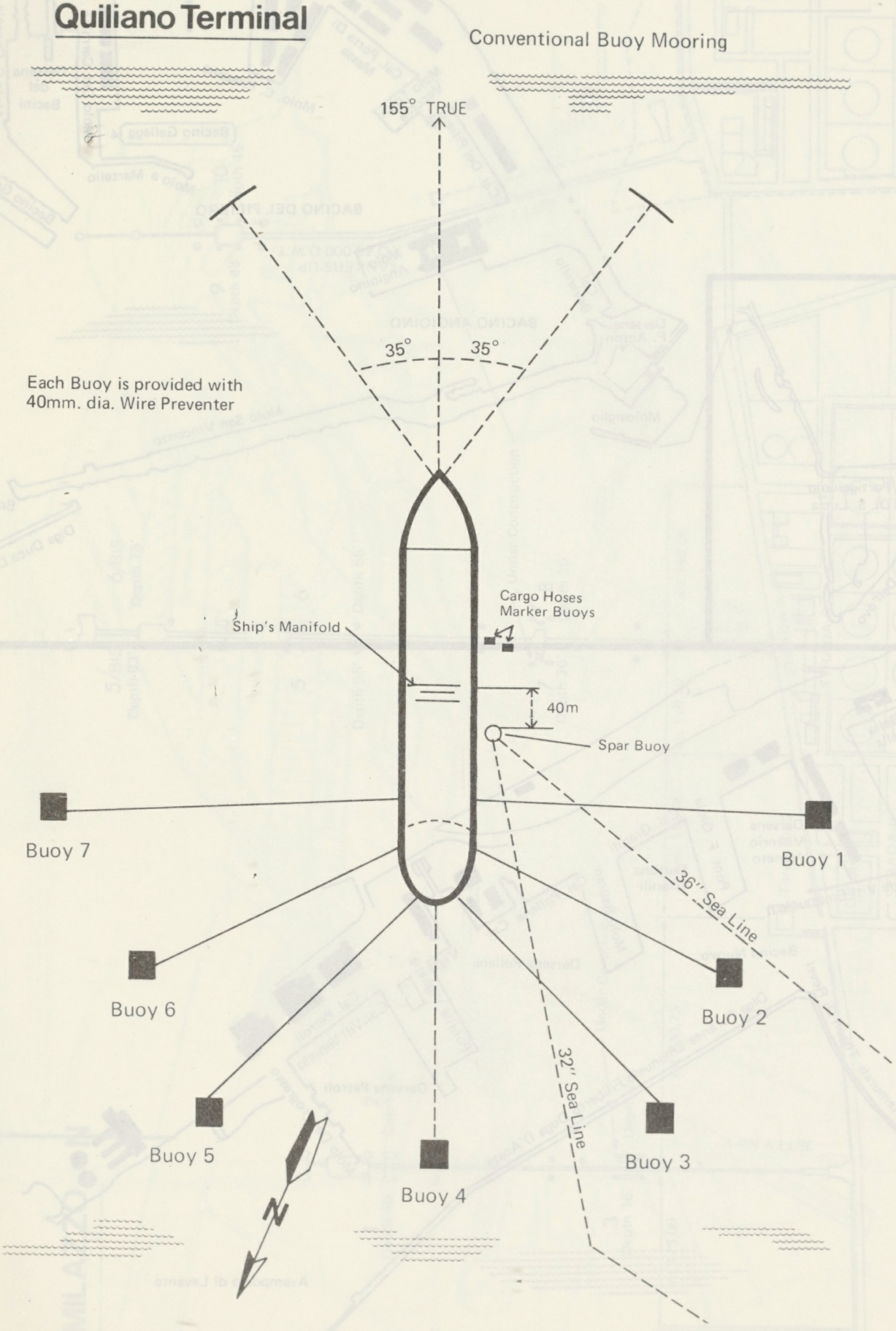
Quiliano Terminal



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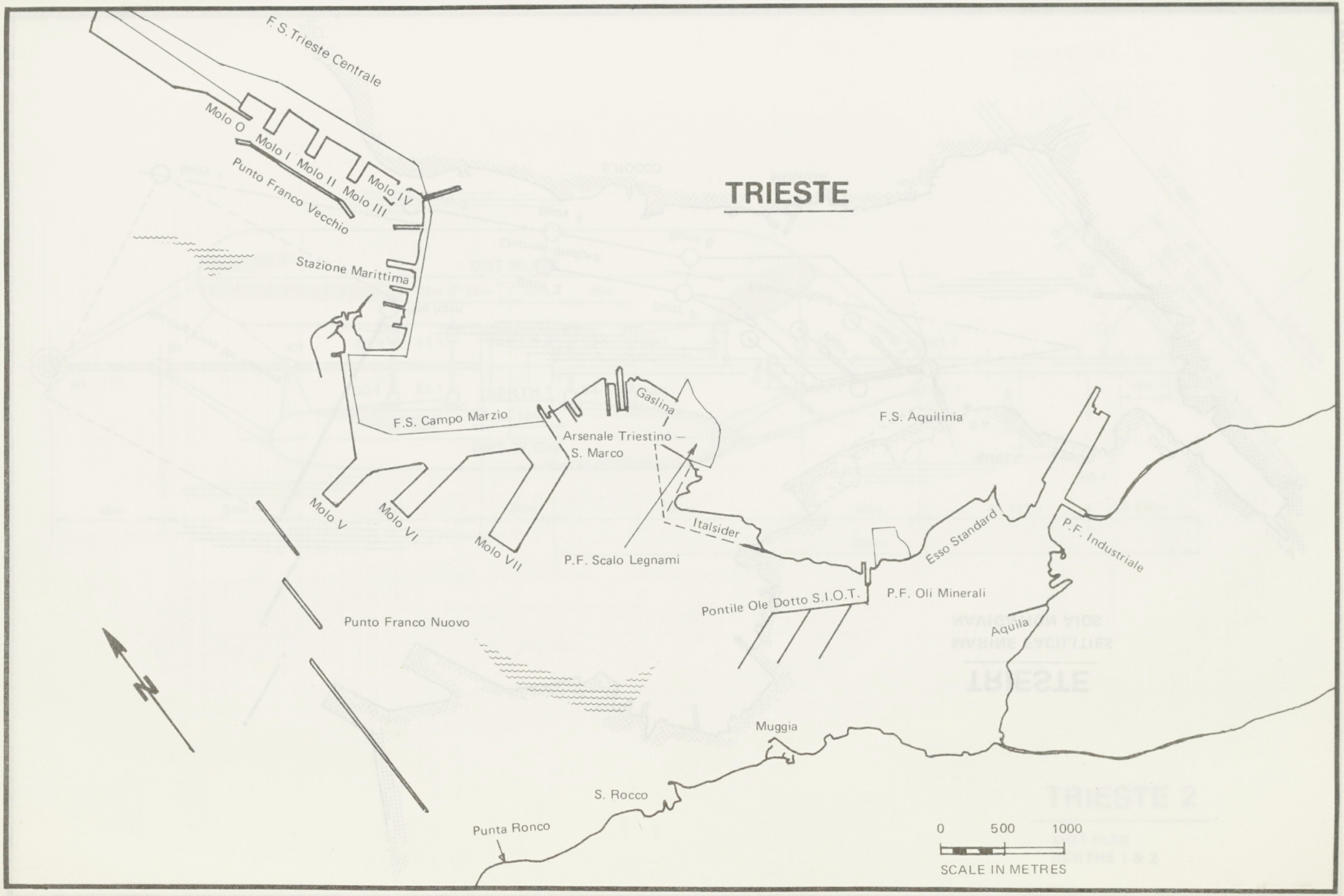

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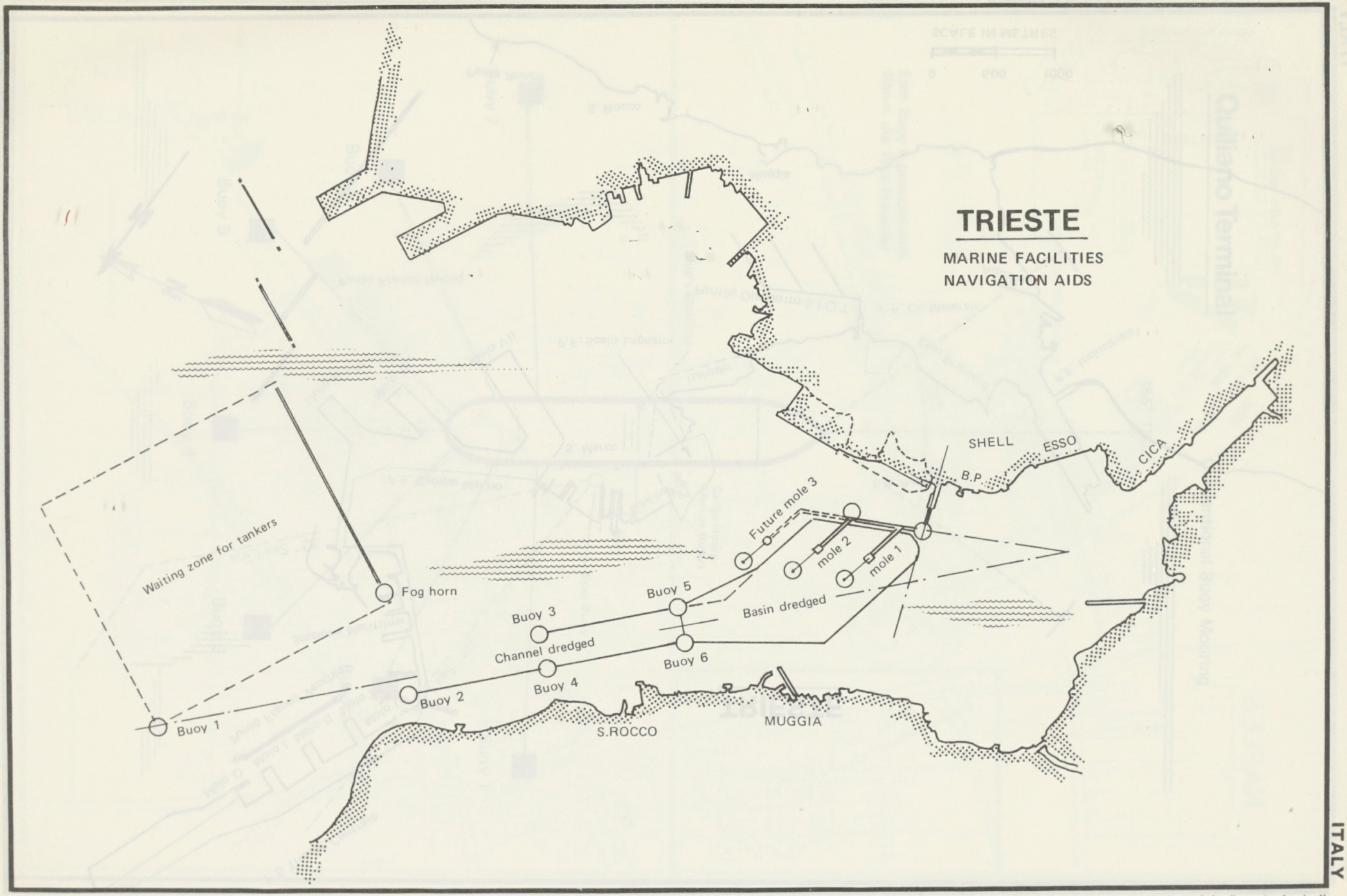

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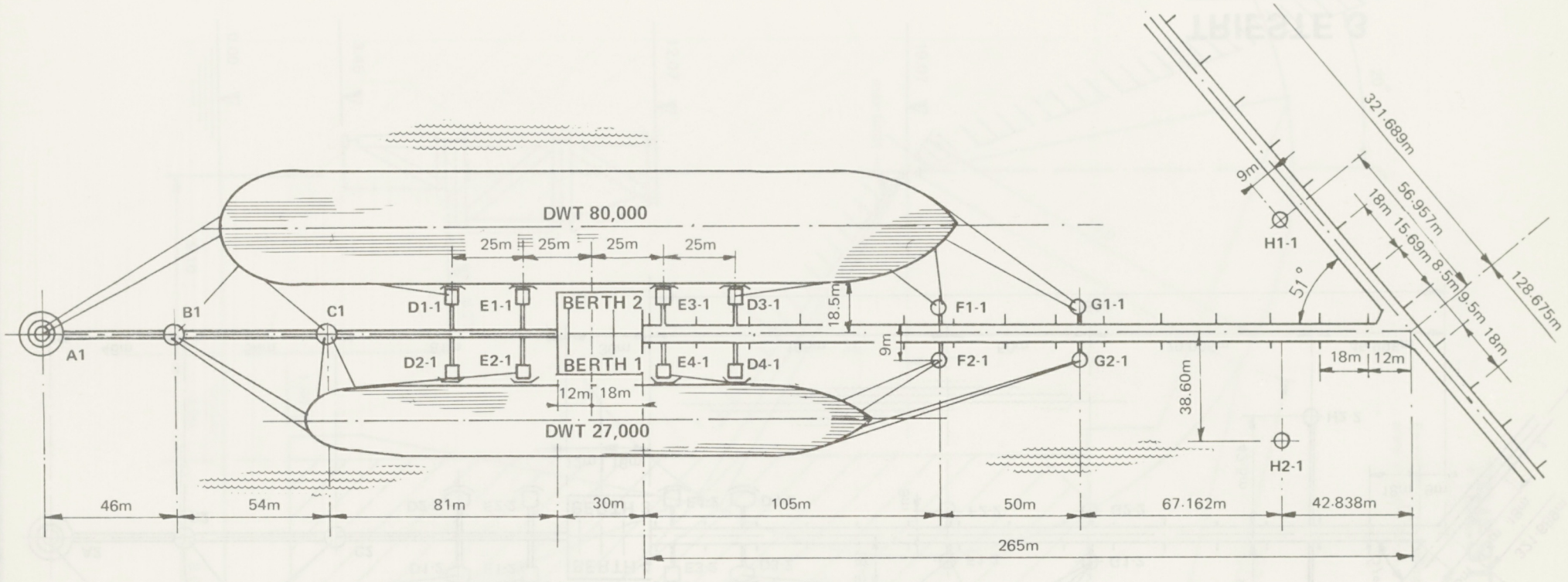

TRIESTE 2

SIOT PIER
BERTHS 1 & 2

ITALY

P441

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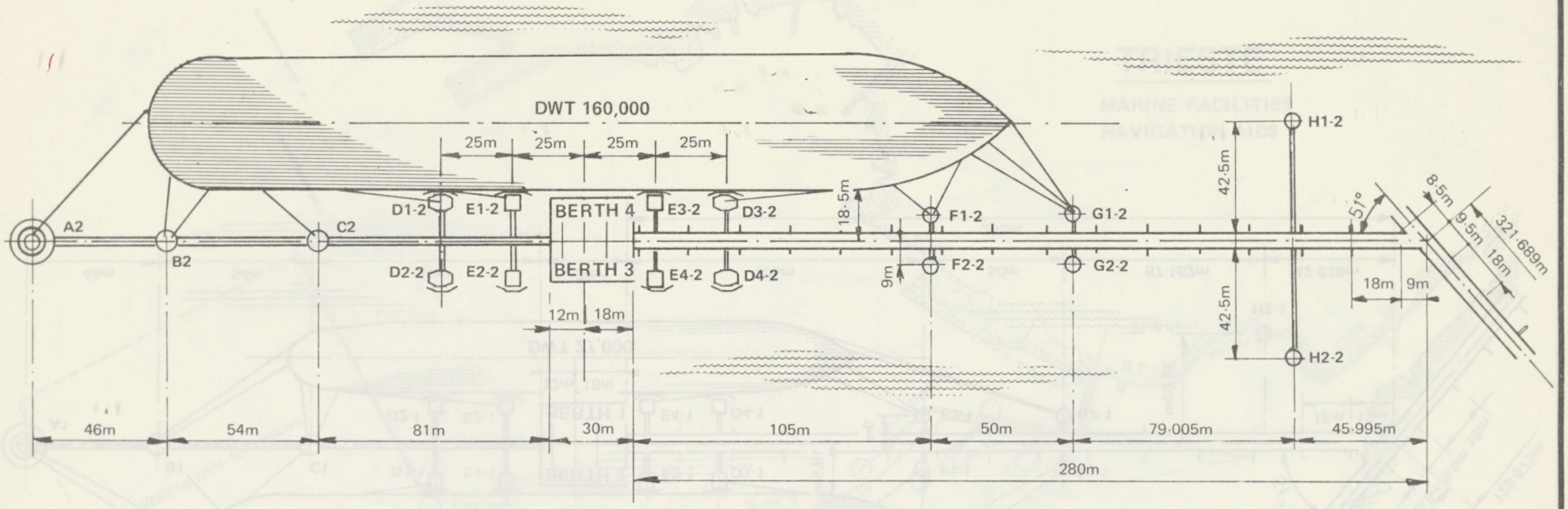

TRIESTE 3

SIOT PIER
BERTHS 3 & 4

ITALY

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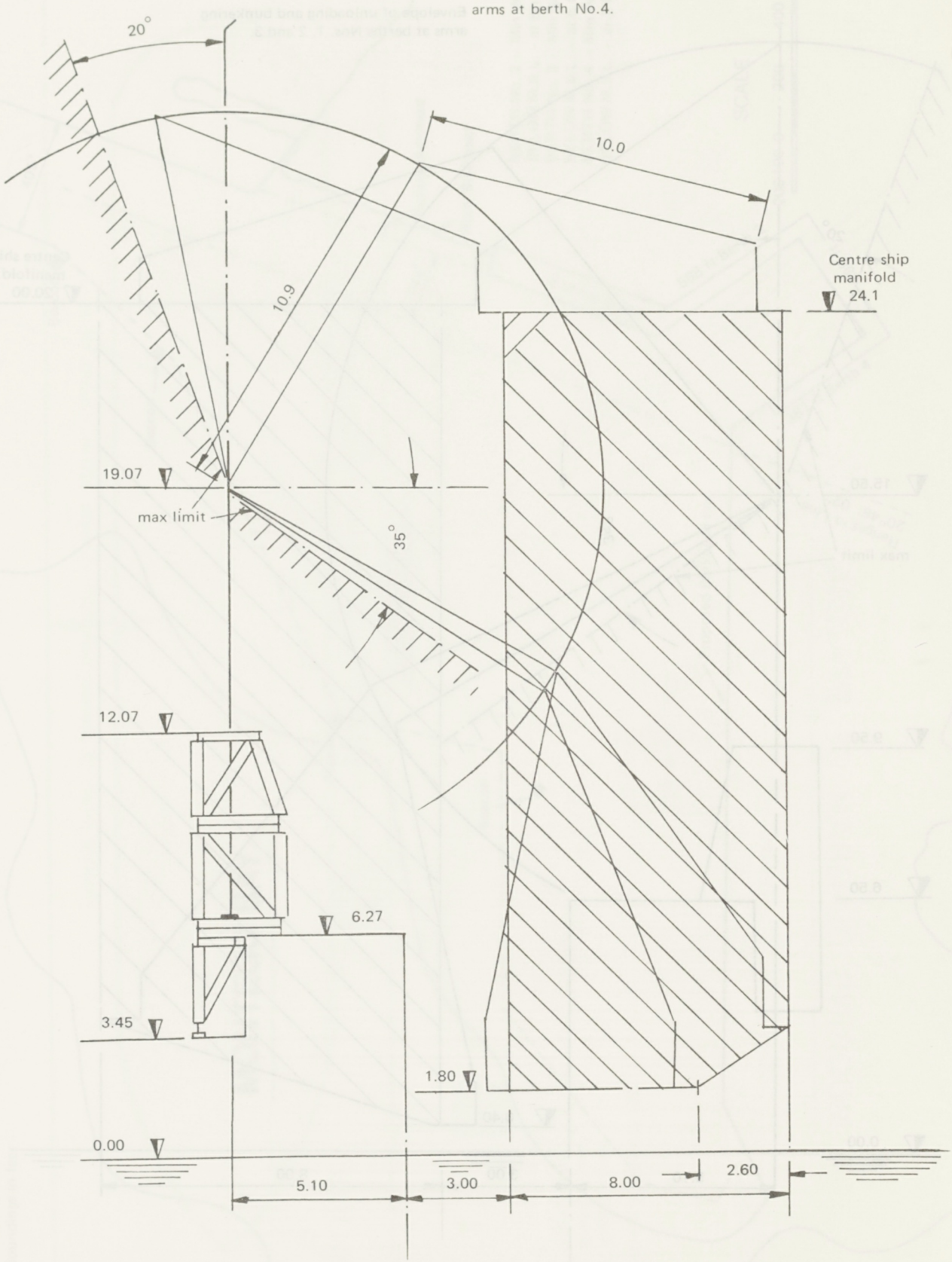
TRIESTE 4

Envelope of unloading and bunkering arms at berth No.4.



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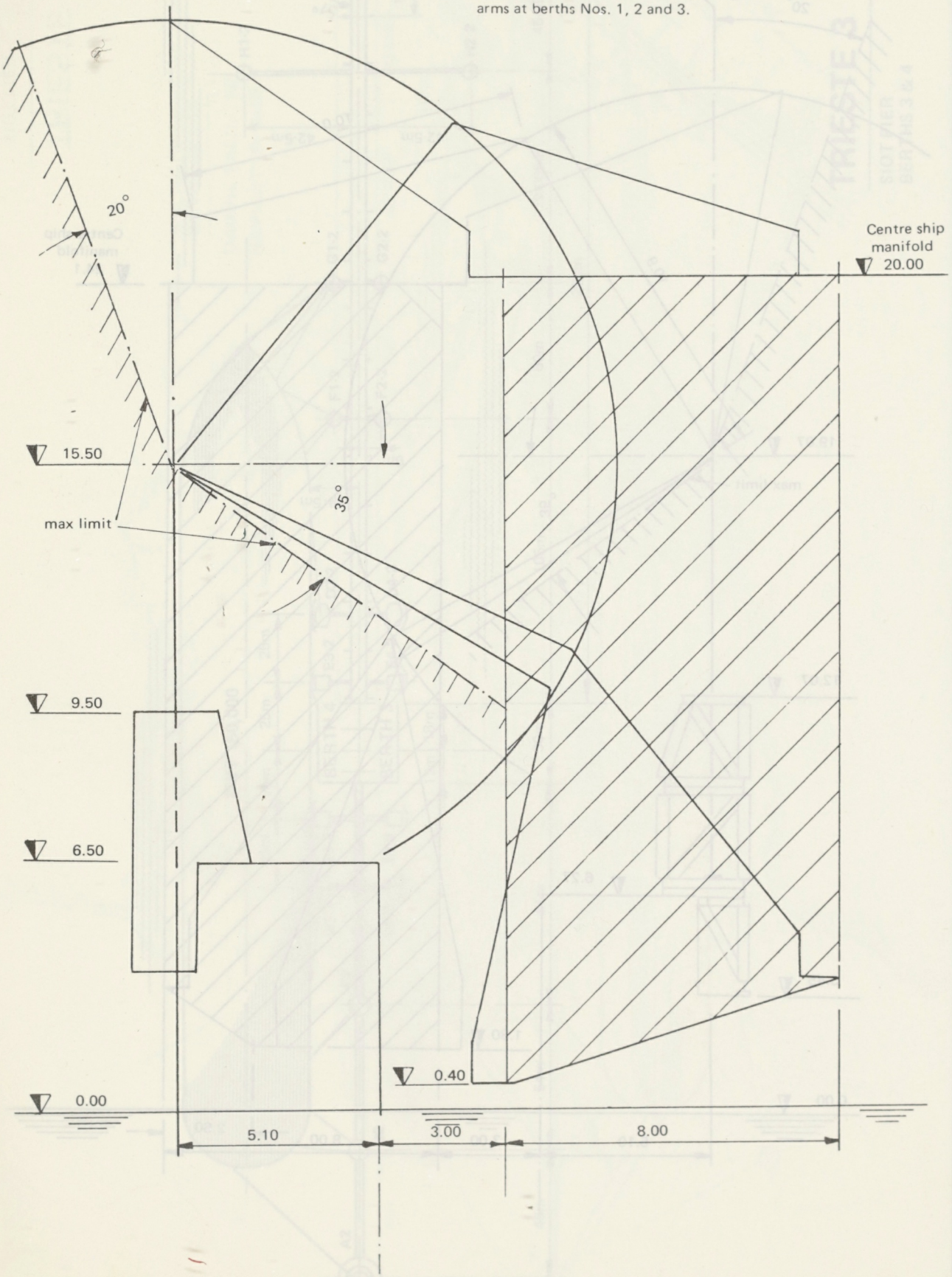
TRIESTE 5

Envelope of unloading and bunkering arms at berths Nos. 1, 2 and 3.



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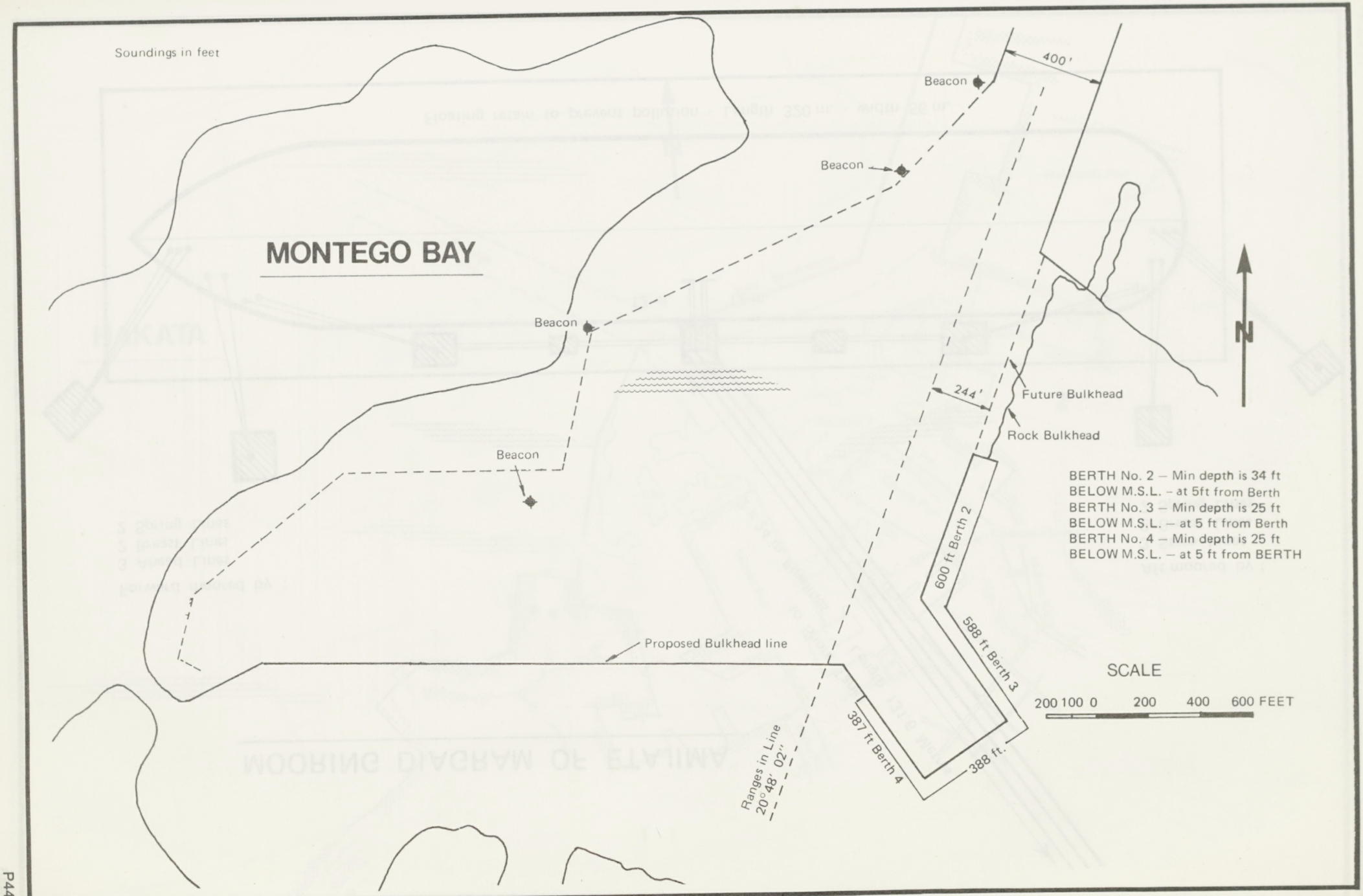

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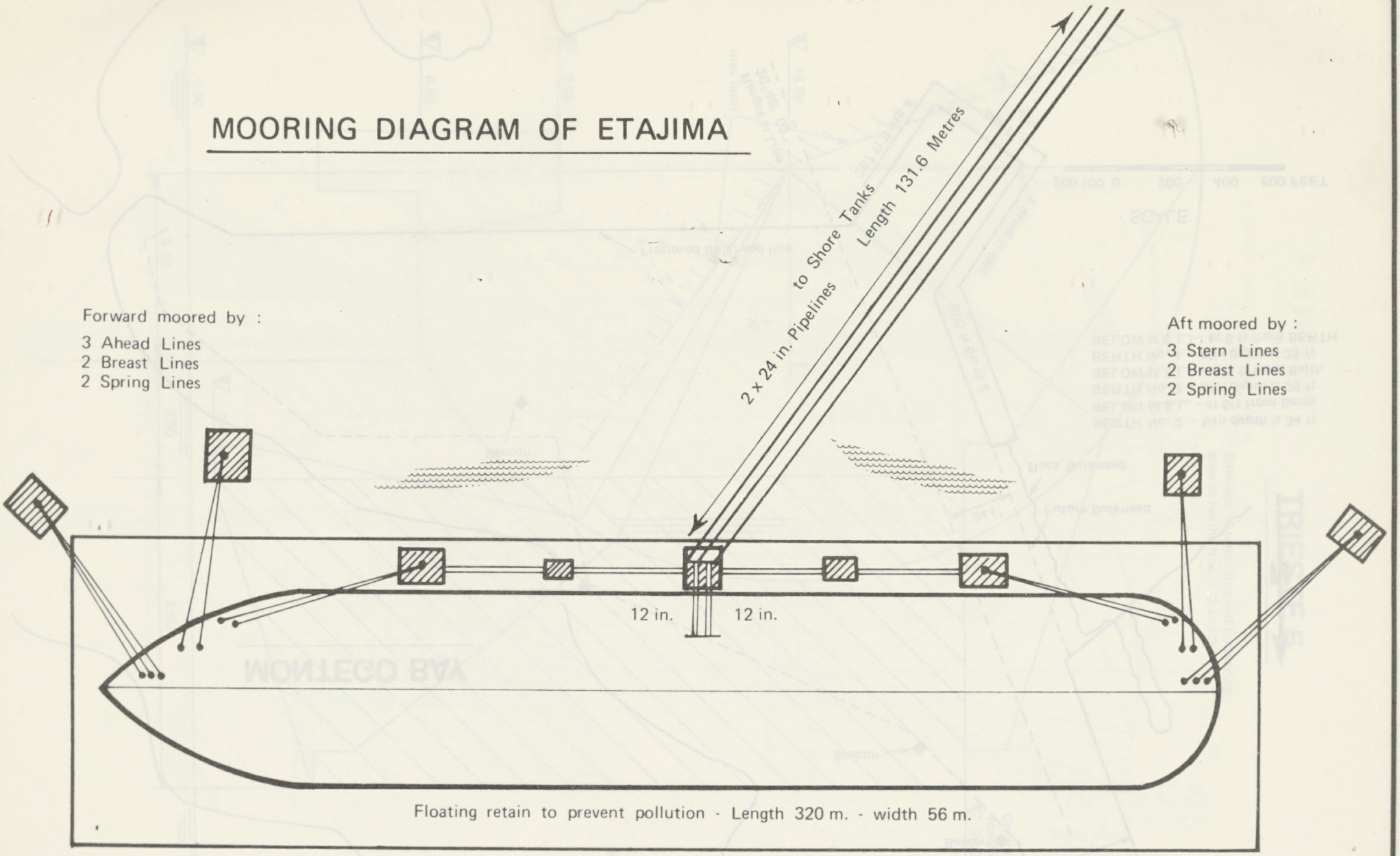
MOORING DIAGRAM OF ETAJIMA



Plan supplied by Ship's Master.

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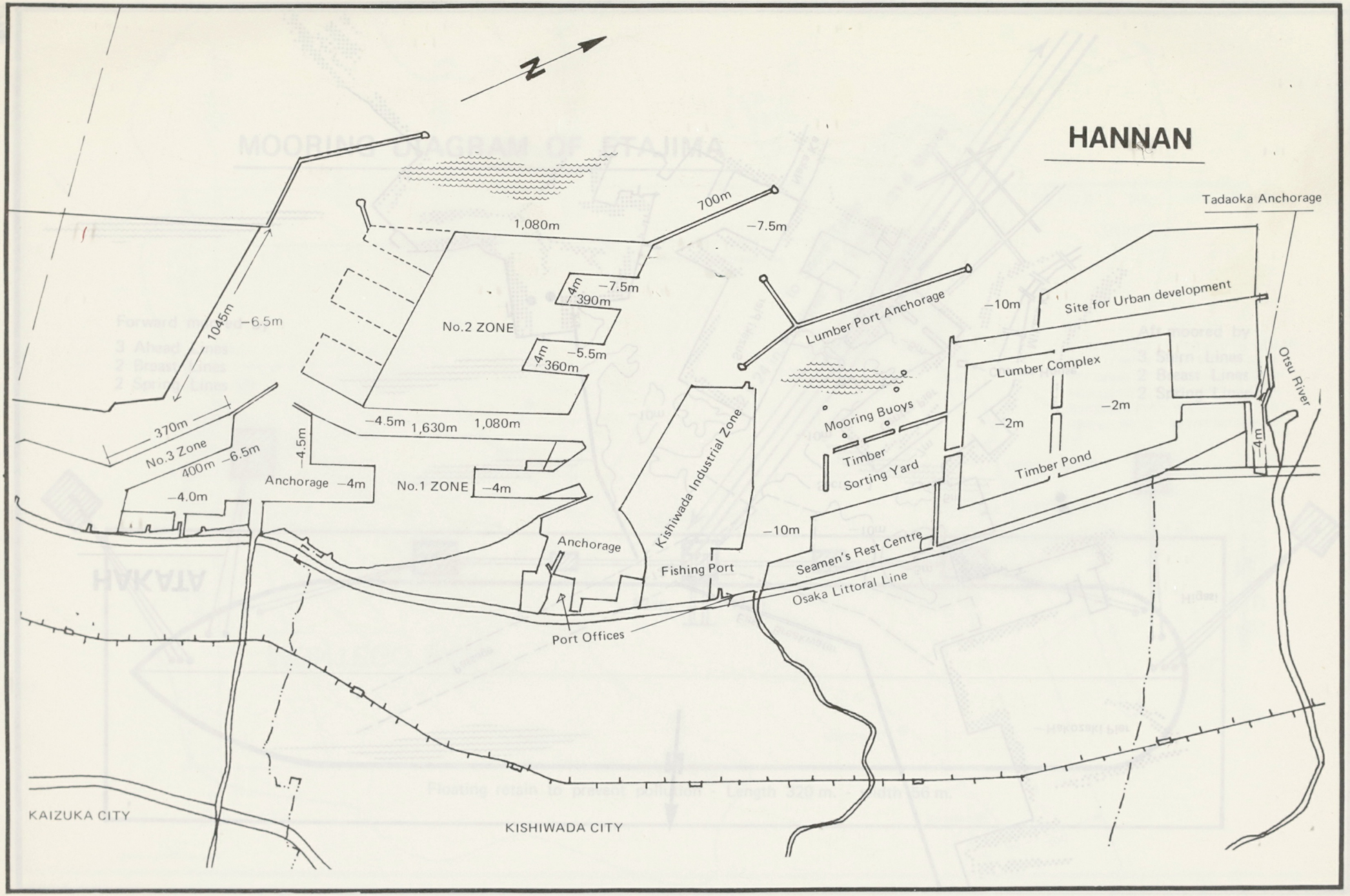

JAPAN

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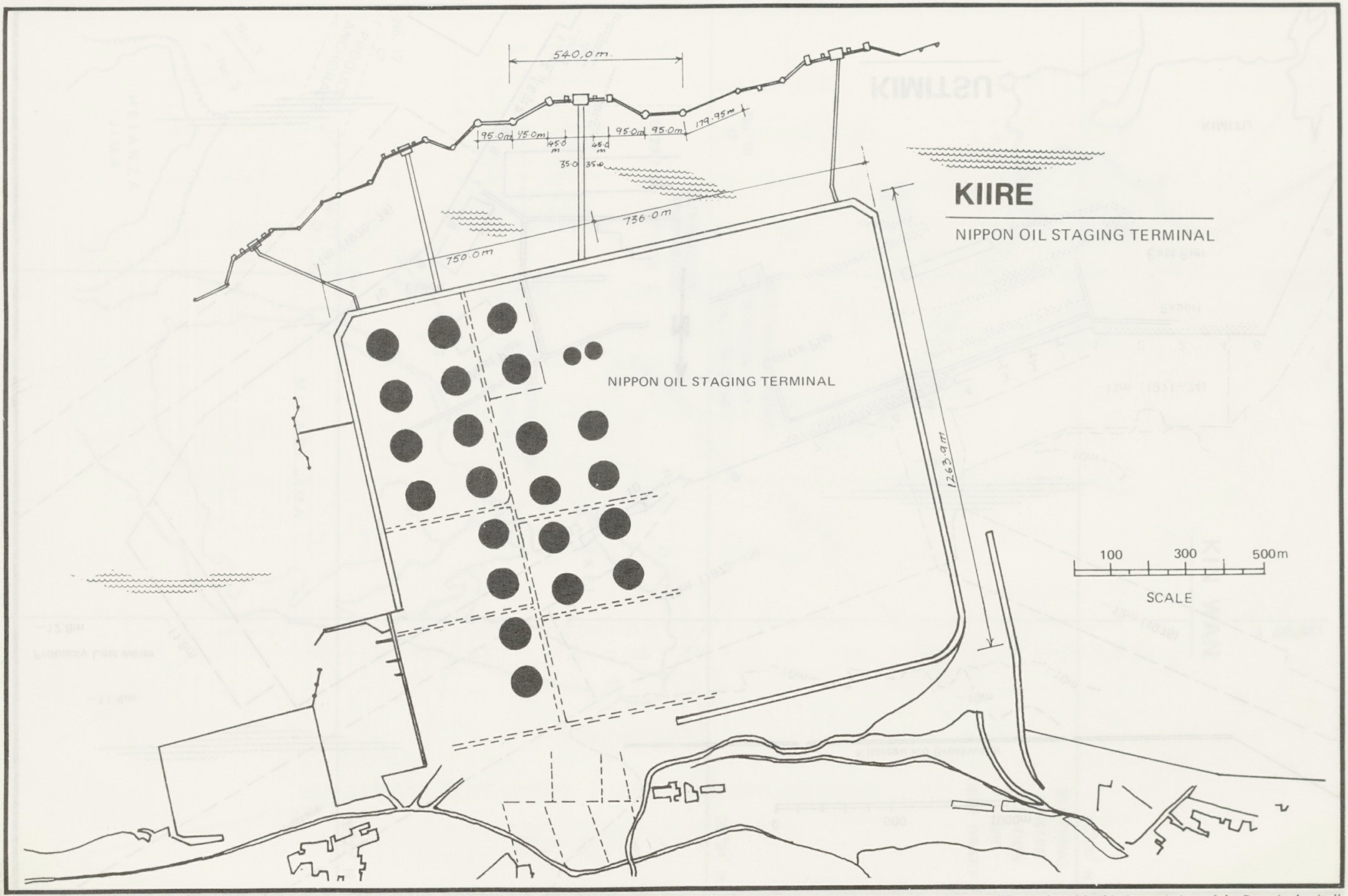

KIIRE

NIPPON OIL STAGING TERMINAL

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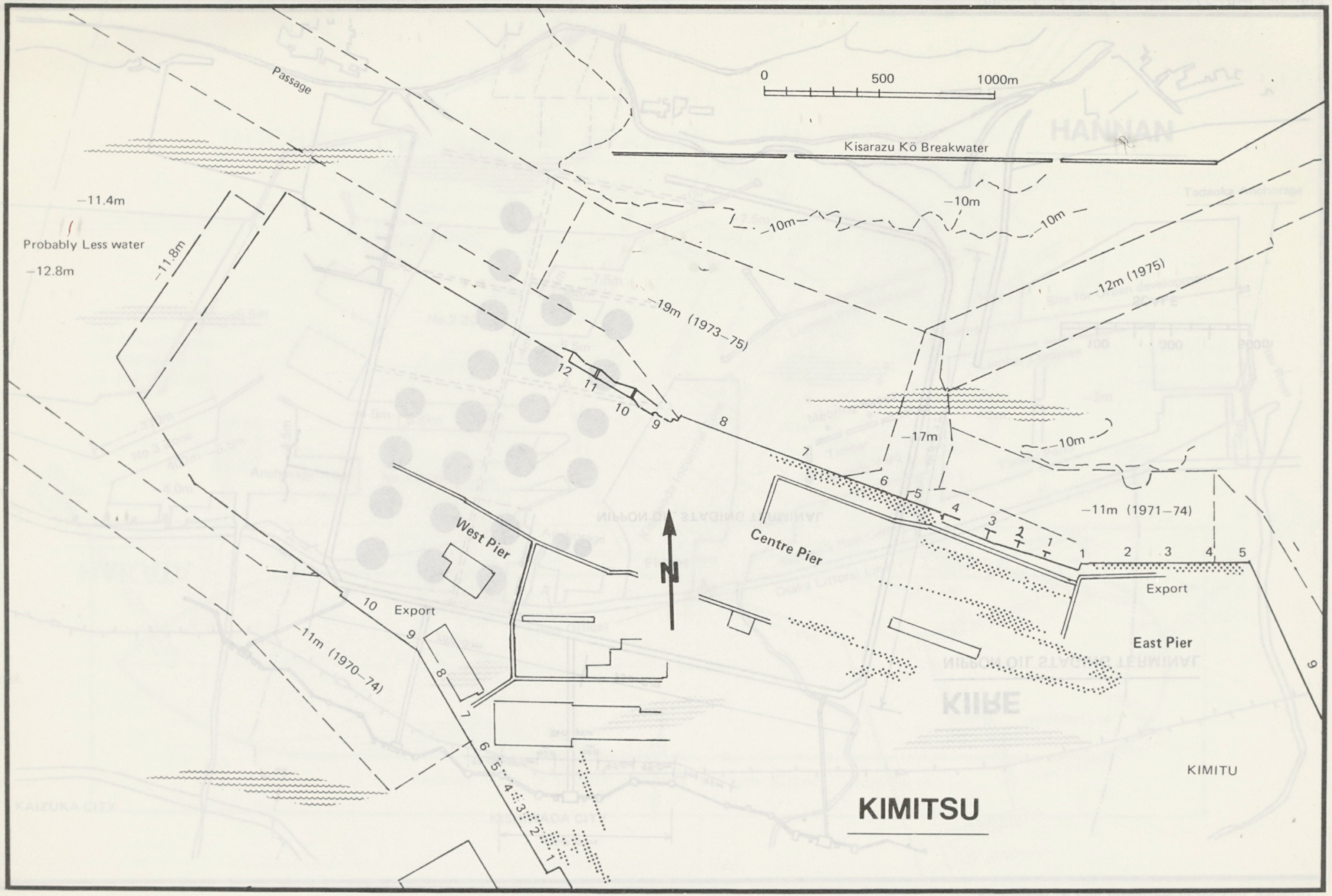

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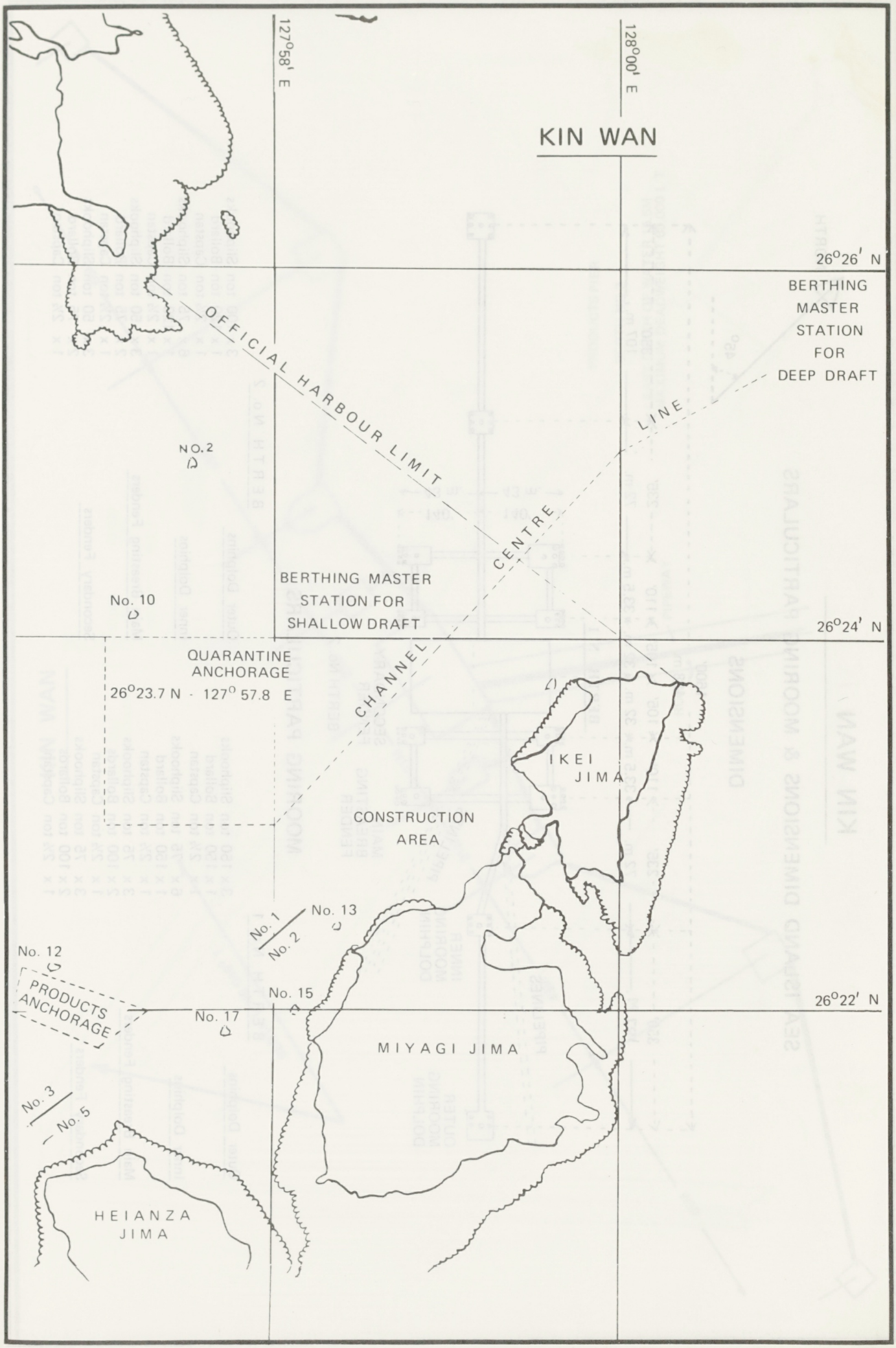

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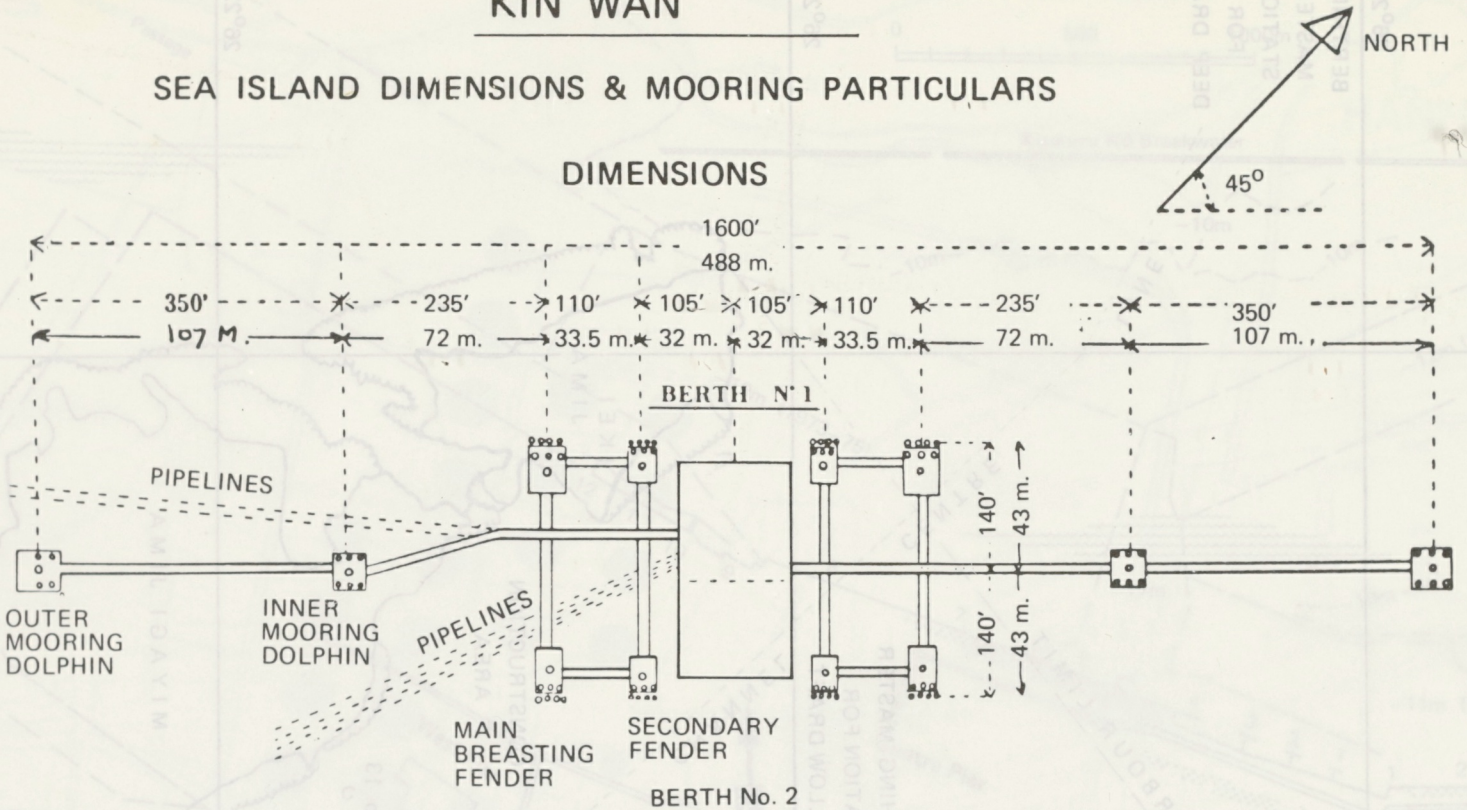
KIN WAN

SEA ISLAND DIMENSIONS & MOORING PARTICULARS

DIMENSIONS



MOORING PARTICULARS

BERTH No. 1

Outer Dolphins	3 x 150 ton Sliphooks 1 x 150 ton Bollard 1 x 2½ ton Capstan
Inner Dolphins	6 x 75 ton Sliphooks 1 x 150 ton Bollard 1 x 2½ ton Capstan
Main Breasting Fenders	3 x 75 ton Sliphooks 2 x 100 ton Bollards 1 x 2½ ton Capstan
Secondary Fenders	3 x 75 ton Sliphooks 2 x 100 ton Bollards 1 x 2½ ton Capstan

BERTH No. 2

Outer Dolphins	3 x 100 ton Sliphooks 1 x 120 ton Bollard 1 x 2½ ton Capstan
Inner Dolphins	6 x 75 ton Sliphooks 1 x 120 ton Bollard 1 x 2½ ton Capstan
Main Breasting Fenders	3 x 50 ton Sliphooks 2 x 75 ton Bollard 1 x 2½ ton Capstan
Secondary Fenders	3 x 50 ton Sliphooks 2 x 75 ton Bollard 1 x 2½ ton Capstan

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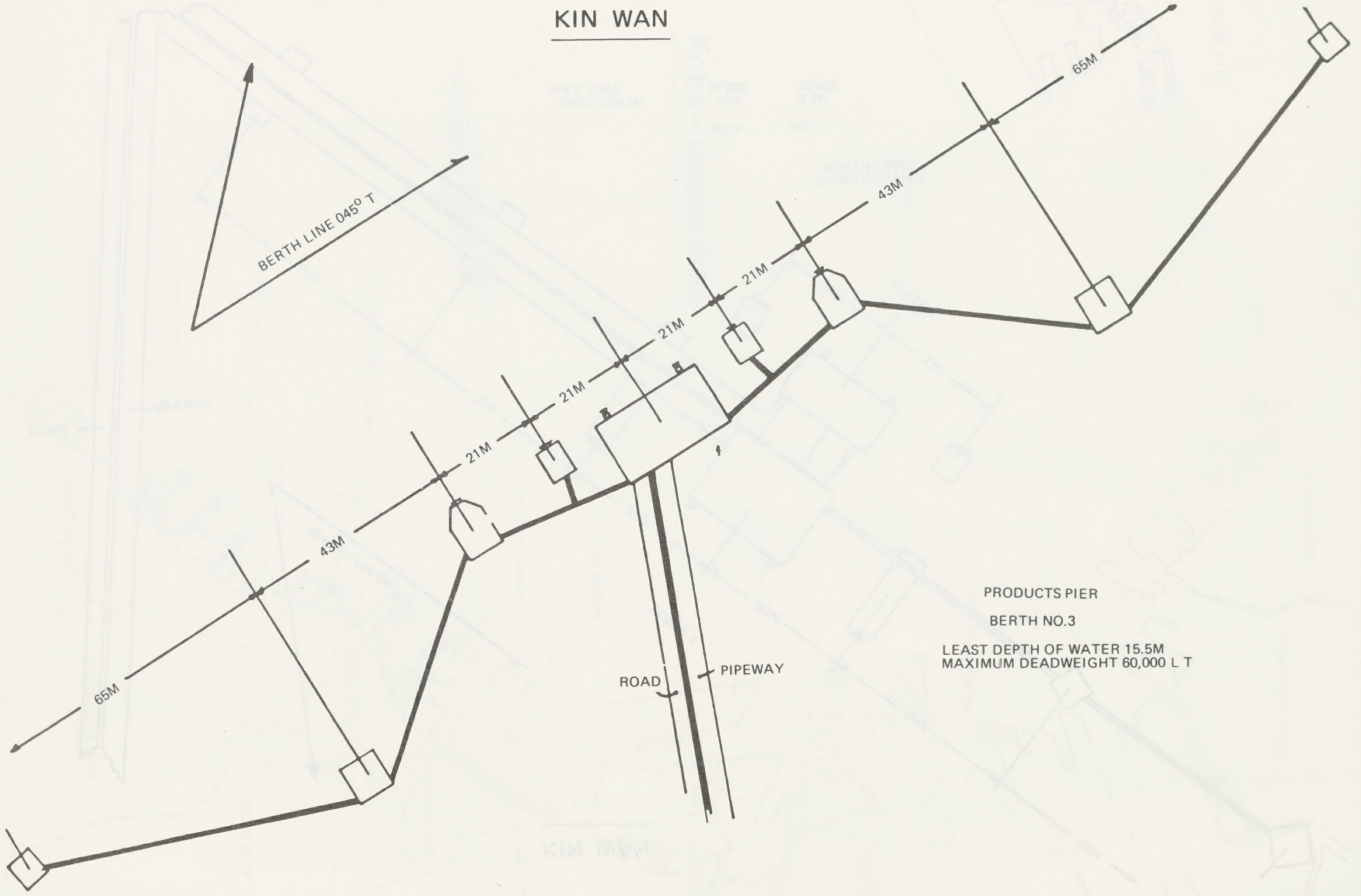
KIN WAN



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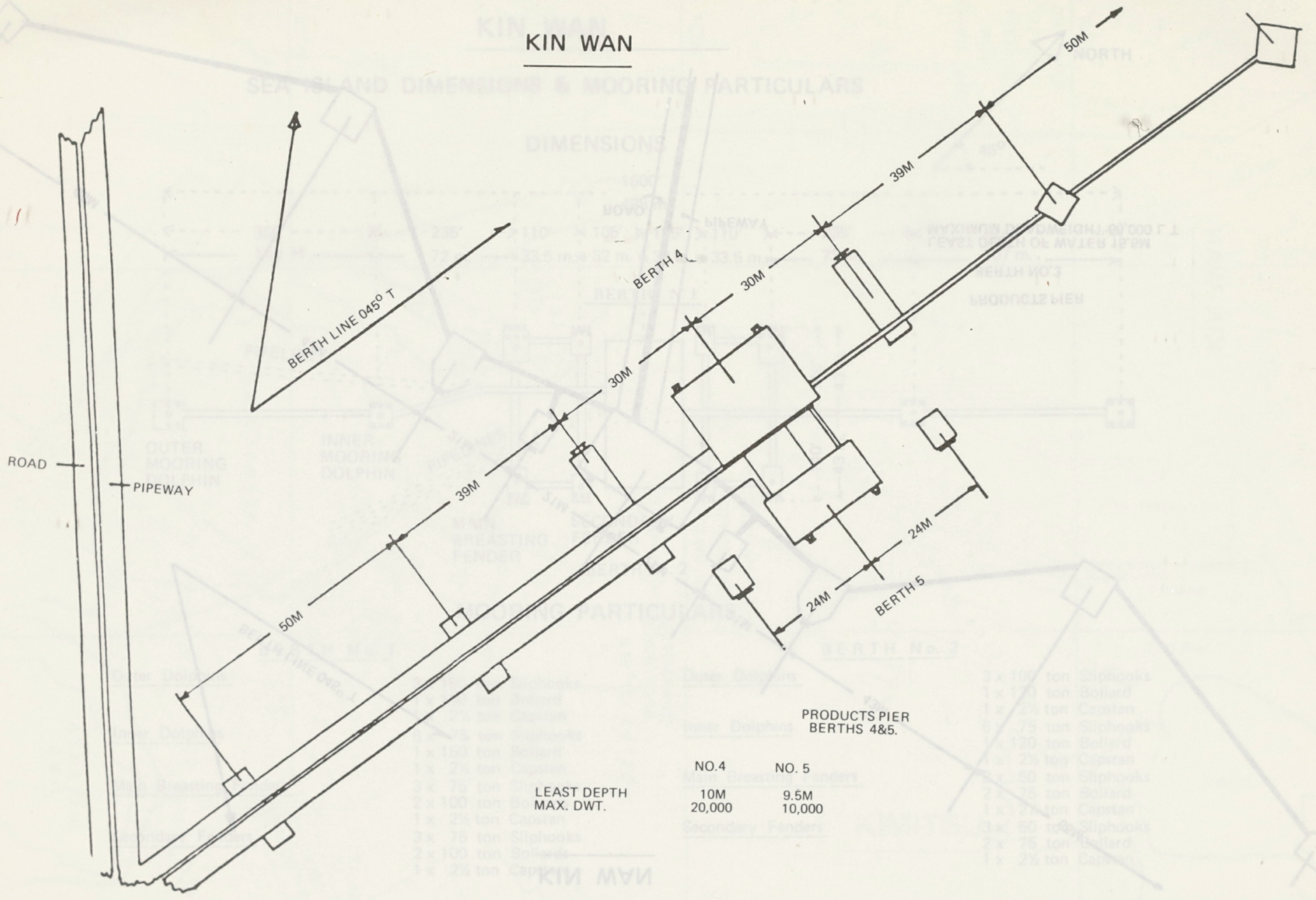

PRODUCTS PIER
BERTHS 4&5.

	NO.4	NO. 5
LEAST DEPTH	10M	9.5M
MAX. DWT.	20,000	10,000

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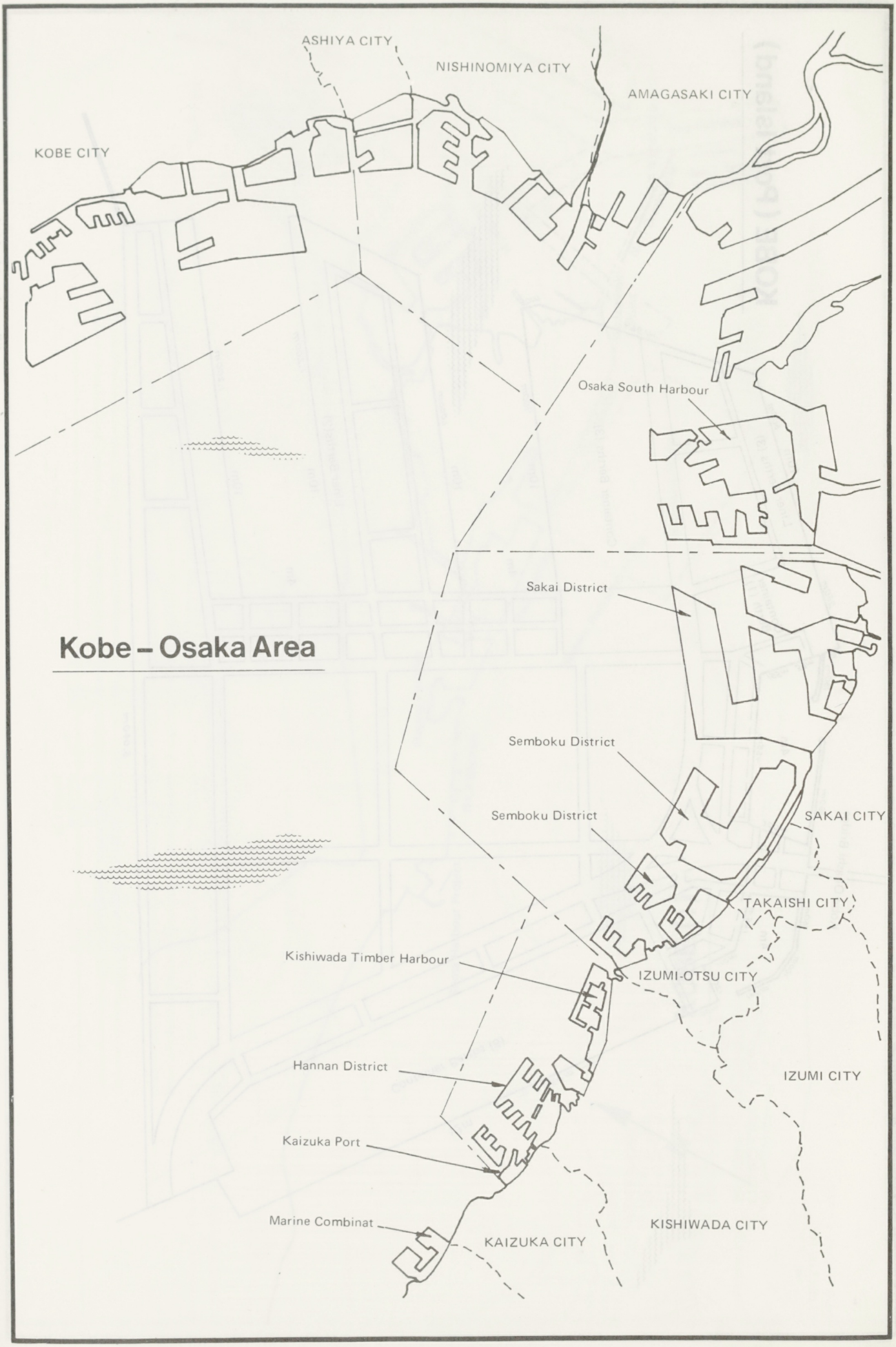

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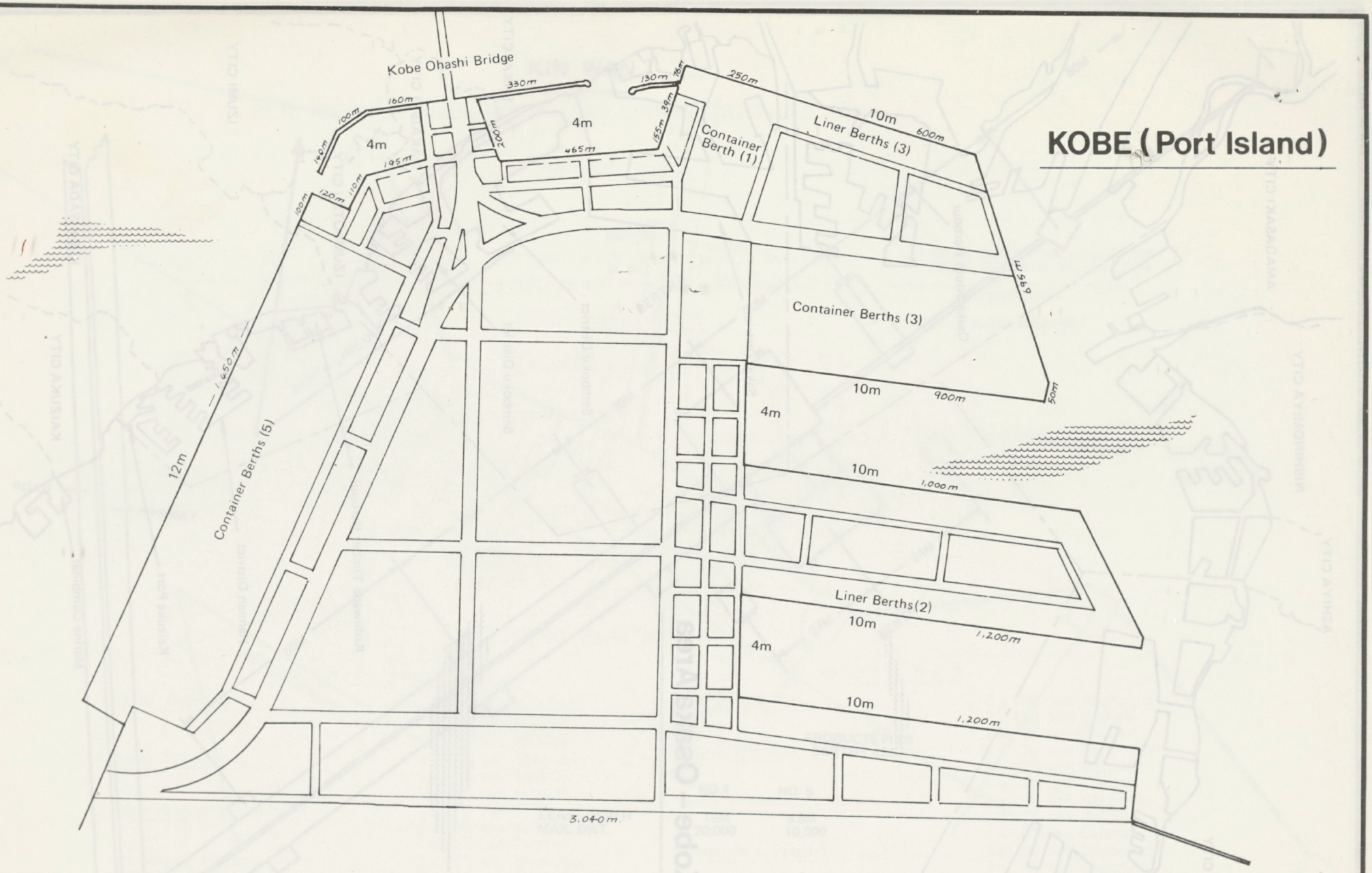

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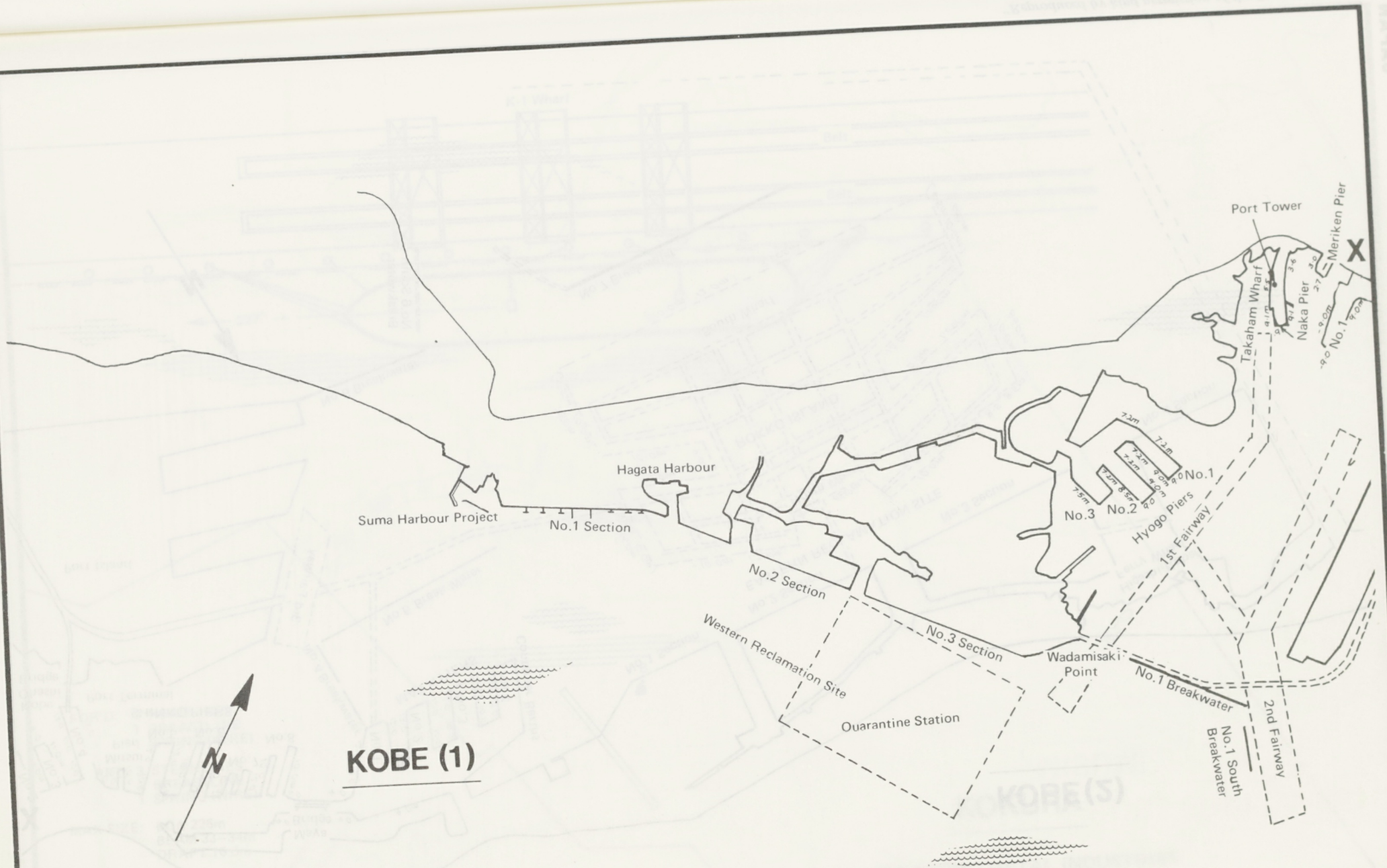

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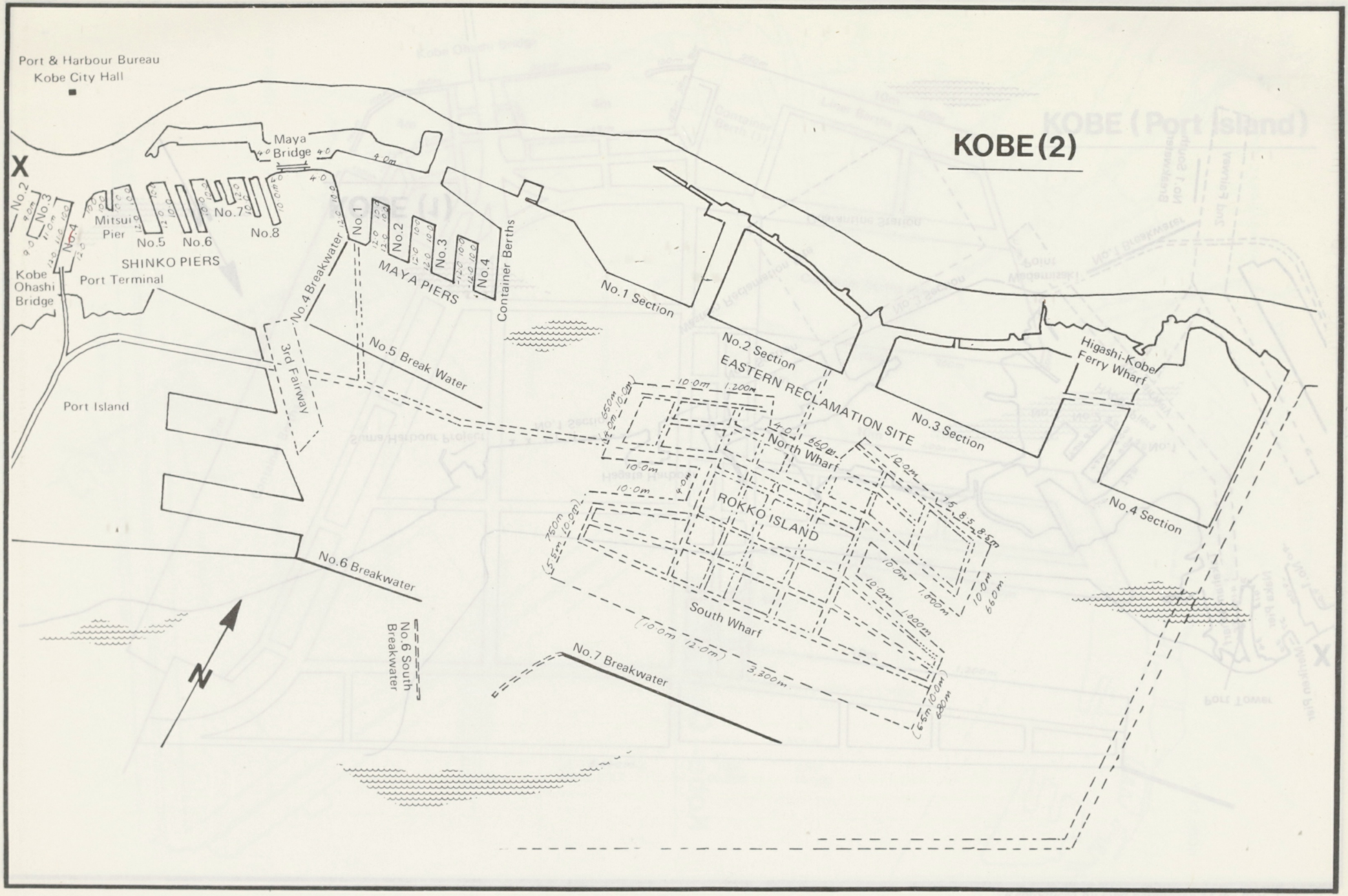

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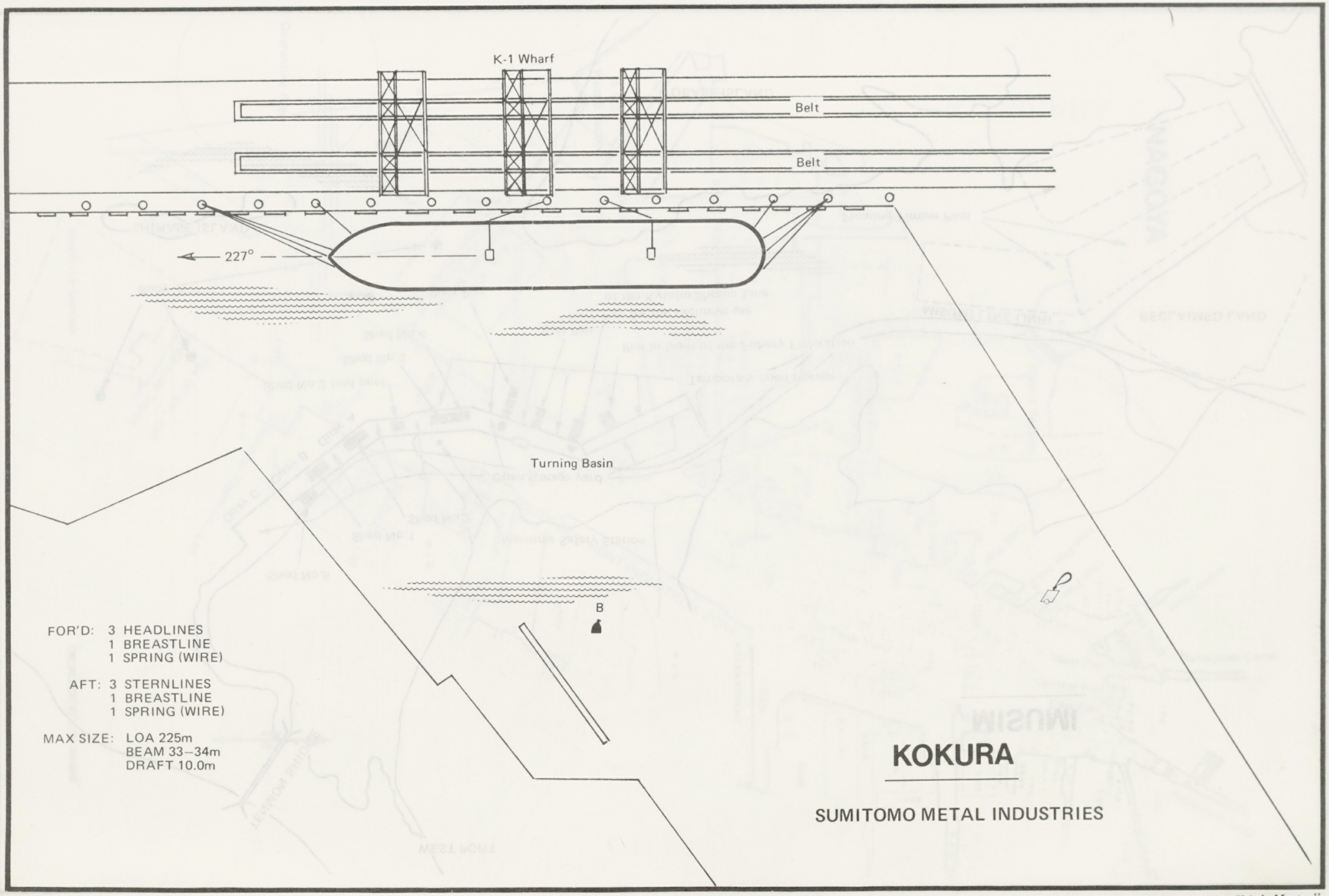

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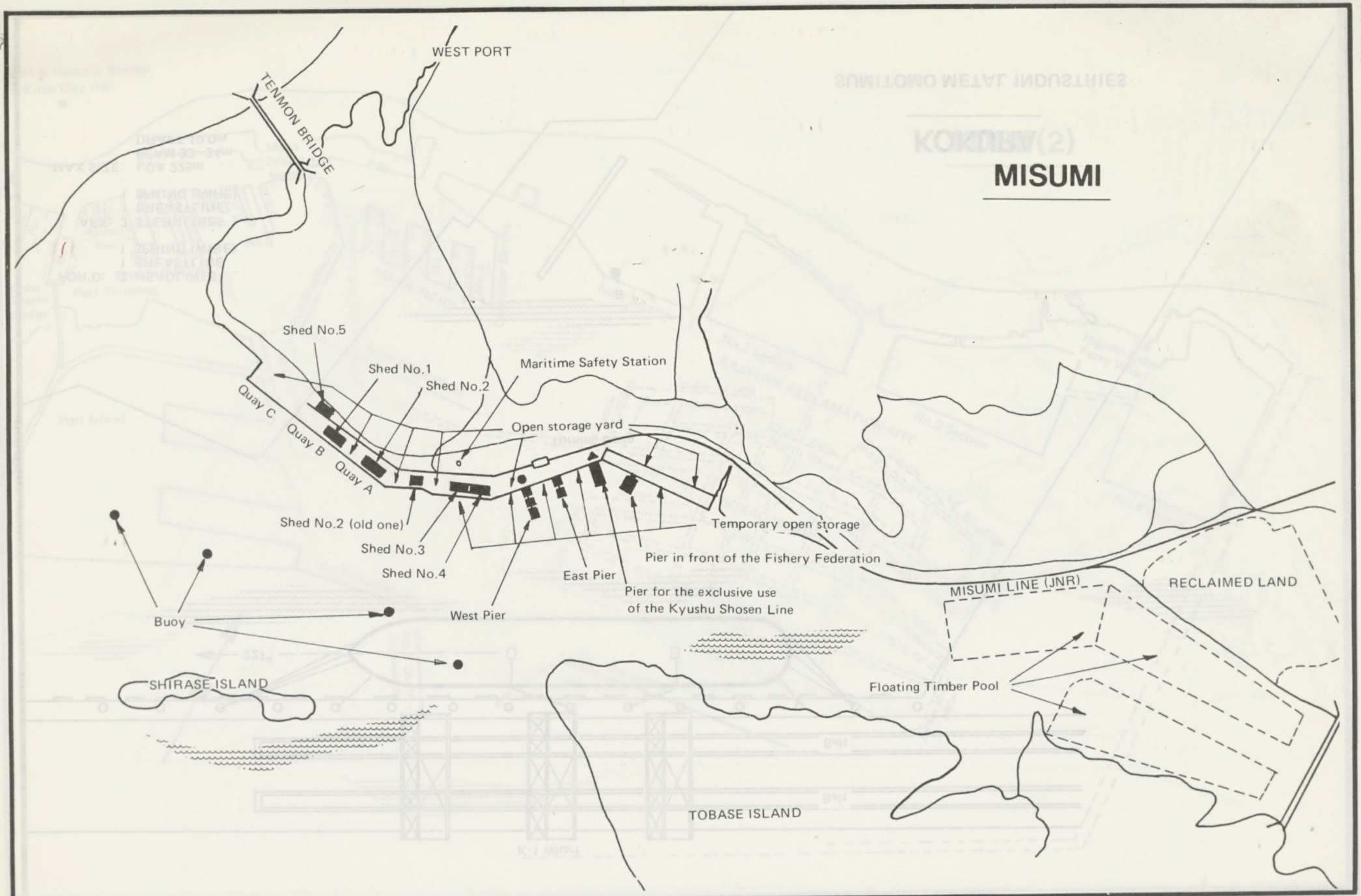

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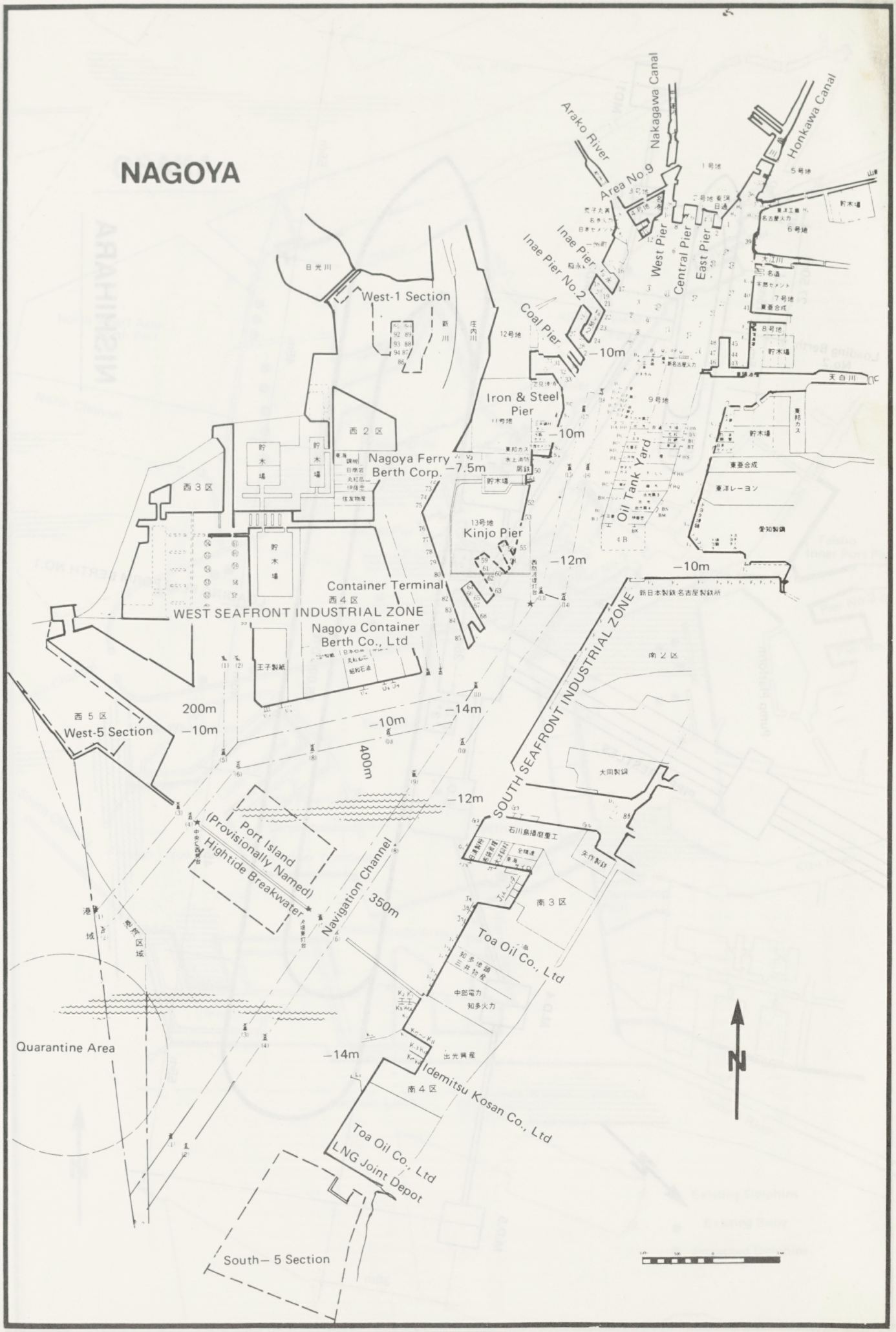

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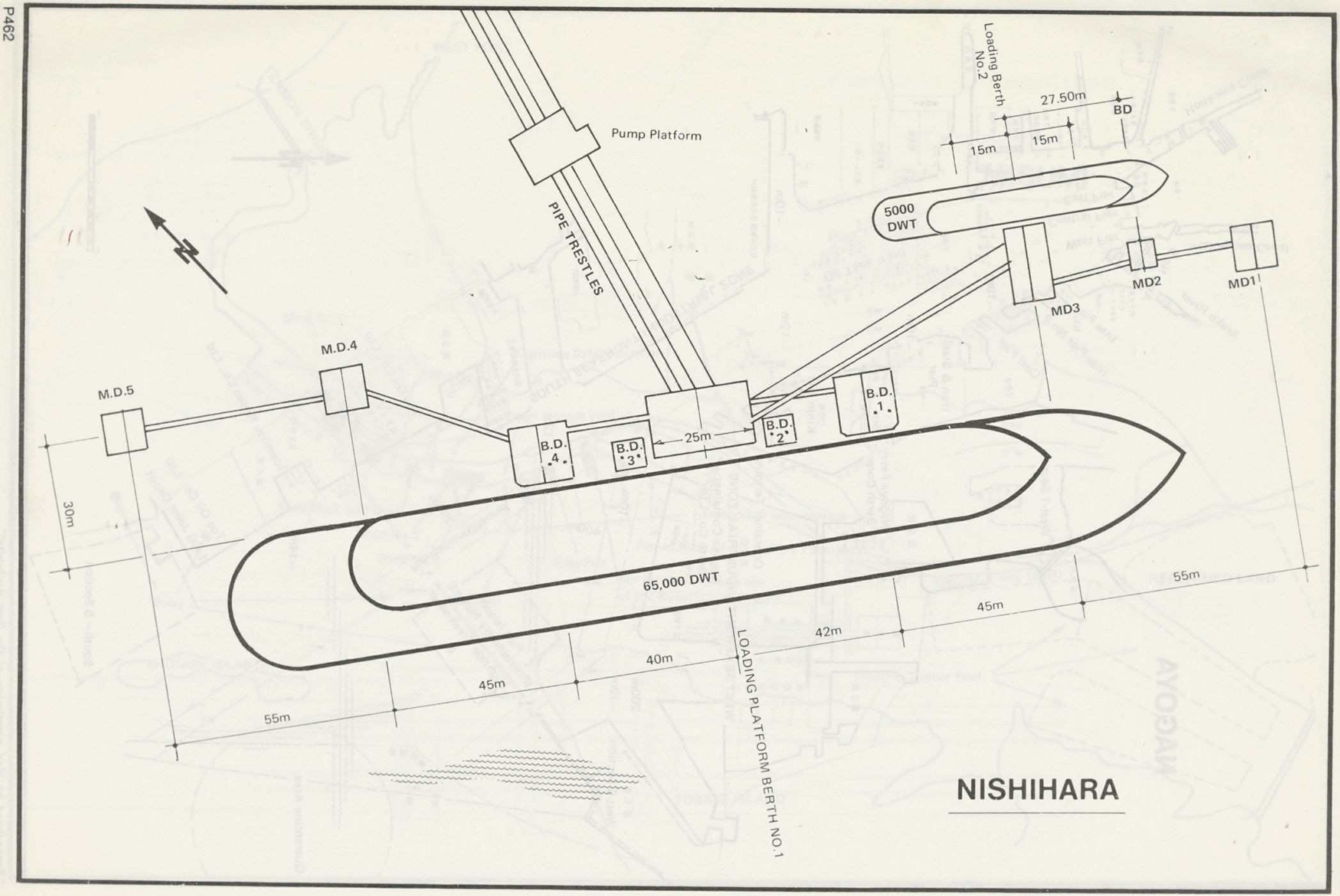

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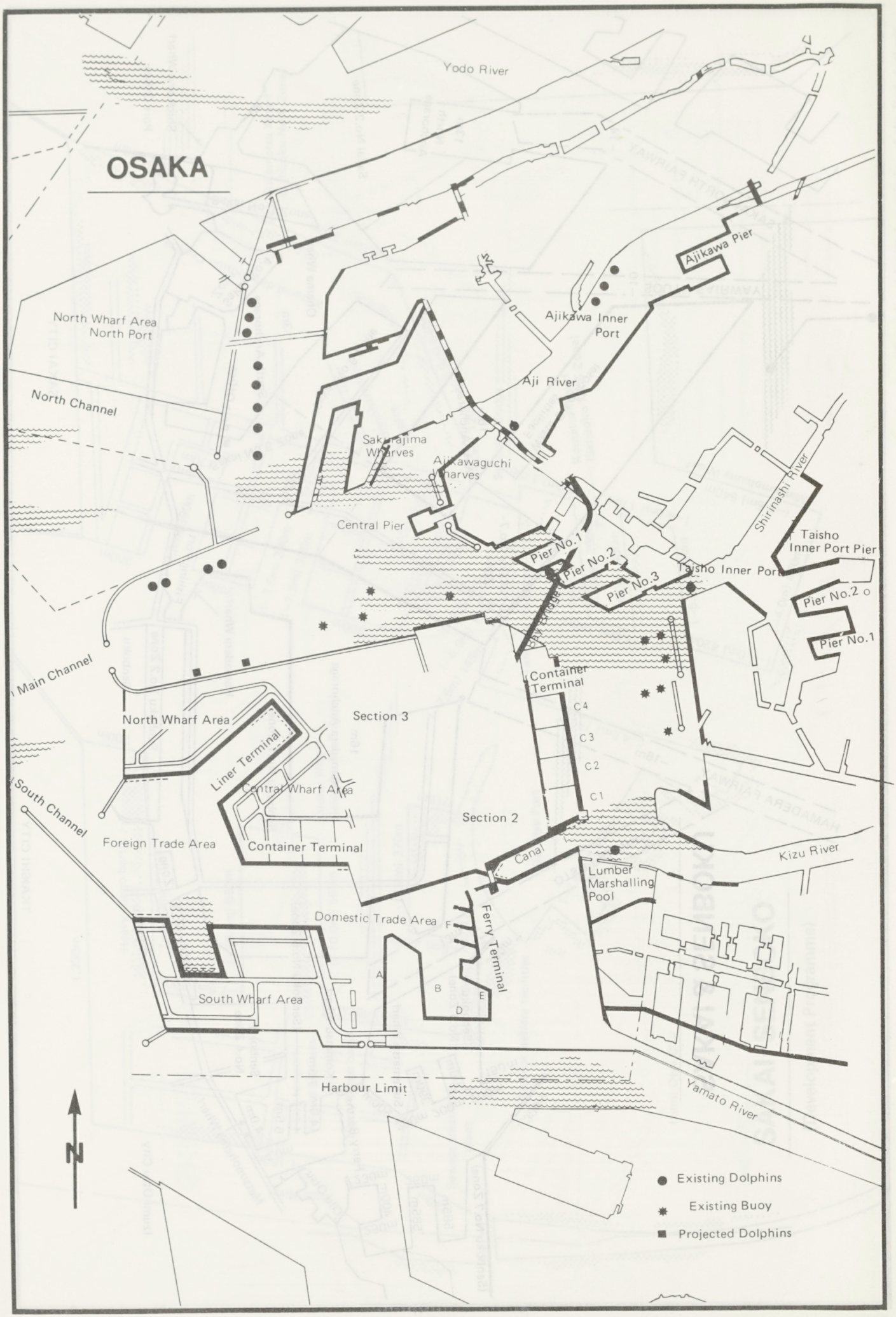

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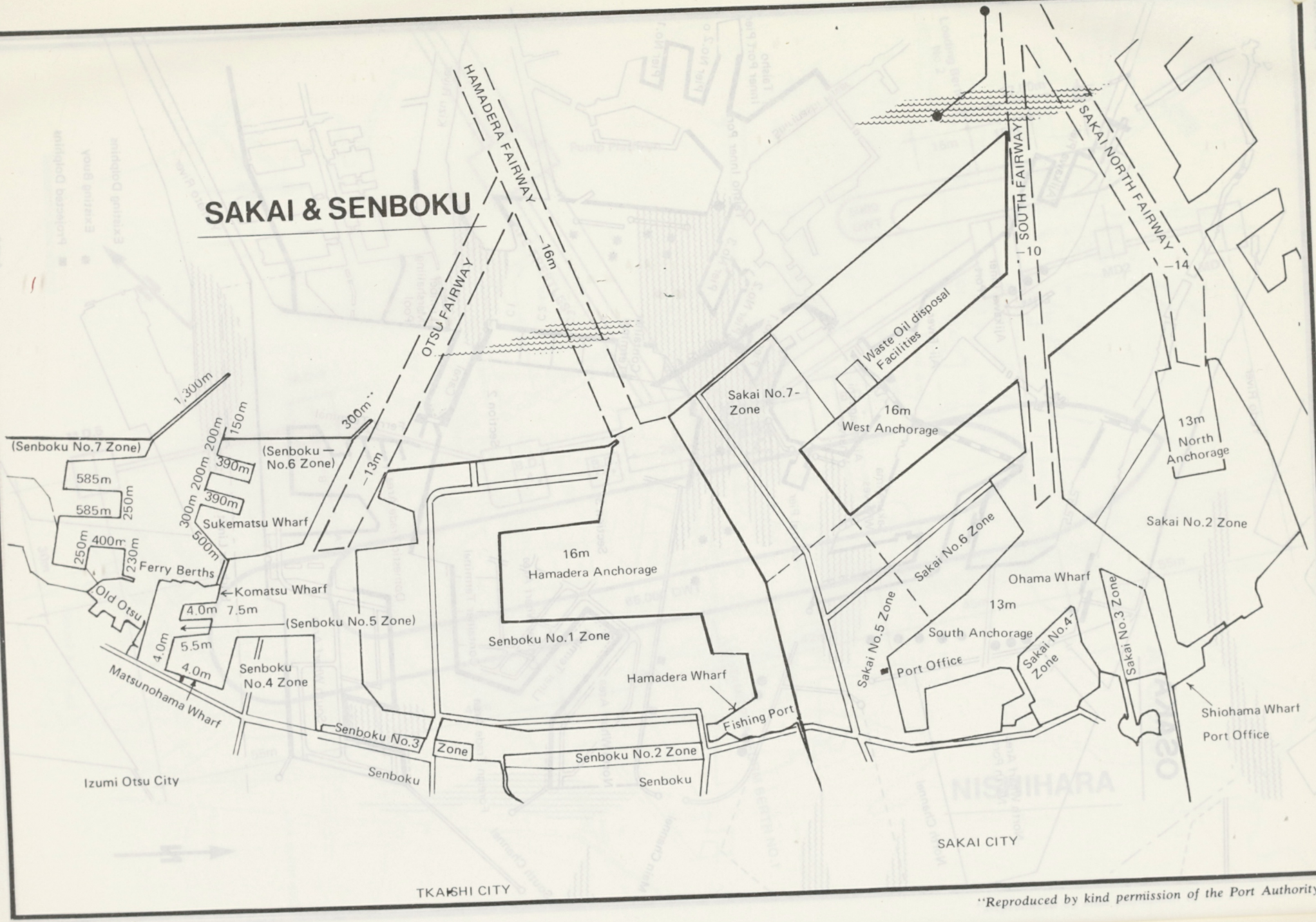

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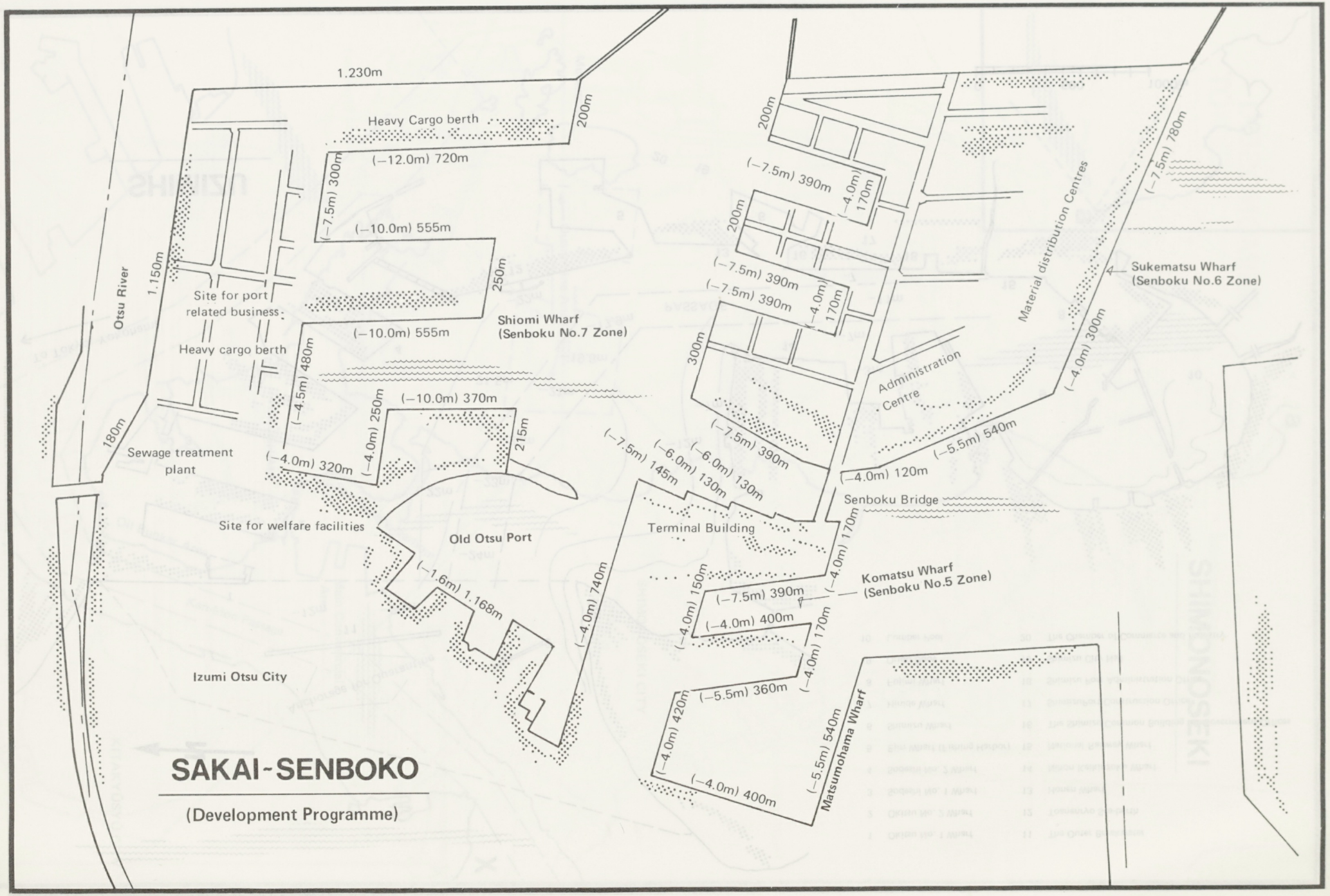

SAKAI-SENBOKO

(Development Programme)

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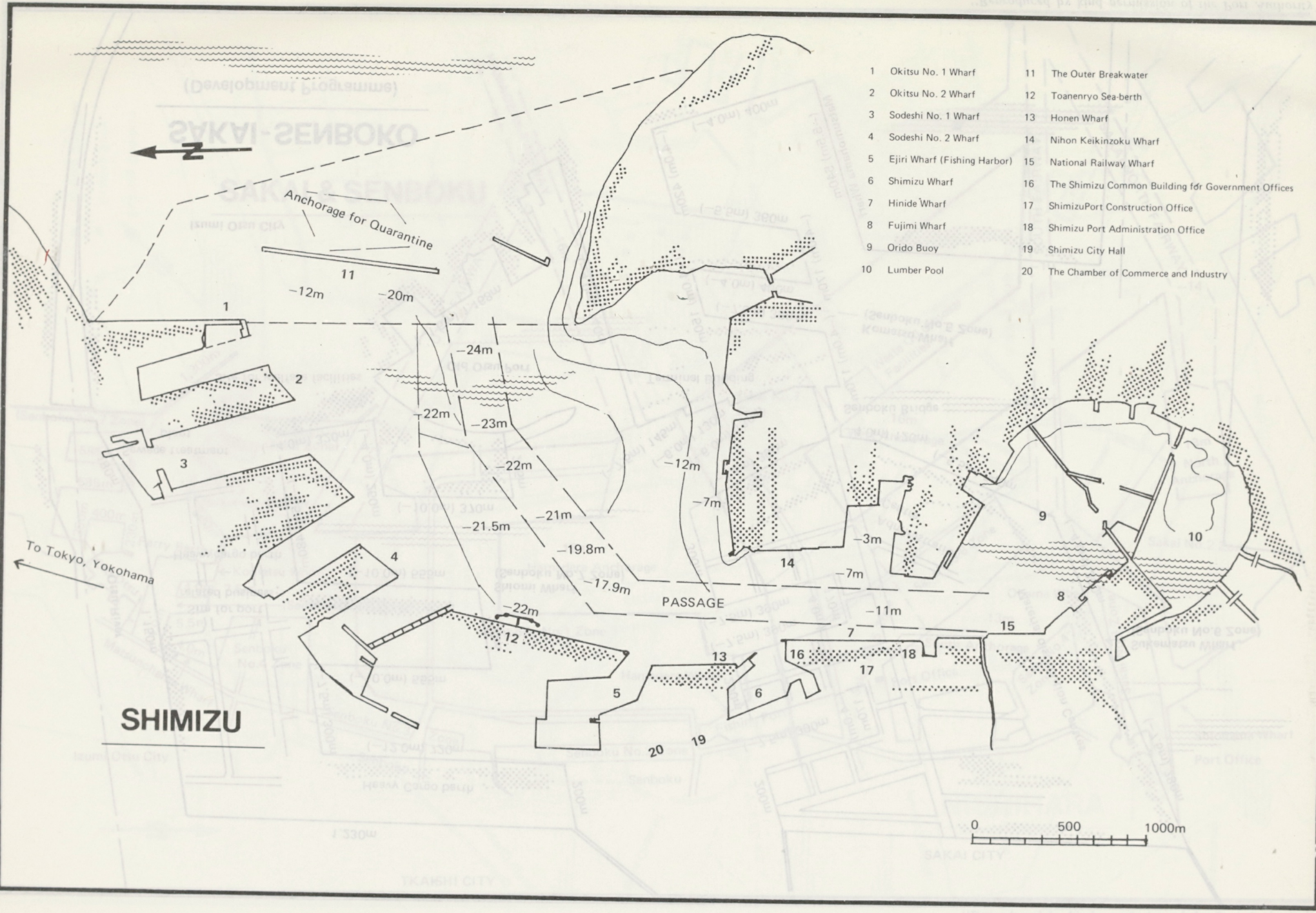

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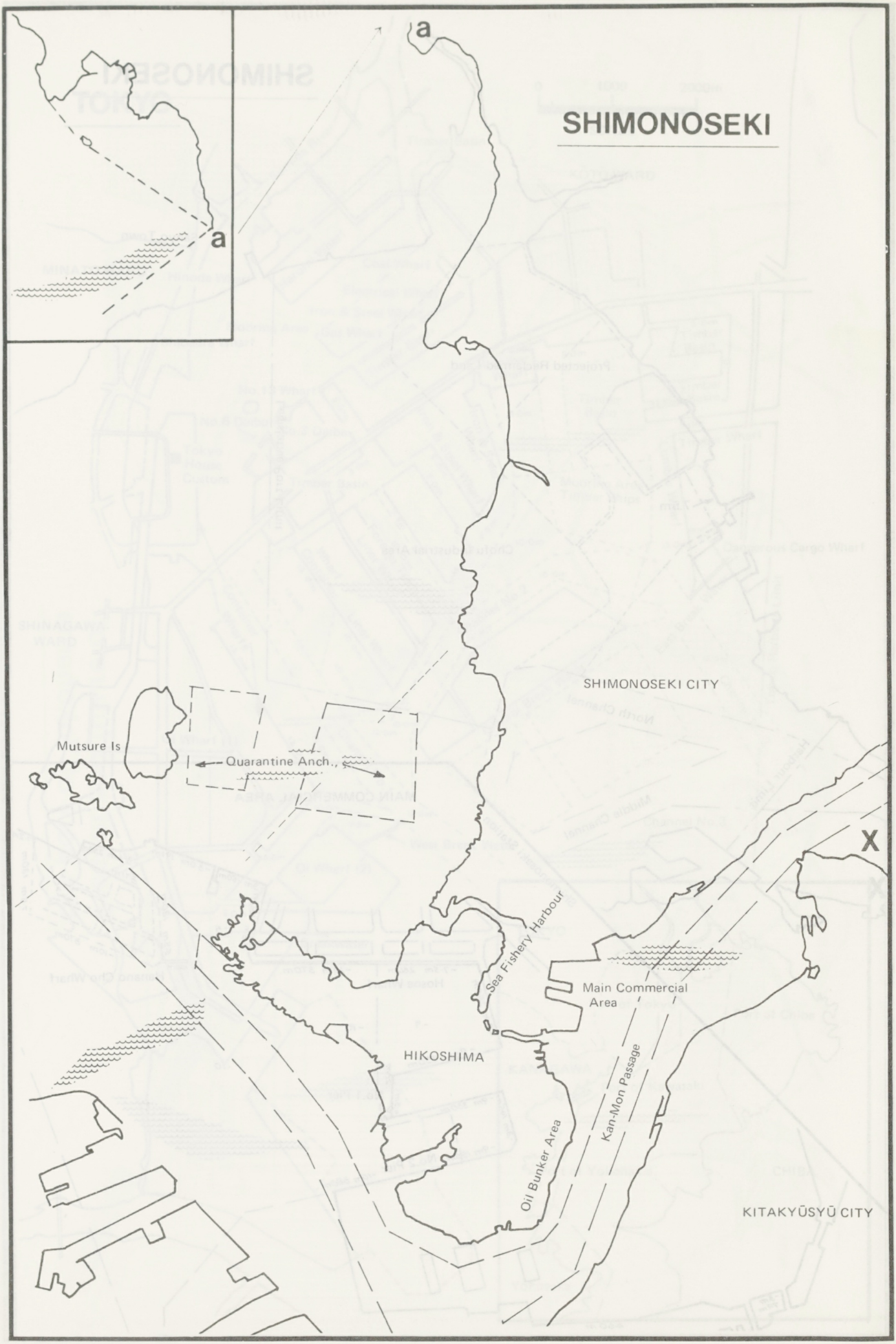

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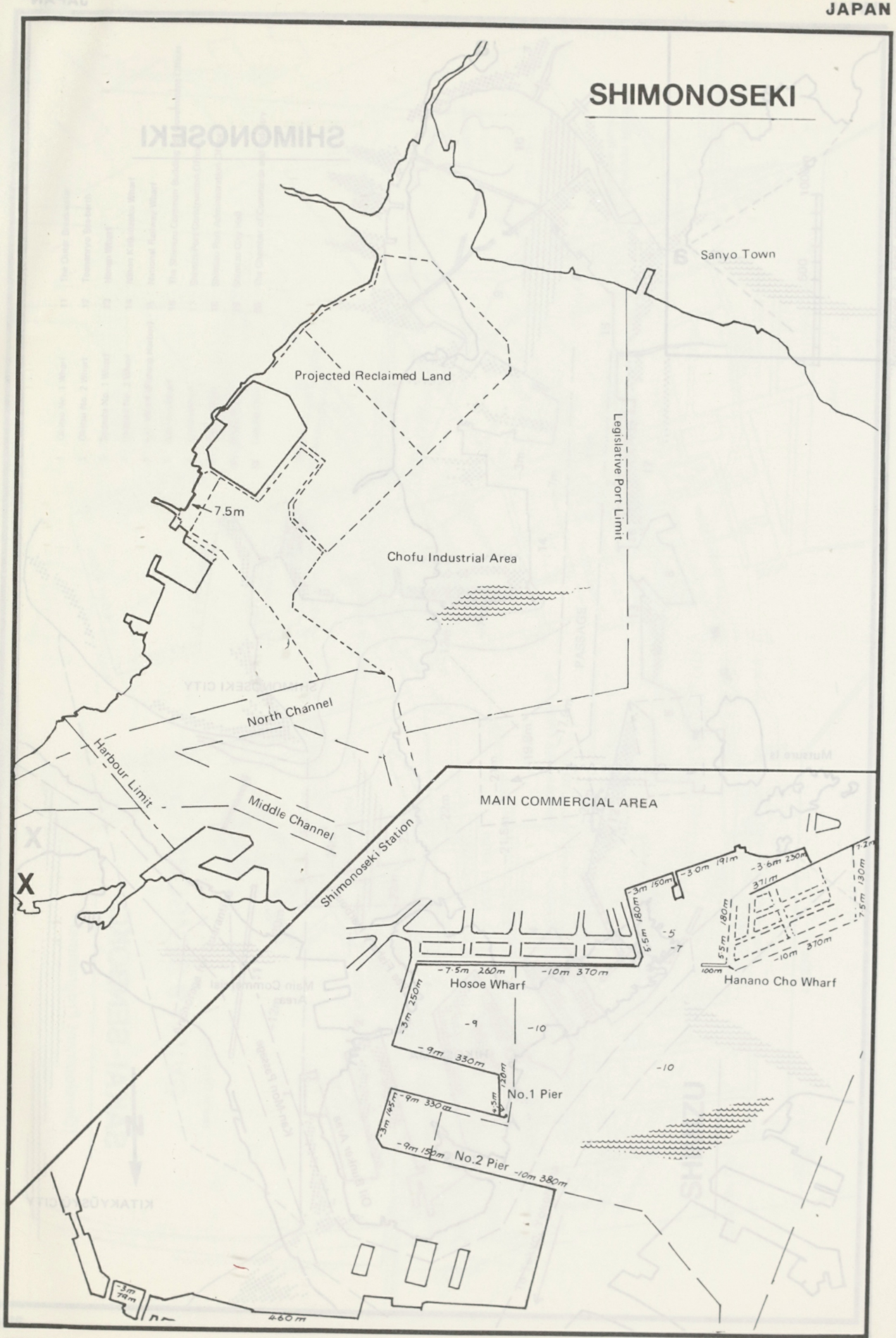

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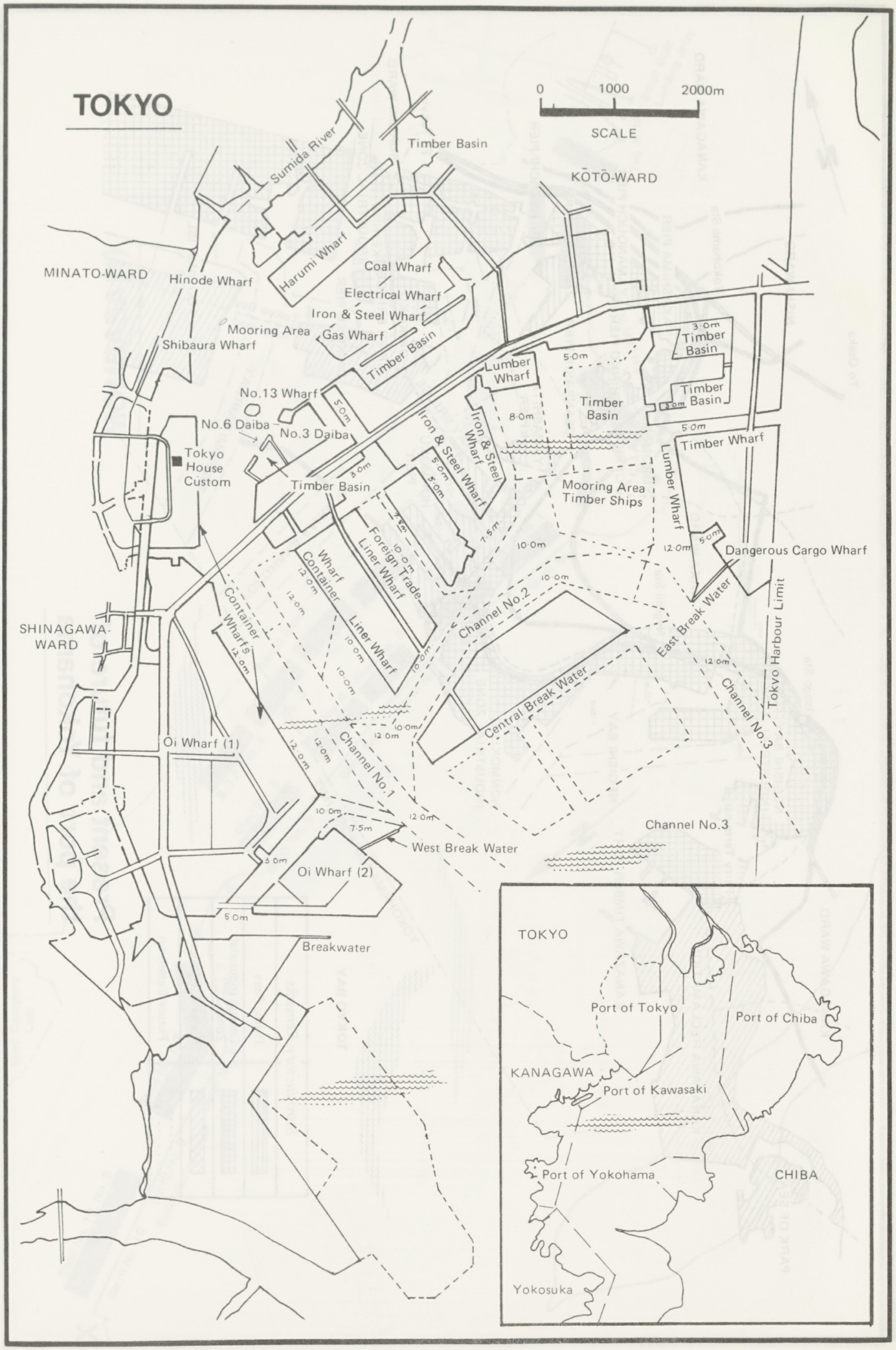

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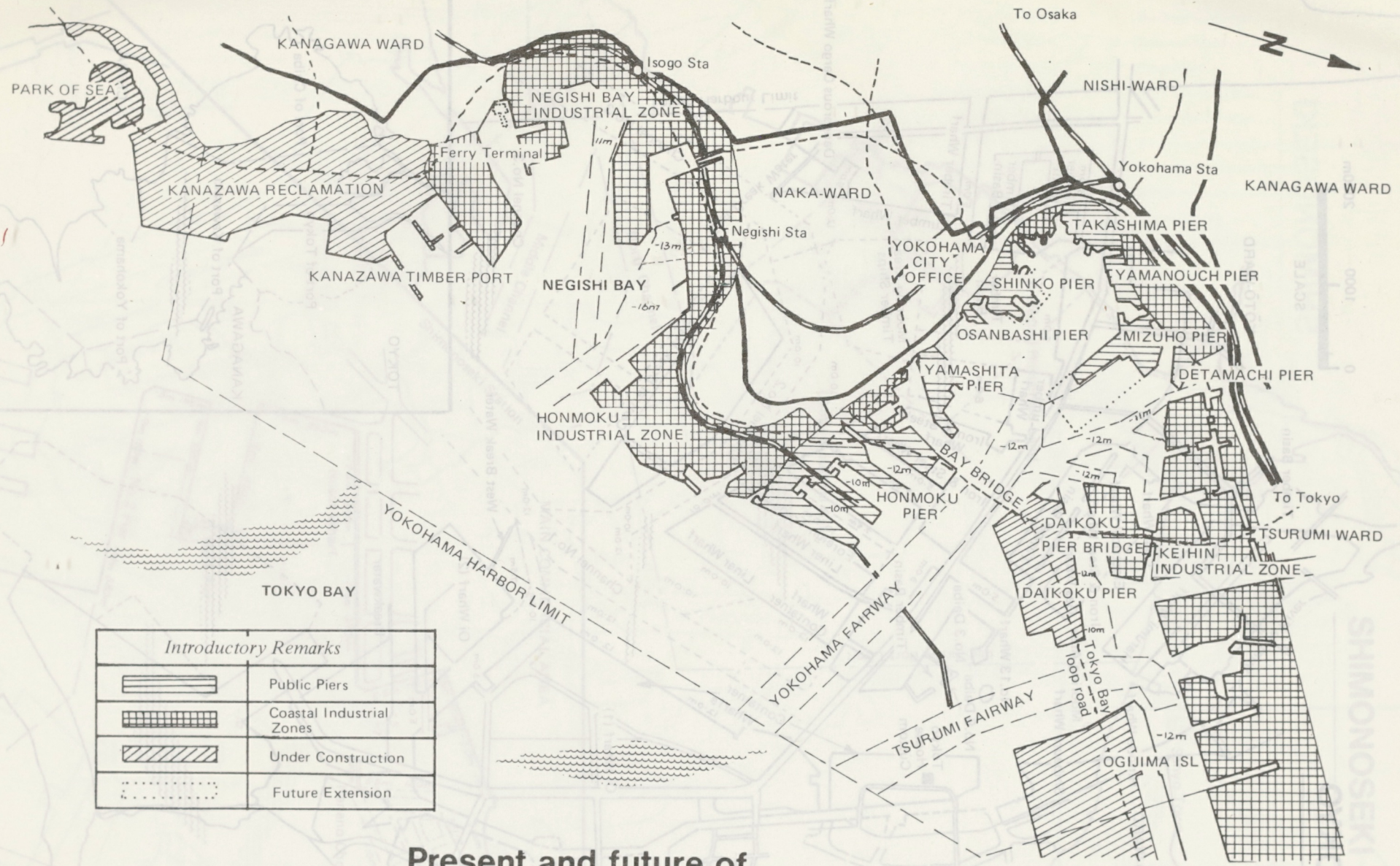

Introductory Remarks	
	Public Piers
	Coastal Industrial Zones
	Under Construction
	Future Extension

Present and future of the port of Yokohama

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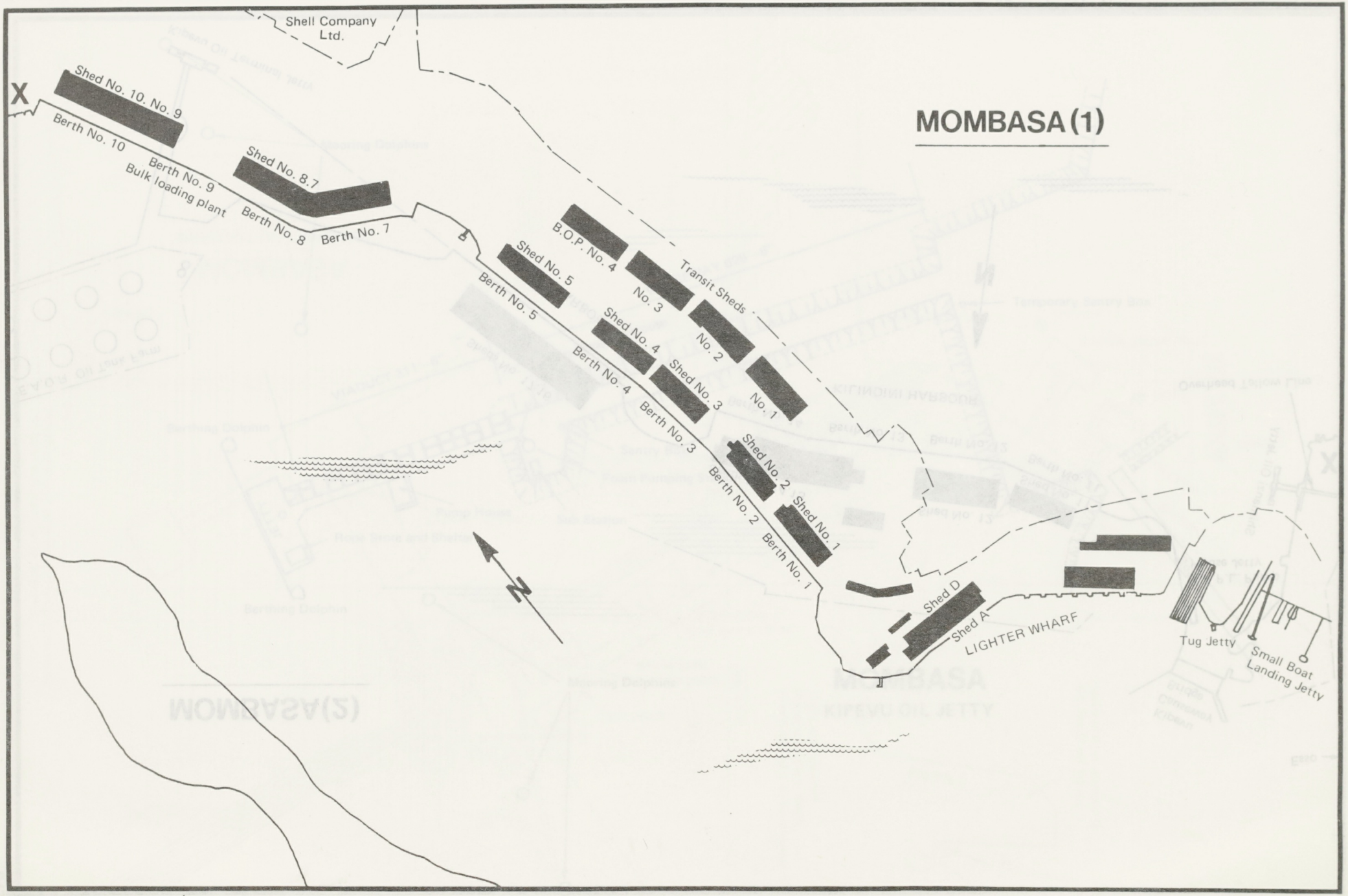

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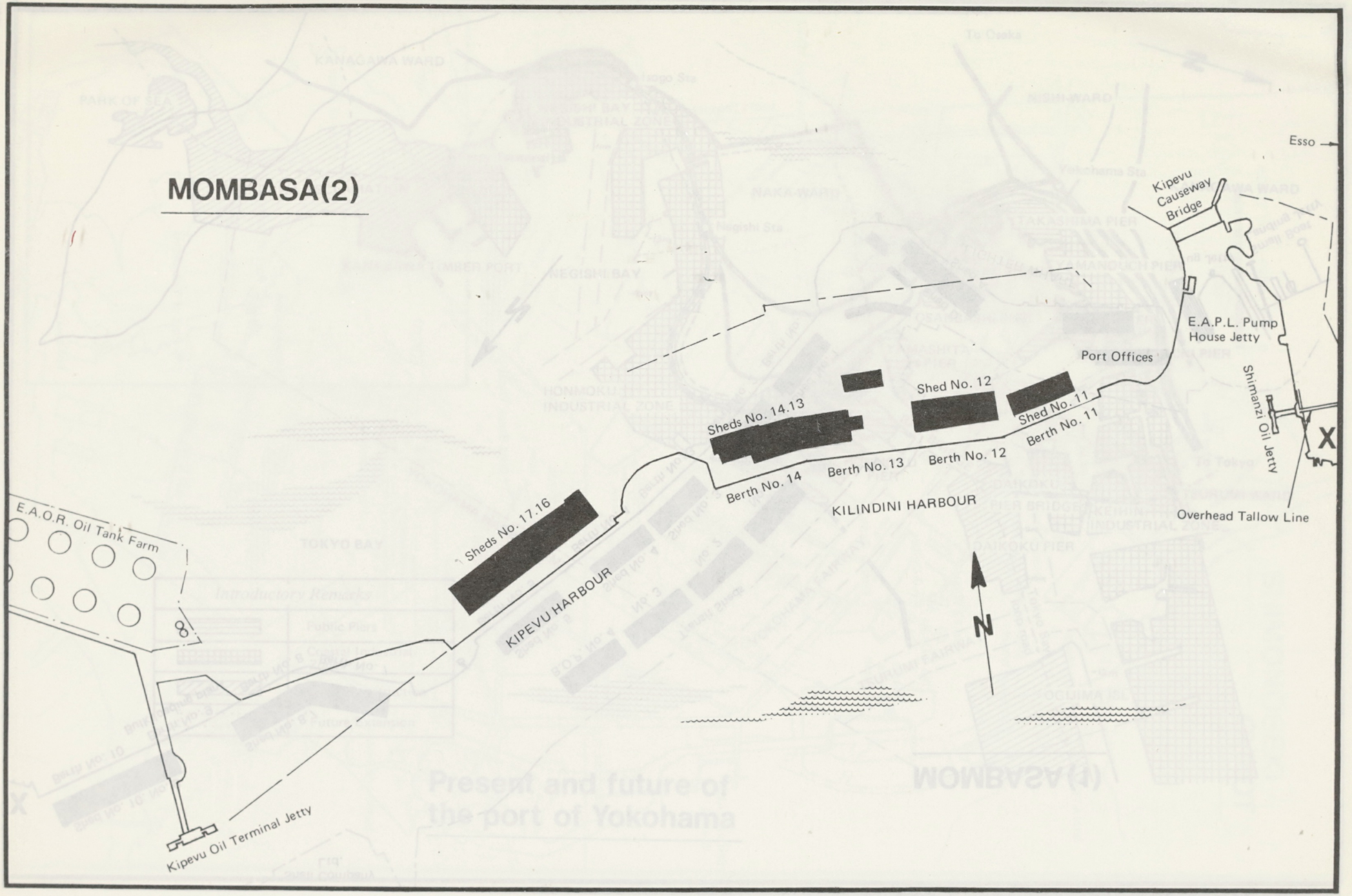
MOMBASA(2)



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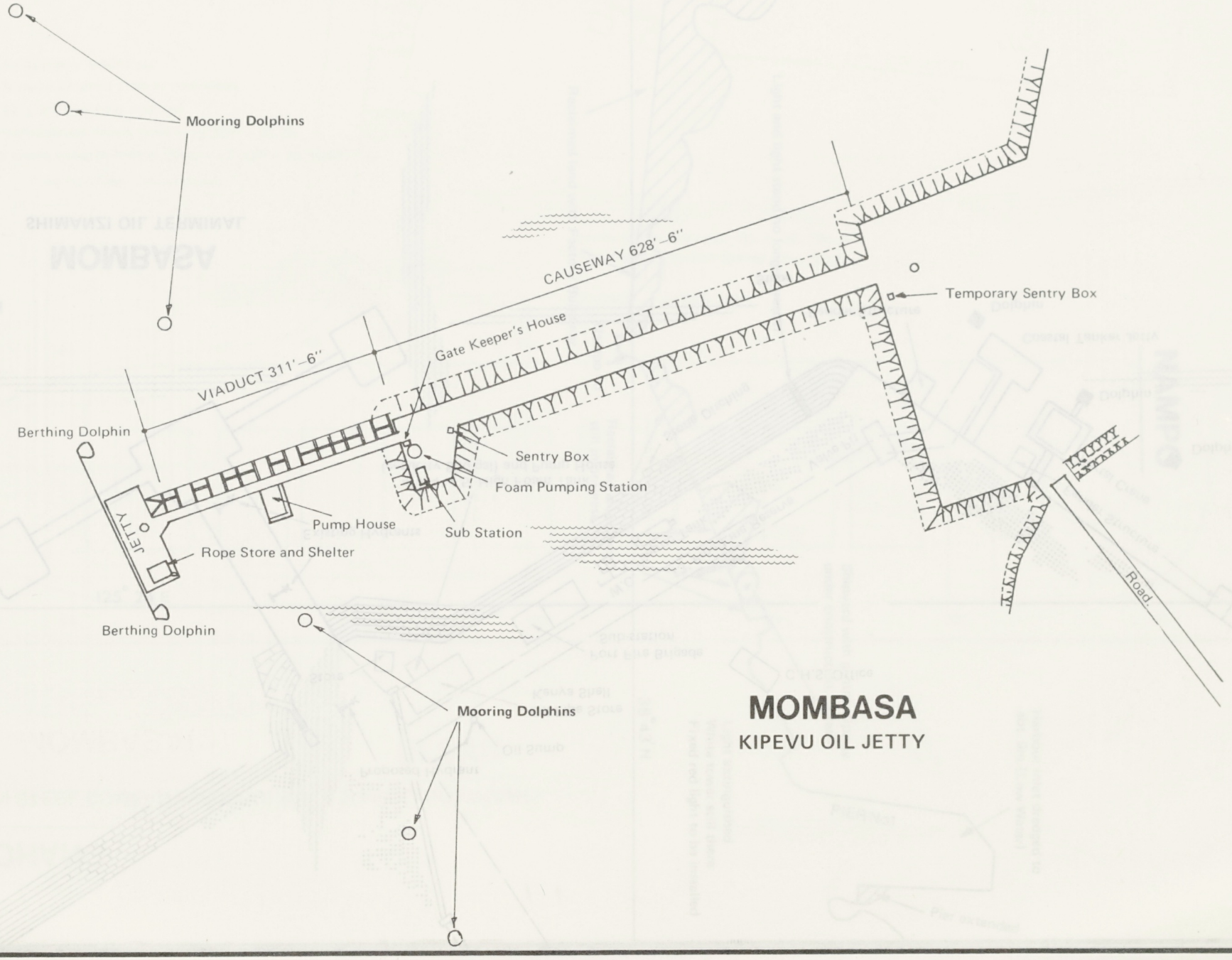

MOMBASA

KIPEVU OIL JETTY

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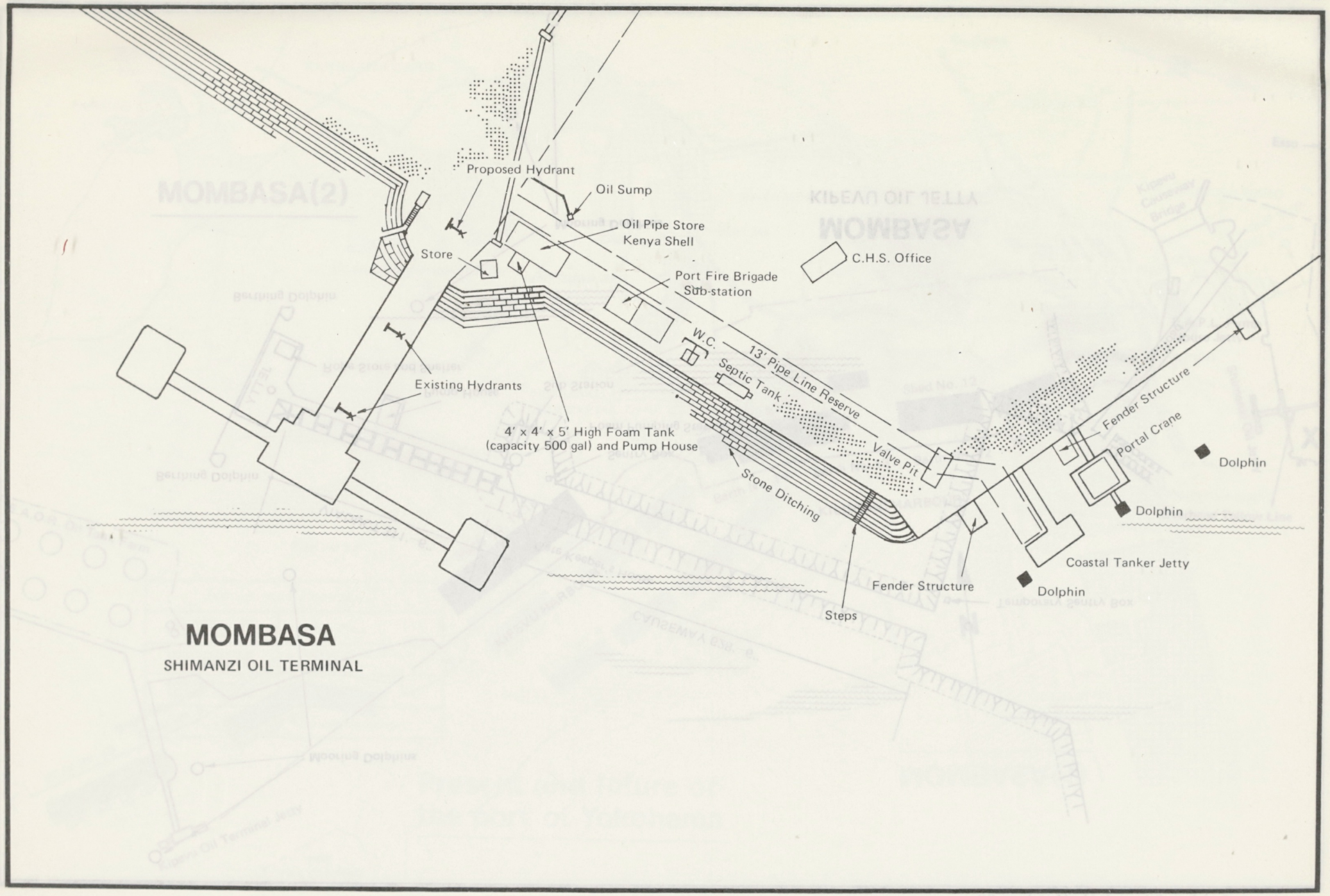

MOMBASA

SHIMANZI OIL TERMINAL

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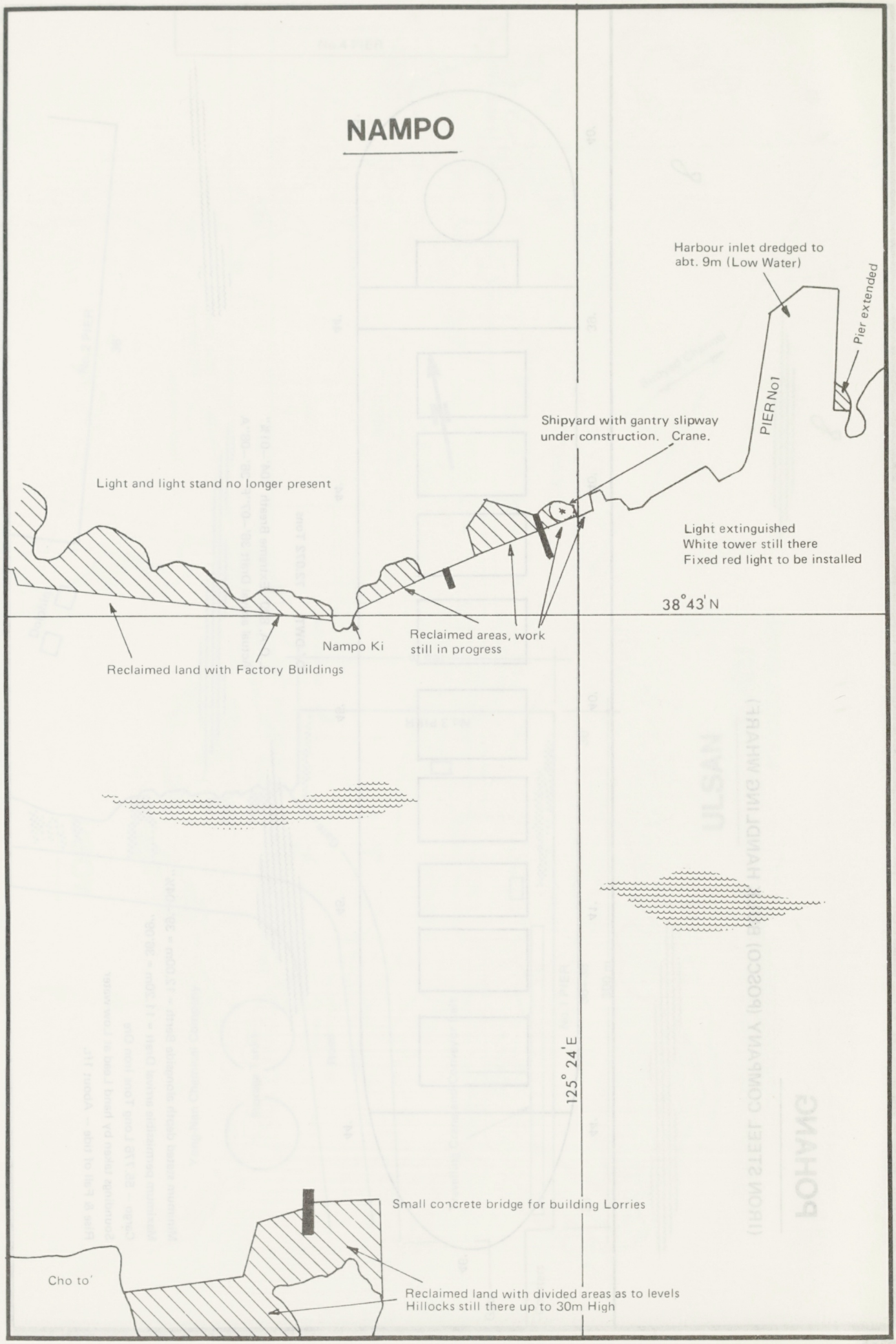
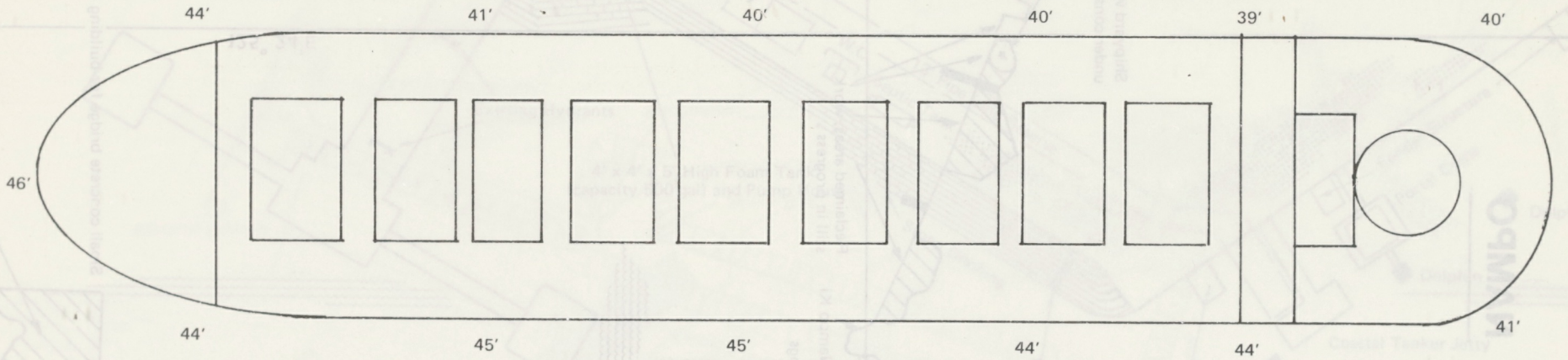


Plan supplied by Ship's Officer.

POHANG

(IRON STEEL COMPANY (POSCO) BULK HANDLING WHARF)

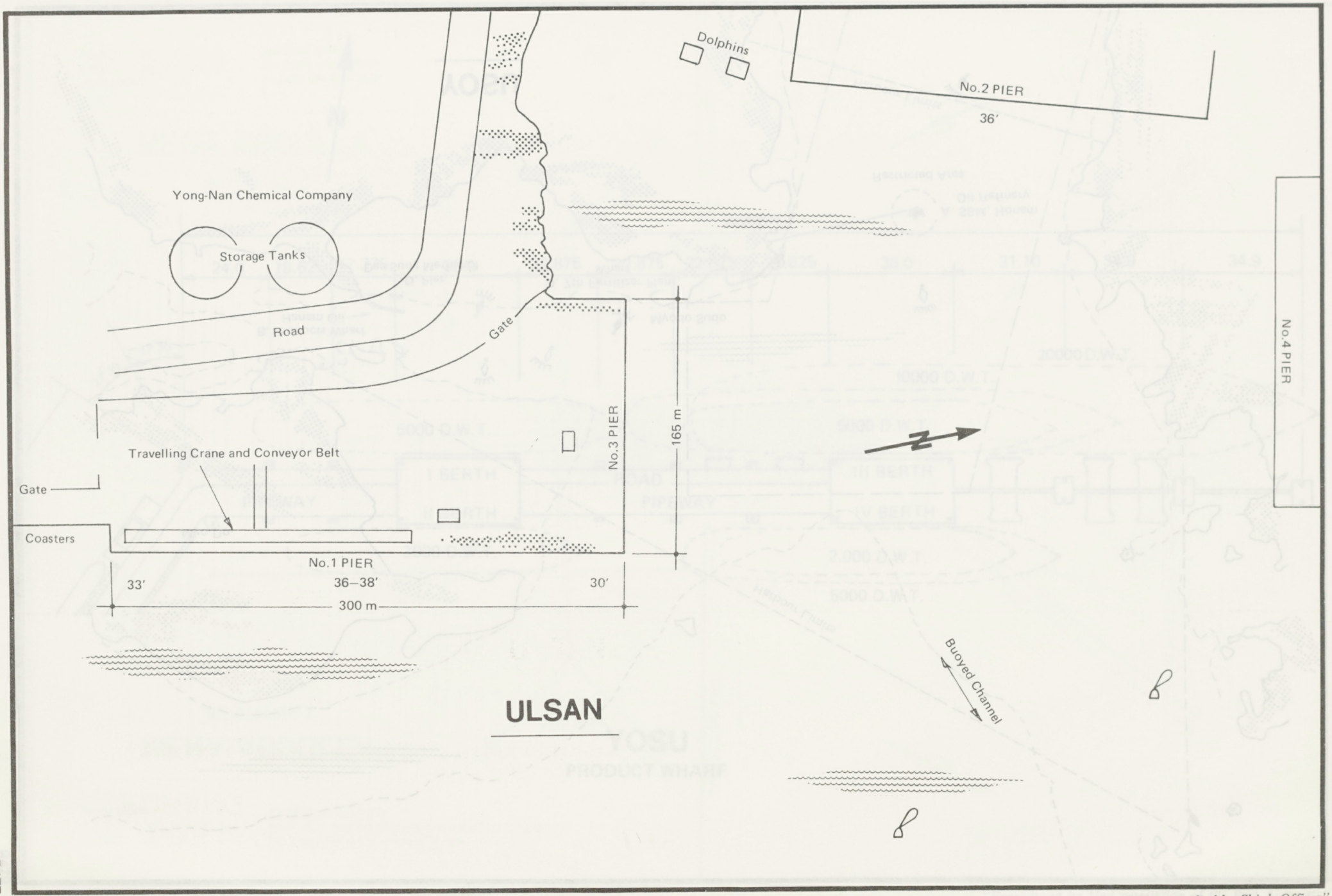


D ′ DWT 72.072 Tons

L.O.A. 820′ Extreme Breath 104′–01¾″
Actual arrival Draft 36′–07″F 36′–08″A

Minimum stated depth alongside Berth = 12.00m = 39′–04½″
Maximum permissible arrival Draft = 11.20m = 36′09″
Cargo – 55.776 Long Tons Iron Ore
Soundings taken by hand Lead at Low water
Rise & Fall of tide – About 1ft.

"Plan supplied by Ship's Master"



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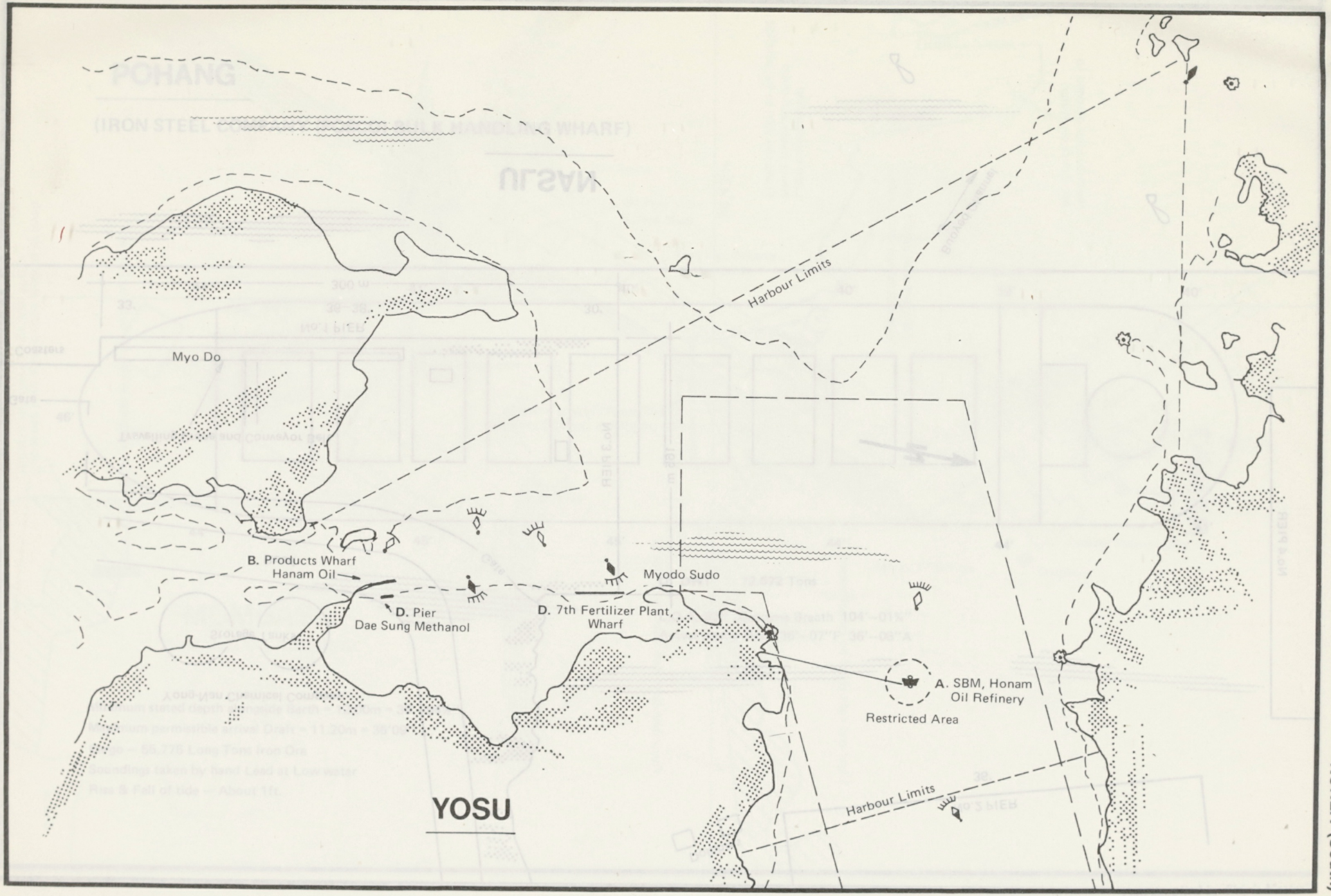

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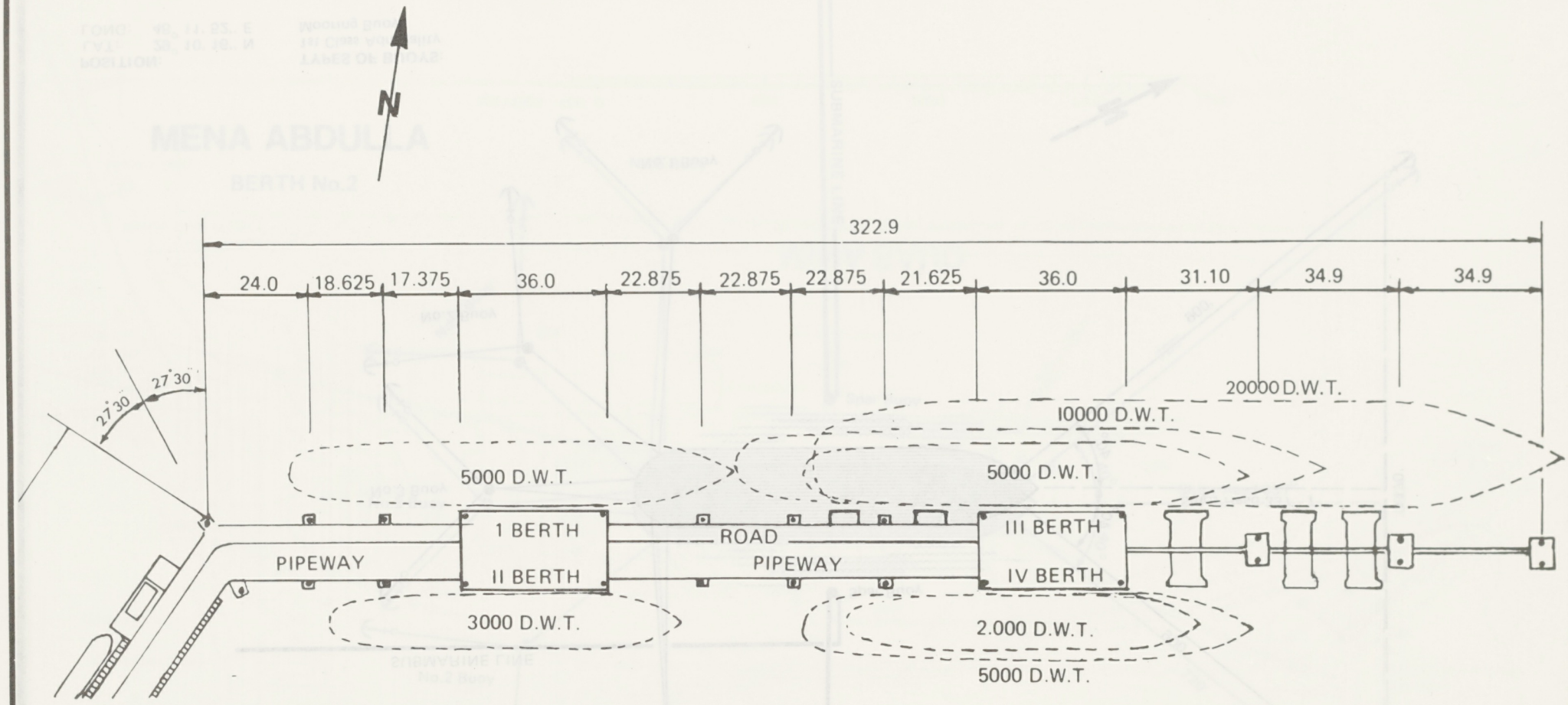

YOSU

PRODUCT WHARF

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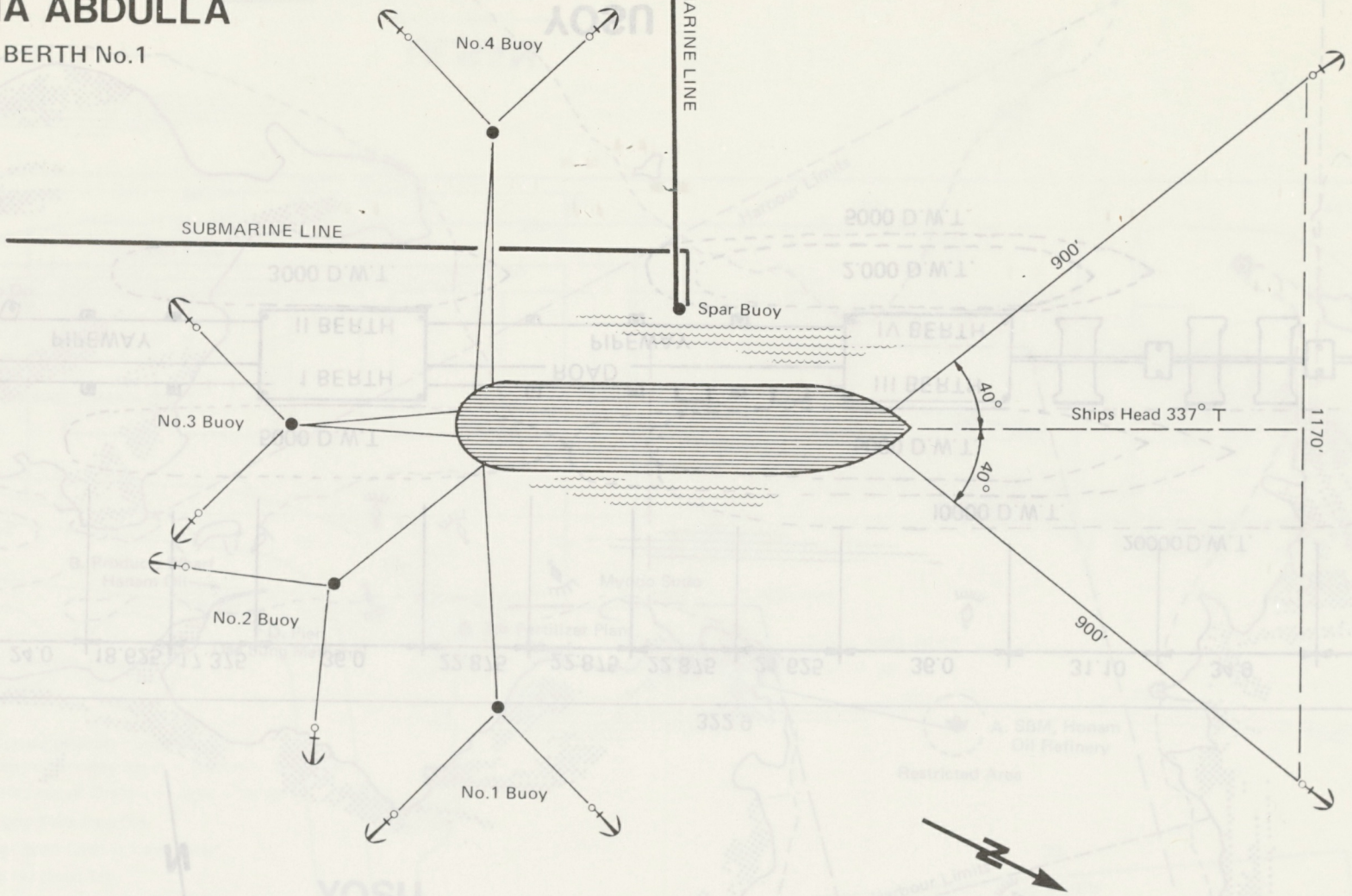
MENA ABDULLA

BERTH No.1



POSITION:
LAT: 29° 10' 16" N
LONG: 48° 11' 52" E

TYPES OF BUOYS:
1st Class Admirality
Mooring Buoys

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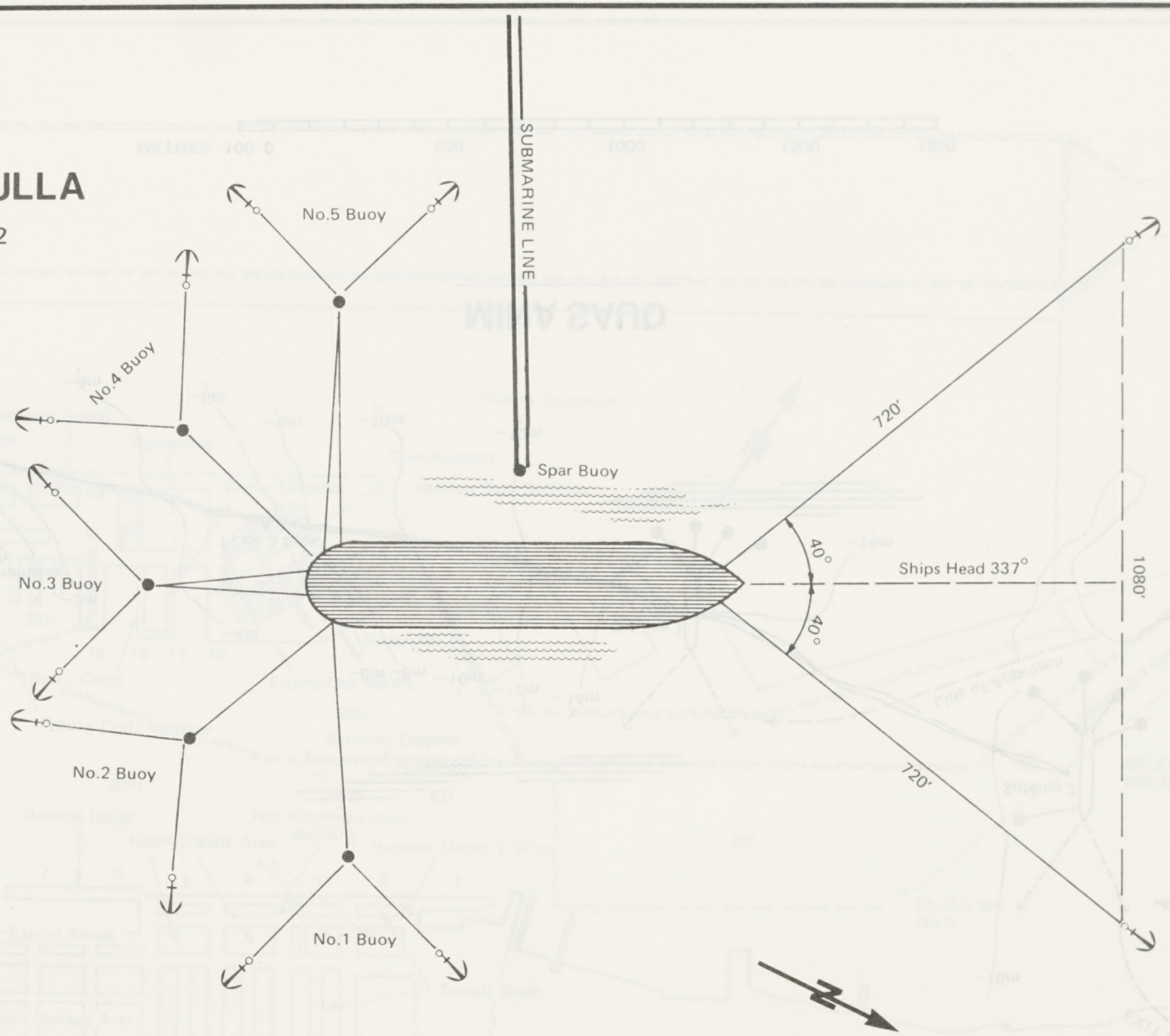
MENA ABDULLA

BERTH No.2



POSITION:
LAT: 29° 01′ 51″ N
LONG: 48° 12′ 51″ E

TYPES OF BUOYS:
No.1, 4, 5 Are 1st Class Admirality Mooring Buoys
No.2 and No.3 are Lamgar Buoys

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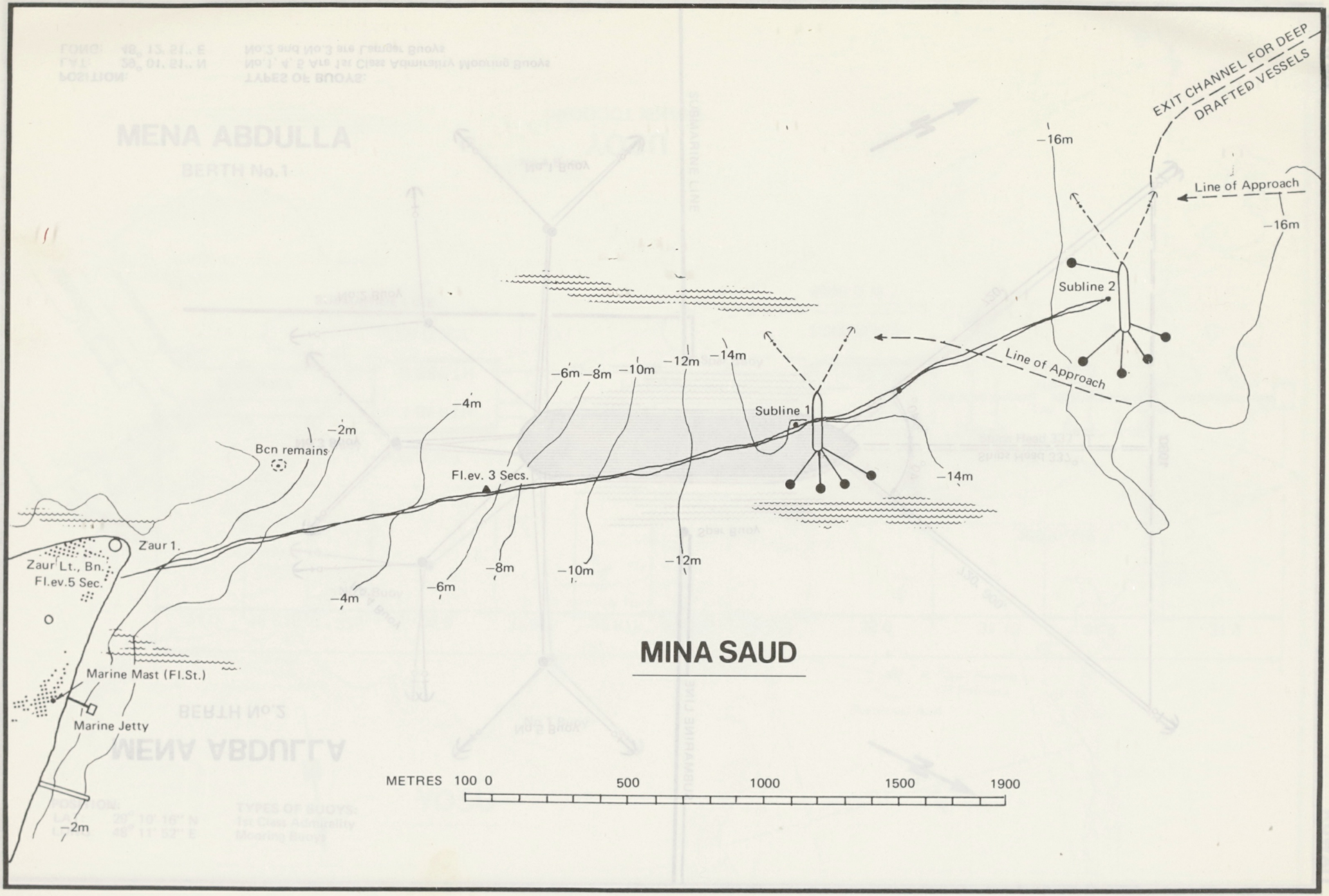

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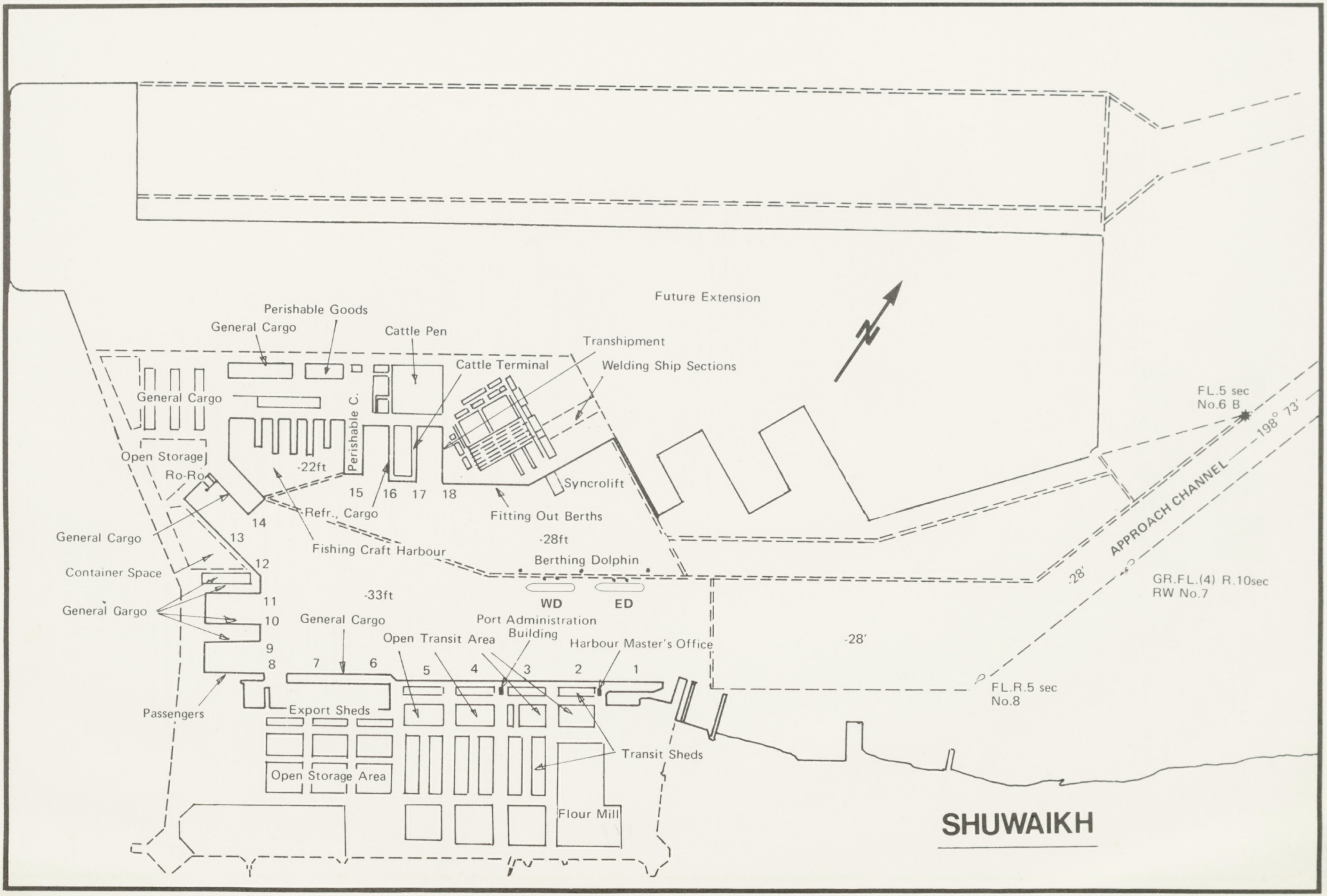

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